

# **A Study On The Impact Of Frequency Of Search Engine Ads Viewership On Online Purchases During The COVID-19 Pandemic Period In Mumbai**

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## **Abstract**

The impact of COVID-19 has also brought some significant changes in consumer lifestyle, purchasing and consumption patterns. People are now avoiding in-store purchases and looking to alternative channels for product sources. The aim of the study is to investigate the factors affecting the rapid growth of Search Engine Ad led shopping during the time of COVID-19 pandemic in Mumbai. The city's retail marketing has been severely affected due to unexpected lockdowns and restrictions on human movement. Specifically, the study examines how mass consumers of the city of Mumbai chose online shopping over in-store purchases during this pandemic. Data was collected through a structured questionnaire from 152 consumers via a Google form. The Stratified Random Sampling technique was used to select the sample. Descriptive statistical analysis and Chi square test of association were used to analyze the data. The result of this research revealed that Search Engine based shopping by mass consumers increased significantly during the pandemic period. Advantages of online shopping, technological support and convenience influenced the consumers to choose shopping via Google Ads. This research aims at understanding if the increase in frequency of viewing Pay Per click Ads affects the frequency of online purchases and that too sector wise. This study has some implications for online marketers in terms of e-marketing strategies and the importance of online retail marketing.

**Keywords:** Pay Per Click method, Frequency of viewership, Frequency of purchase, COVID-19.

## **INTRODUCTION**

The pandemic has changed the way people in Mumbai live, shop and has also changed consumer behavior in many ways. From a marketing point of view, retailers suffered huge financial losses in the period March 2020 to November 2021. The supply chain of most industries has now changed. Consumers around the world, including India, search for products and services through Search Engines among other online modes.

The huge rise in online shopping, in Mumbai, is likely to continue even after the pandemic. This study provides a summary of the inefficiencies of buying in-store during this pandemic time and how retail brands are now being forced to think differently and introduce some sort of online shopping convenience to their target customers. In response to the lockdown situation, many stores are closed, consumers are demanding contactless payments, home delivery, virtual consultations and the availability of necessities in the product line of online businesses.

According to an Economic Times survey, Amazon has 100 million users in India (J, 2017). The rapid adoption of online shopping and digital payment methods in India has led to the development of new applications, websites and other services. It is crucial for all stakeholders to understand the variables impacting consumers' continued use of e-commerce platforms in the wake of the COVID-19 pandemics. Several studies have been conducted to examine online consumers' purchase intent to use Search Engine Ads, but few have examined the topic during the COVID-19 and its effect on the buying preference among consumers in Mumbai. Therefore, the study aims to fill in the gaps by identifying the variables influencing the decision to purchase through Search Engine Ads during the COVID-19 pandemic.

## 2. Review of Literature

For the purpose of this research various books, research papers and e-sources have been used. An overview of the literature is presented herewith.

**Keng & Lin. (2006)**, in their research explored different parameters for evaluating the effectiveness of the Pay Per Click method of online advertising. The researchers narrowed down on specific criteria such as; Usage Frequency of the advertising method, User's preference towards the advertising platform, etc.

In addition, these changes have completely changed the purchasing behavior of consumers, instead of the usual brick-and-mortar shopping for goods, online shopping would be a better alternative for customers. According to **Nachit & Belhcen (2020)**, the COVID-19 pandemic is causing a dramatic change in consumer behavior. There, shopping priorities shifted, heightened tensions over the availability of certain necessities in the market, especially panic buying of hygiene items, showed that consumers are willing to spend more than before on their hygiene shopping as well as on certain groceries. On the one hand, this behavior can be perceived as a new motivation to buy. On the other hand, it also creates several obstacles, mainly the decrease in purchasing power and the risk of contamination in supermarkets or pharmacies.

**Lim, et al., (2016)** suggested that the subjective norm, perceived utility, and purchase intention are fundamental themes for online shopping. Confirmation, regret, external information,

alternative attractiveness, and loyalty are the factors influencing online shoppers (**Liao, Lin, Luo, & Chea, 2017**).

Recent research on consumer readiness for digital transformation during the COVID-19 pandemic in India has shown that COVID-19 and the measures taken by the government have influenced public and private sector knowledge, attitudes and perceptions on digital transformation. Both made innovative and forced to take some steps towards adopting digital tools to ensure adequate availability of products and services and to reach the customers (**Nachit & Belhcen 2020**). Insights from this research can also be used to develop marketing strategies and value propositions to encourage online shopping.

### **Research gap**

The research conducted so far helps understand parameters to be used to assess popularity of Pay Per Click method in a global context. There is a lack of information about popularity of Pay Per Click among consumers in Mumbai and the consumer preference towards Pay Per Click in pandemic phase. The study aims to fill in the gaps by identifying the factors influencing the decision to purchase through Search Engine Ads during the COVID-19 pandemic

### **3. Objectives**

1. To understand the impact of change in frequency of watching Search Engine Ads and online shopping during Pandemic.
2. To study whether preference for Pay Per Click method and Sector wise product purchase are associated.

### **4. Research Methodology**

#### **4.1 Research Design**

This study used a quantitative method to analyze impact of frequency of use of Pay per Click and the frequency of purchase sector wise during the COVID-19 pandemic with reference to Mumbai. First, the previous literature was reviewed to find relevant independent variables relevant to the research purpose. A quantitative technique was then performed to collect the data, analyze it and test the hypothesis. The survey was conducted on 173 samples relevant to the research purpose and obtained 152 complete survey data. Descriptive surveys with frequencies were used to describe respondents' demographic variables. Chi square test of association was used to understand the relation between frequency of use of Pay Per Click and Frequency of purchase.

#### **4.2 Hypothesis:**

##### **Hypothesis -1**

H<sub>0</sub> - There is no significant association between frequency of viewing Pay Per Click Ads and purchase of products online.

H<sub>1</sub> . There is a significant association between frequency of viewing Pay Per Click Ads and purchase of products online.

### Hypothesis 2

H<sub>0</sub> – There is no significant association between viewership of Pay Per Click Ad and Sector wise product purchase

H<sub>1</sub> . There is a significant association between viewership of Pay Per Click Ad and Sector wise product purchase

### 4.3 Sampling Design:

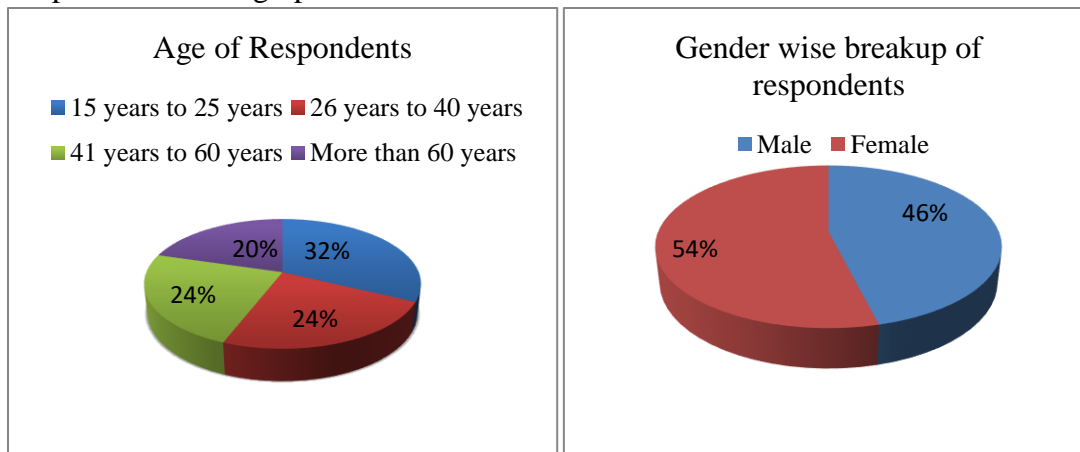
The sampling technique used for this research is Stratified Random Sampling so as to get data proportionately from every demographic segment which comprises of Internet Users from the Mumbai city. The sample size for the study is 152 respondents.

### 4.4 Limitations:

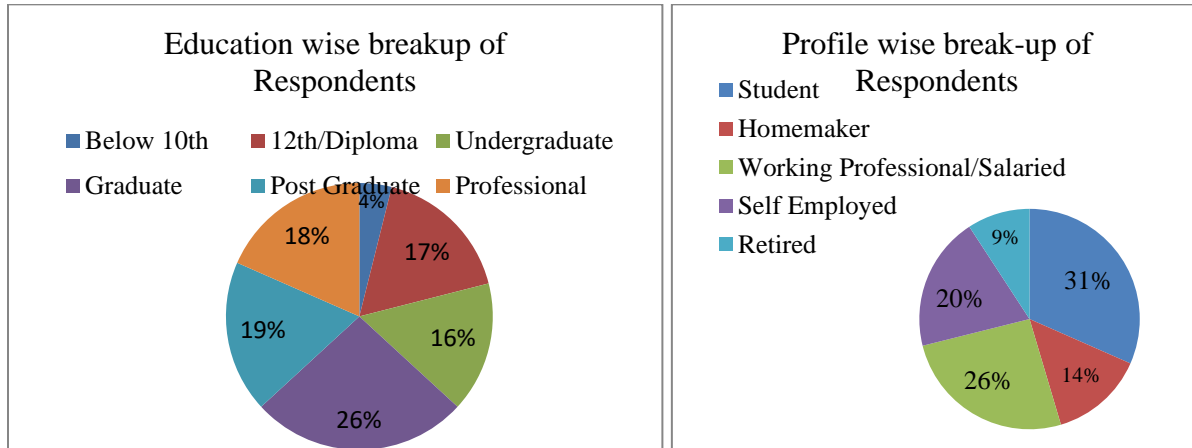
a) Respondents below 15 years of age have not been included in this study with the assumption that they may not be able to comprehend the questions correctly. b) It is based on the opinion on a limited number of consumers in the geographical range of Mumbai City and Suburbs.

## 5. Data analysis & Interpretation

Respondents Demographic Profile



Source: Researcher's Compilation



Source: Researcher's Compilation

### Hypothesis 1

The respondents across four age categories were asked about the frequency of watching Pay Per Click Ads and whether there was an increase in watching Ads over Search Engine during pandemic phase. Out of 152 respondents, 76% i.e. 116 respondents stated that there was an increase in viewership of Search Engine Ads during the Pandemic phase and 24% i.e. 36 respondents said that there was no increase in their viewership of Pay Per Click Ads in the COVID-19 period. In order to estimate the change in purchase frequency owing to Search Engine Ads, respondents were asked to describe the change in their buying behavior.

### Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	77.146 <sup>a</sup>	14	.000
Likelihood Ratio	88.305	14	.000
Linear-by-Linear Association	41.271	1	.000
N of Valid Cases	152		

Table 1: Chi-square of Independence for association between change in viewing frequency of PPC Ads and online Purchase  
 Source: Output SPSS 21

A Chi-square test of association was conducted to study if there was any significant association between Search Engine Ads viewership and purchase of products online. The relationship between these variables was significant with  $\chi^2(14, n = 152) = 77.146, p < .000$ . Thus, the null hypothesis is rejected. There is a significant association between frequency of viewing Pay Per Click Ads and purchase of products online.

## Hypothesis 2

In order to estimate whether the viewership of Pay Per Click Ad and Sector wise product purchase are associated, the respondents were asked sector wise change in their buying behavior owing to the pandemic. The sectors covered were, Food & Beverages, Grocery, Healthcare and Medical utilities, Fashion, Cosmetics & Apparel, Real Estate & Construction, Sports, Fitness & wellness, Entertainment, Tourism & Hospitality, Education, Plumbing, Electrician, Salon & Spa services.

The results of the Chi-square test of independence are as follows:

	Association of Frequency of watching Pay Per Click Ad and sector wise Purchase of products	Pearson Chi square value	Sig.	Accepted/ Rejected
1.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Food and Beverages sector	74.165	.000	Rejected
2.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Grocery sector	70.353	.000	Rejected
3.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Healthcare and Medical utilities sector	35.879	.000	Rejected
4.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Fashion, Cosmetics & Apparel sector	48.273	.000	Rejected
5.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Real Estate & Construction sector	6.240	.044	Rejected
6.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Sports, Fitness & wellness sector	21.447	.000	Rejected
7.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Entertainment sector	20.798	.000	Rejected
8.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Tourism & Hospitality sector	22.388	.000	Rejected
9.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Education sector	19.426	.000	Rejected

10.	There is no significant association between viewership of Pay Per Click Ad and product purchase with respect to Plumbing, Electrician, Salon & Spa services sector	22.385	.000	Rejected
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Table 2- Source: Researcher’s compilation based on SPSS 21 output

The Chi-square test of association establishes that the viewership of Pay Per Click Ads and product purchase with respect to Sectors are associated with each other. This study shows that as frequency of viewing Ads on Search Engine increased, there was also a rise in the frequency of shopping for products online. Thus, Pay Per Click Ads contribute to the frequency of product purchases. This could be due to the ease of shopping through the advertisement listed on Search engine, as one can click on the Advertising link and reach the product site directly. So Pay Per Click Ads serve not just as advertisements but also pathway to the product shopping platforms.

It was also interesting to learn that there is an association between Frequency of watching Pay Per Click Ad and sector wise Purchase of products. This means that sectors for which customers have searched products online during pandemic, have also shown a similar effect on the purchase of products of those sectors. The rise in frequency of searching products on Search engine and then shopping for them is also due to the online exposure and high time spent on Internet due to the pandemic restrictions with reference to Mumbai region.

## 6. Conclusion

The association between viewership of Pay Per Click advertisement and the purchase of products online is important in understanding that Pay Per Click Ads are one of the contributing agents in online purchases of products. Furthermore, the association between Frequency of watching Pay Per Click Ad and sector wise Purchase of products proves that change the frequency in viewing Ads also affects the frequency of online purchase of products from those sectors. This paper studies variables such as frequency of viewing Pay Per Click Ads and Online purchase with reference to COVID 19 specifically since the pandemic and the subsequent restrictions have given rise to the use of Internet usage. Hence, the number of respondents using Internet has risen aiding the study.

## 7. Recommendation

The study can be helpful for advertisers as it shows the differences in usage frequency of the pay-per-click method based on age and product category being purchased. It can target the age groups with a higher frequency of use and develop advertising content specifically for these age groups, instead of creating blanket advertising and diluting popularity. This study is also a revelation for the companies that place their ads in the search engine. The product categories for which ads are commonly viewed by customers when shopping through search engines can increase their pay-per-click ad spend. Whereas the marketers of those product categories that show lower frequency in ad viewership can reduce their use of pay-per-click method and reallocate their advertising spend to other possible mediums, especially when budget is limited.

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