

Impact of Covid 19 on E - Commerce in India - A Study with Special Reference to Sivakasi taluk of Virudhunagar District

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Abstract - The Covid-19 situation is bound to have many consequences for consumers, but many retailers have mixed opinions of the severity of Covid-19 and its impacts. One study by Digital Commerce 360 including a survey of 304 retailer shows that when asked what impact they believe the Covid-19 will have on their e-commerce business, 32% believed that it would go down somewhat while 30% answered that they think it would go up somewhat. The study, furthermore, states that online retailers are still continuing to adapt to the continuous changing environment that the Covid-19 outbreak causes. Digital Commerce 360 has a Top 100 list of retailers based on their global e-commerce sales and as of March 23, 62 of the retailers from the list have closed physical stores due to the pandemic.

Index Terms - E-Commerce, pandemic, customer, covid.

INTRODUCTION

The worldwide spread of the COVID-19 pandemic has disrupted how people buy products and services and how they perceive e-commerce. The standardized lockdown rules across India and the growing hesitation among consumers to go outside and shop for essential goods have tilted the nation towards e-commerce. Consumers have switched from shops, supermarkets, and shopping malls to online portals for the purchase of products, ranging from basic commodities to branded goods.

India's e-commerce industry will grow 84 per cent to \$111 billion by 2024 as it gains from demand created by the coronavirus pandemic's impact. The 2021 Global Payments Report by World pay FIS, a financial technology product and services provider, tracked trends in 41 countries to find that digital commerce accelerated during the pandemic. India's e-commerce market will be driven by mobile shopping, projecting it to grow 21 per cent annually over the next four years.

Digital wallets (40 per cent) followed by credit cards (15 per cent) and debit cards (15 per cent) were the most popular payment methods online in 2020. According to IBEF (India Brand Equity Foundation), the market opportunities for online commerce in India are expected to touch \$200 billion by 2026 from \$30 billion in 2017. The report also states that the Indian e-commerce industry is expected to overtake its US counterpart to become the second-largest market for e-commerce in the world by 2034. The researcher analysed the impact of Covid – 19 on E-Commerce in Sivakasi Taluk of Virudhunagar District.

SCOPE OF THE STUDY

- This study is to have a clear incite about the impact of COVID-19 on e-commerce market in Sivakasi.
- This study finds out the important factors, which influence the effective use of e-commerce. The study has also identified various problems faced by the e-commerce customer in the study area and offer suitable suggestions.
- The study has been confined to Sivakasi Taluk of Virudhunagar District in Tamil Nadu.

REVIEW OF LITERATURE

“Ashok Panigrahi, Ranjan Upadhyaya, Pramod Raichurkar”, 2016 in their research paper “E-commerce Services in India: Prospects and Problems” found that India is showing tremendous growth in E-commerce and the future does look very bright for E-commerce in India. They suggested that India needs to promote E-commerce business to develop rural India by developing effective communication to map value

of the goods produced and make available goods and services at low cost to the consumers .

“Anam Bhatti, Hamza Akram, Hafiz Muhammad Basit, Ahmed Usman Khan, Syeda Mahwish Raza Naqvi, Muhammad Bilal”, 2020 in their research paper “E-commerce trends during COVID-19 Pandemic” found that E-commerce grew due to corona virus and is become a substitute source and considered top in this condition. They suggested how COVID-19 impacted E-commerce will be encouraging other researchers to investigate more deeply in this area such as E-commerce trends how changed by corona and future trends .

Mohammad Waliul Hasmad, Ashikul Hoque, Farzana Afrin Shikha, Mashrekha Anwar, Prof. Dr. Abu Bakar Abdul Hamid, Prof.Dr.Huam Hon Tat, 2020 in their research paper “The Impact of Corona virus (COVID-19) on E-commerce in Malaysia” found that this deadly virus severely impact the Malaysian online business especially the Chinese product. They suggested that the primary research has been carried out to get a better outcome .

OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

- To study the socio-economic profile of the respondents in the study area.
- To analyze the level of satisfaction of customers while buying in e-commerce market.
- To study the impact of covid-19 on e-commerce market in the study area.
- To offer suitable suggestions on the basis of findings of the study.

HYPOTHESES

H01: There is no significant relationship between socio economic profile of the respondents and their level of satisfaction with the precautions made by the online marketers during COVID 19.

GEOGRAPHICAL AREA

Sivakasi taluk is a taluk of Virudhunagar district of the Indian state of Tamil Nadu. It is located 74 km from Madurai in the state of Tamil Nadu. This city is known for its firecrackers, matchbox, printing industries. The industries in sivakasi employ over 250000 people with an estimated turn over 20 billion. According to the

2011 census, the taluk of sivakasi had a population of 4, 27, 072 with 2, 11, 932 males and 2, 15, 140 females. The taluk has had a literacy rate of 72.65.

METHODOLOGY

The study is based on both primary and secondary data. The required data has been collected through the primary and secondary sources. Primary data has been collected from the e-commerce customers through well-structured Questionnaire. Secondary data has been collected from various books, journals and websites.

SAMPLING DESIGN

Since it is descriptive research, a convenience sampling method of non-probability sampling will be adopted in this research study. The sample has been drawn from 80 e-commerce customers in Sivakasi Taluk of Virudhunagar District in Tamilnadu.

TOOLS FOR ANALYSIS

The data collected has been processed further with the help of the Statistical Package for the Social Sciences (SPSS) to analyze and interpret the data in the study. The following statistical tools used namely,

- Percentage analysis
- Chi-square test
- Garret Ranking

DATA PROCESSING

After completing the data collection work, the filled in questionnaire were edited as to its correctness and completeness and were coded. The tabulation work is done with the help of SPSS Software.

LIMITATIONS OF THE STUDY

- The area of this study is limited to Sivakasi Taluk only. Hence, a finding of the study may not generalize to district, state or national level.
- The researcher deals only the impact of COVID-19 on e-commerce marketers of customers of general public not focusing a specific e-commerce website.

The researcher has made an attempt to analyze how COVID-19 impact on the e-commerce platform. Researcher classified the respondents based on their socio economic profiles.

PREFERENCE OF E-COMMERCE PLATFORM

The researcher has gathered information about the category of respondents according to preference of ecommerce platform. The information is displayed in Table 1.

TABLE 1 PREFERENCE OF E-COMMERCE PLATFORM

S. No.	E-commerce platform	No. of Respondents	Per cent
1	Amazon	45	56.20
2	Flipkart	32	40.00
3	Myntra	1	1.20
4	Meesho	2	2.50
	Total	80	100.00

Source: Primary Data

From the analysis of the Table 1, it is understood that out of 80 respondents, a majority of 56.20 per cent of the respondents have preferred Amazon, 40.00 per cent of the respondents have preferred Flipkart, 2.50 per cent of the respondents preferred Meesho and the remaining 1.20 per cent of the respondents have preferred Myntra.

It is understood that a majority of 56.20% of the respondents have preferred Amazon in the study area.

MODE OF PAYMENT

The researcher has gathered information about the category of respondents according to the mode of payment. The information is displayed in Table 2.

TABLE 2 MODE OF PAYMENT

S. No.	Form of payment	No. of Respondents	Per cent
1	Cash on delivery	70	87.50
2	Visa	3	3.80
3	MasterCard	3	3.80
4	UPI	4	5.00
	Total	80	100.00

Source: Primary Data

From the analysis of the Table 2 it is understood that out of 80 respondents, a majority of 87.50 per cent of the respondents have preferred Cash on delivery, 5.00 per cent of the respondents have preferred UPI, 3.80 per cent of the respondents are preferred Visa and the

remaining 3.80 per cent of the respondents have preferred MasterCard.

It is understood that a majority of 87.50% of the respondents have preferred Cash on delivery in the study area.

NUMBER OF YEARS OF USING E-COMMERCE

The researcher has gathered information about the category of respondents according to the years of using e-commerce. The information is displayed in Table 3

TABLE 3 NUMBER OF YEARS OF USING E-COMMERCE

S. No.	Years of using e-commerce	No. of Respondents	Per cent
1	Below 1 year	21	26.20
2	1 – 2 year	29	36.20
3	2 – 3 year	11	13.80
4	Above 3 years	19	23.80
	Total	80	100.00

Source: Primary Data

From the analysis of the Table 3 it is understood that out of 80 respondents, a majority of 36.20 per cent of the respondents were using e-commerce for 1-2 years, 26.20 per cent of the respondents were using e-commerce for Below 1 year, 23.80 per cent of the respondents were using e-commerce for Above 3 years and the remaining 13.80 per cent of the respondents were using e-commerce for 2-3 years.

It is understood that a majority of 36.20% of the respondents are using e-commerce for 1-2 years in the study area.

PURPOSE OF USING E-COMMERCE

The researcher has gathered information about the category of respondents according to the purpose of using e-commerce. The information is displayed in Table 4

TABLE 4 PURPOSE OF USING E-COMMERCE

S. No.	Purpose of using e-commerce	No. of Respondents	Per cent
1	For personal use	72	90.00
2	For business use	5	6.20
3	Both	3	3.80
	Total	80	100.00

Source: Primary Data

From the analysis of the Table 4 it is understood that out of 80 respondents, a great majority of 90.00 per cent of the respondents were using e-commerce for

personal use, 6.20 per cent of the respondents were using e-commerce for business use and the remaining 3.80 per cent of the respondents were using e-commerce for both use.

It is understood that a great majority of 90.00% of the respondents are using e-commerce for personal use in the study area.

PURCHASE OF GOODS AFTER COVID-19

The researcher has gathered information about the category of respondents according to purchase of goods after COVID 19. The information is displayed in Table 5.

TABLE 5 PURCHASE OF GOODS AFTER COVID-19

S.No	Purchase of goods after covid-19	No. of Respondents	Per cent
1	Yes	57	71.20
2	No	23	28.80
	Total	80	100.00

Source: Primary Data

Among 80 respondents, 71.20 percent of the respondents purchased goods from online after covid-19 and 28.80 percent of the respondents did not purchase goods after covid-19.

Table 5 spells out that majority of the respondents 71.20 per cent purchase goods after covid-19.

OCCUPATION AND FACTORS INFLUENCING TO USE E-COMMERCE

To know the significant association between the occupation and factors influence them to use e-commerce.

Hypothesis- I

“There is no significant association between occupation of the respondents and the factors influence them to use e-commerce”.

For testing the hypothesis, the above hypothesis has been formulated and is tested with the help of chi square test. The result is shown in the following table 6.

TABLE 6 OCCUPATION AND FACTORS INFLUENCING TO USE E-COMMERCE

S. No	Occupation of the respondent		Factors influence you to use e-commerce			Total
			Low	Medium	High	
1	Student	Observed	6	19	8	33
		Expected	5.4	22.7	5.0	33.0

		% of Total	(7.5 %)	(23.8 %)	(10.0%)	(41.2 %)
2	House wife	Observed Expected % of Total	20.8 (2.5 %)	3 3.4 (3.8 %)	0 0.8 (0.0 %)	5 5.0 (6.2 %)
3	Self employ ee	Observed Expected % of Total	3 2.6 (3.8 %)	11 11.0 (13.8 %)	2 2.4 (2.5 %)	16 16.0 (20.0 %)
4	Government employ ee	Observed Expected % of Total	0 1.1 (0.0 %)	6 4.8 (7.5 %)	1 1.0 (1.2 %)	7 7.0 (8.8 %)
5	Job seeker	Observed Expected % of Total	2 3.1 (2.5 %)	16 13.1 (20.0 %)	1 2.8 (1.2 %)	19 19.0 (23.8 %)
	Total	Observed Expected % of Total	13 13.0 (16.2 %)	55 55.0 (68.8 %)	12 12.0 (15.0 %)	80 80.0 (100.0 %)

Source: Computed Data

TABLE 7 Chi-Square Tests for Occupation and Factors influencing to use e-commerce

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.901 ^a	8	.351
Likelihood Ratio	10.413	8	.237
Linear-by-Linear Association	.165	1	.684
N of Valid Cases	80		

Source: Computed Data

In order to test the relationship between the Occupation and the factors influence them to use e-commerce, Chi-square test has been applied. The result of the Chi-square test 0.351 is more than 0.05. Hence the null hypothesis is accepted. Therefore it is concluded that there is no significant relationship between Occupation and the factors influences them to use e-commerce.

FACTORS INFLUENCING THE PREFERENCE OF E-COMMERCE SITE

The researcher attempts to analyse the factors influencing the respondents in the selection of e-commerce site. The respondents are asked to rank the factors which are influencing them in the selection of e-commerce site. Table 8 presents such details.

TABLE 8 RANK THE FOLLOWING ATTRIBUTES

Factors	I	II	III	IV	V	Total
Convenience	38	19	11	3	9	80
Time consuming	10	39	19	9	3	80
24*7 service	13	11	36	8	12	80

Reduce work	9	7	5	45	14	80
Quality of the product received	10	4	9	15	42	80
Total	80	80	80	80	80	

Source: Primary Data

Garratt ranking method

The garret ranks are calculated by using appropriate Garrett ranking formula. Then based on The Garrett table values have ascertained. The Garrett table values and scores of each rank in Table 3.51 are multiplied to record scores in Table 8.

$$\text{Per cent position} = 100(\text{Rij} - 0.5)/\text{Nj}$$

Where,

Rij = Rank given for ith item by the jth sample respondents

Nj = total rank given by the jth sample respondents.

TABLE 9 PERCENTAGE OF POSITION AND GARRETT VALUE

Rank	100 (Rij - 0.5)/Nj	Calculated value	Garrett value
1	100(1 - 0.5)/5	10	75
2	100(2 - 0.5)/5	30	60
3	100(3 - 0.5)/5	50	50
4	100(4 - 0.5)/5	70	40
5	100(5 - 0.5)/5	90	25

Source: Calculated Primary Data

Table 9 shows the Garrett course. Firstly the Garrett ranks are calculated by using appropriate Garrett ranking formula. Then based on the Garrett ranks, the Garrett table value is ascertained. The Garrett table values and scores of each rank in the table 9 multiplied to record scores in table 9 finally by adding each row, the Garrett score is obtained.

TABLE 10 GARRETT RANKING MULTIPLICATION

S. No	Attributes	I	II	III	IV	V	Total
1	Convenience	2850	1140	550	120	225	4885
2	Time consuming	750	2340	950	360	75	4475
3	24*7 service	975	660	1800	320	300	4055
4	Reduce work	675	420	250	1800	350	3495
5	Quality of the product received	750	240	450	600	1050	3090

Source: Calculated Primary Data

Table 11 FACTORS INFLUENCING THE SELECTION OF E-COMMERCE SITE

S.No	Attributes	Total score	Average score	Rank
1	Convenience	4885	61.06	I
2	Time consuming	4475	55.94	II
3	24*7 service	4055	50.69	III
4	Reduce work	3495	43.69	IV
5	Quality of the product received	3090	38.63	V

Source: Primary Data

The above Table 11 shows that Garrett scores and the average scores. The average score are ranked according to their values. The first rank is given to “Convenience” the second rank is to “Time consuming” third rank is given to “24*7 service” the fourth rank goes to “Reduce work” and fifth rank is given to “Quality of the product received”.

It is inferred that the factors influencing the respondents regarding the preference about the particular e-commerce is “Convenience”.

SUGGESTIONS

I suggested that e-commerce platform should earn customers trust by making their sites more secured. Because earning a customer’s trust is the first step to creating a brand evangelist that will share their positive experiences with their friends and family. That would directly influence the purchase decision of consumer’s family and friends.

E-commerce should add live chat. Live chat allows customers to ask questions or express concerns just as they are in the process of making a buying decision. As a result they can discover common problem with their site or common customer concerns.

I suggested that some unpopular e-commerce sites would offer free shipping until their getting popular. I guess it may be increase more people’s attention. In a pandemic period most of the common people are facing a financial crisis, also they buy goods from online. At that time free shipping option is a great relief for them.

Yet most of the people in India are not aware of e-commerce because of the slow penetration of internet. E-commerce has reached more than enough in the urban region but the rural region is exceptional. So they should take proper measures to make the rural people being aware of online business.

CONCLUSION

In this project we have found that e-commerce is growing tremendously in the pandemic period.

Because of pandemic period and lockdown, most of the people are running behind e-commerce.

Also, we have found that the site's name plays a major role. For example, most of the people prefer Amazon and Flipkart to Myntra etc. On the other hand, many people don't encourage e-commerce because of security concerns and cheating like things.

Though e-commerce has some problems it is very useful for the people in the pandemic period. It helps people to stay safe in home.

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