

A Study on the Distribution of Purchase Frequency across Sectors Owing to Pay per Click

Advertising During COVID-19 Pandemic

Turkish Online Journal of Qualitative Inquiry (TOJQI)

Volume 11, Issue 4, December 2020: 1498-1507

## **A Study on the Distribution of Purchase Frequency across Sectors Owing to Pay per Click Advertising During COVID-19 Pandemic**

**Ms. Shivani Naik Devrukhkar, Assistant Professor, M. L. Dahanukar College of Commerce, Vile Parle (East), Mumbai**

Email: [shivz2619@gmail.com](mailto:shivz2619@gmail.com)

### **Abstract**

It has been observed in the past that all global events have had an impact on the economy. In case of the Corona Pandemic, the impact was evident not only at macro level but also at the small business level. However, the impact of COVID-19 on the Pay Per Click Advertising campaigns is a complex phenomenon to decode. This is because the effect of the pandemic on different sectors varies. Moreover, since people were forced to stay indoors, the attention was diverted towards online mediums more than ever leading to a surge in searches. Therefore, the impact on Pay Per Click advertising is a mixed bag and needs careful analysis. This study aims at assessing the impact of COVID-19 on the Pay Per Click method of online Advertising and sector wise influence of the pandemic. The objective of the research is to acquaint businesses and new business entrants with the opportunities and perils in the market vis-à-vis the pandemic and post pandemic situation and the possibility of using Pay Per Click form of advertising in promoting business. There is extensive use of data from news reports, related research and industry expert forecast in this study. The findings of the study infer that COVID-19 has an impact on Pay Per Click advertising with reference to certain selected sectors. However, the impact is not adverse on all sectors, as certain sectors have shown an upward trend. This study may be of benefit to businesses and potential startups to formulate their business strategy and adapting their Pay Per Click advertising campaign to suit the current sector specific market needs.

**Keywords:** COVID-19, pandemic, Pay Per Click Advertising, Sector specific, Industry forecasts.

## **1. Introduction**

Ever since the outbreak of the COVID-19 pandemic at global level, there has been a major impact on all the industries and the lifestyle of consumers worldwide. In order to understand the impact of the COVID-19 pandemic on Pay Per Click Advertising, this research paper has covered the impact on certain sectors.

### **Summary of the Impact of COVID-19 on the global economy**

The impact on the global economy has been negative. According to the (**Report by Bloomberg Economics, 2020**) the estimated loss for the global economy is about \$2.7 trillion, especially the tertiary sector consisting of the service industry. Furthermore, the International Monetary Fund, (IMF) has estimated that the global economy will be shrinking down by 3% in 2020. This slowdown will be the steepest since the Great Depression which hit the world in 1930s.

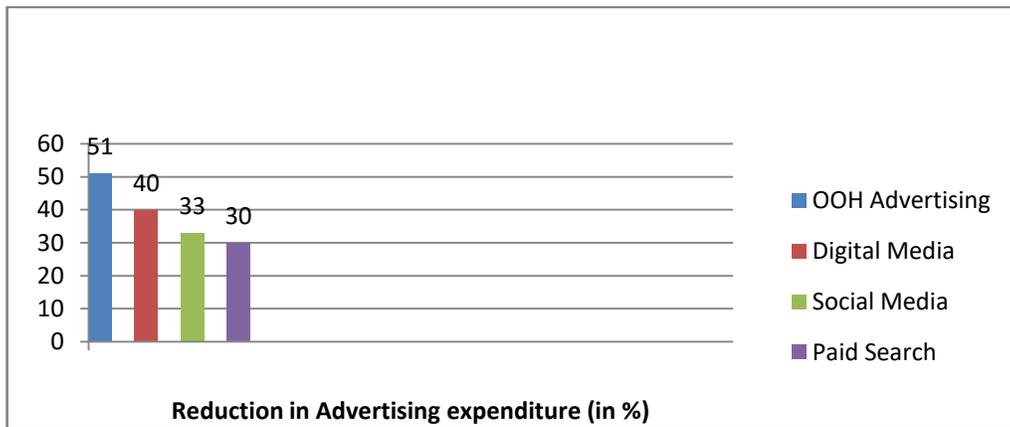
According to (**CNBC, 2020**), the Federal Reserve Estimate states that the unemployment rate may be affected by 32% with more than 6 million people worldwide losing jobs. Owing to unemployment and the fear of uncertain economic conditions, consumers are reported to spend on only bare essentials, hence the Sales of companies have drastically dropped. With no demand, the marketing expenditure was also lowered. This is evident from the study by (**Amperity , 2020**), which states in its Crisis Tracker that retail demand has hit rock bottom by 86% decline as compared to 2019-20, obvious reason being shutting down of stores. However, even the online sales have been affected by 70% which is due to in unavailability of funds with consumers or fear of spending.

### **Summary of the Impact of COVID-19 on the global advertising spend**

As per the (**Report by Statistica, 2020**), published in March 2020, the advertising industry is estimated to have lost about \$26 billion by early March 2020. That is due to a decline of 50% in Advertising expenditure. This is considering the impact on all advertising channels; however, the figures differ depending on type of advertising channel. For instance, outdoor medium shows steeper decline as compared to indoor since the attention was diverted towards Indoor medium owing to the lockdown phase and people being forced to remain indoors. The following Figure No. 1 states the decline rate.

Figure No. 1

**Decline in Advertising spending in April 2020**



*Source: Report by Statistica, Published by A. Guttman, Apr 21, 2020*

Statistics point towards a very steep downfall in the economy and also overall advertising spending owing to the pandemic. However, not all sectors are badly affected. For instance, online grocery food sector has flourished owing to the demand of consumers especially with the unavailability of food service providers. This research aims at finding the impact of the economic fluctuations post COVID-19 on specifically Pay Per Click Advertising and even more in terms of the selected sectors.

## 2. Review of Literature

1. According to **(Irvine, 2020)**, all global events have an impact on Pay Per Click advertising and COVID-19 is not exception to this. The difference in case of the impact of COVID-19 on Pay Per Click is that most people turned towards online medium owing to the restriction on stepping outside. It is an opportunity for most online advertisers but for many businesses there was a dire need to bring paradigm change in their mode of operation for their survival. Paid searches reduced by 7% and the conversion rates reduced by 21%.

2. **(Linde, 2020)**, states that while paid clicks have reduced drastically, there is a 260% rise in searches related specifically to coronavirus and this has affected the Pay Per click advertising. This is in fact evident from the figures given in a study conducted by Interactive Advertising Bureau which states that not only paid searches and conversion rates but also Ad spend is expected to reduce by 33% during the period March-June 2020.

3. In a study by **(Edelman, 2020)** brings out an interesting observation that though the Pay Per Click advertising have been affected adversely on an average. However, there are businesses which can steer audience attention and trust towards their brands. The report states that 84% consumers admitted that their loyalty towards a brand will be influenced by the actions of a company during the pandemic. This loyalty may be a factor in continuing purchase with that company in future.

4. In the article by **(Bozkurt, 2020)**, states the changes in Pay Per click advertising are sector specific and that there are prominent fluctuations. The graph of various industries has plummeted and for certain industries, there is a major downfall. The lack of sales in this phase may not be considered as lack of demand but may just be a case of deferred purchase and hence the volatility seen in the market is temporary.

5. **(Davis, 2020)**, highlights that while the Conversion rates and Ad spend shows reduction, also specified by previous studies; there is an increase in the Click Through Rates (CTR). There is a rise in opportunities for certain sectors such as Grocery, home improvement, online entertainment and games, etc. Thus, reinstating that there is a mixed reaction on sectors with reference to COVID-19 and hence advertising medium such as Pay Per Click can be employed to cash in on the current shift in consumer behavior.

6. **(Nanji, 2020)**, in an article provides Industry wise and region wise analysis on Cost Per Click. The research by **(Nanji, 2020)** is from the company's perspective and the feasibility and using Paid Search Advertising amidst current crisis. This paper may add to the industry wise analysis on the impact on Pay Per Click Advertising.

### **3. Objectives of the study**

- To understand the impact of COVID-19 on Pay Per Click Advertising
- To ascertain whether the effect on Pay Per Click Advertising varies sector wise
- To suggest measures to utilize Pay Per Click campaigns to deliver optimal results in businesses.

## **4. Research Methodology**

### **4.1 Research Design**

It is quantitative research and questionnaires have been used for data collection.

**Secondary Data:** To understand the global impact sector wise on Pay Per Click advertising, secondary data was collected through news reports, related research and industry expert forecast in this study from online sources. The data is collected from the period January to December 2020.

**Primary Data:** For customer perspective, primary data was collected through self-administered questionnaire is made up of three sections. Demographic Information of the respondents is collected in first section. The second section covers information about frequency and pattern of usage of Pay Per Click medium by the customers in general. The third section covers the impact of COVID-19 on the viewership and popularity of Search Engine Ads have been collected on a 5-point Likert scale.

#### **4.2 Hypothesis:**

**H<sub>0</sub>:** There is no significant difference in distribution of purchase frequency across sectors owing to Pay Per Click advertising during COVID-19 pandemic.

**H<sub>1</sub>:** There is a significant difference in distribution of purchase frequency across sectors owing to Pay Per Click advertising during COVID-19 pandemic.

#### **4.3 Sampling Design:**

The sampling technique used for this research is Stratified Random Sampling so as to get data from customer across varied demographic backgrounds. The sample size for the study is 152 respondents. Of the 191 surveys sent out, 166 chose to participate. Only 152 questionnaires could be included for analysis, leading to a 79% response rate.

#### **4.4 Limitations:**

- Owing to the recency of the phenomena of the COVID-19 pandemic, the research relies mainly on secondary data and electronic sources such as news reports and website articles.
- It was challenging to acquire information and cooperation from customers. Among the ones who have filled the survey, the possibility of bias cannot be negated.

### **5. Hypothesis testing, Data analysis & Interpretation**

**H<sub>0</sub>:** There is no significant difference in distribution of purchase frequency across sectors owing to Pay Per Click advertising during COVID-19 pandemic.

**H<sub>1</sub>:** There is a significant difference in distribution of purchase frequency across sectors owing to Pay Per Click advertising during COVID-19 pandemic.

Prior to assessing the difference in purchase frequency among various sectors through the Pay Per Click medium during COVID-19 pandemic, the data has been checked for Normality. The results of Normality Tests are given in Table No. 1

Table No.1  
**Normality test to ascertain the test to analysis the impact**

<b>Tests of Normality</b>						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
COVID_PPC	.471	152	.000	.533	152	.000
PURCHASE_FOOD	.379	152	.000	.692	152	.000
PURCHASE_FMCG	.368	152	.000	.703	152	.000
PURCHASE_HEALTHCARE	.405	152	.000	.657	152	.000
PURCHASE_RETAIL	.288	152	.000	.773	152	.000
PURCHASE_REALESTATE	.236	152	.000	.799	152	.000
PURCHASE_SPORTS	.231	152	.000	.802	152	.000
PURCHASE_ENTERTAINMENT	.374	152	.000	.698	152	.000
PURCHASE_TOURISM	.233	152	.000	.797	152	.000
PURCHASE_EDUCATION	.281	152	.000	.778	152	.000
PURCHASE_PLUMBING	.242	152	.000	.798	152	.000
A. Lilliefors Significance Correction						

*Source: Analysis from SPSS 21.0*

The ‘p’ values of Purchase Frequency across all sectors were below the critical ‘p’ value of 0.05. Hence, the null hypothesis that the data is normally distributed has been rejected. The data was found to be not normally distributed, hence, the non-parametric test Mann-Whitney U has been to assess the difference in distribution of purchase frequency across sectors owing to Pay Per Click advertising during COVID-19pandemic. The Table No.2shows the results of the Mann-Whitney U Test

A Study on the Distribution of Purchase Frequency across Sectors Owing to Pay per Click

Advertising During COVID-19 Pandemic

Table No.2

Distribution of purchase frequency across sectors owing to PPC advertising during COVID-19

Hypothesis	Sig.	Decision
There is no significant difference in distribution of purchase frequency in Food sector owing to Pay Per Click advertising during COVID-19 pandemic.	.000	Reject the null hypothesis
There is no significant difference in distribution of purchase frequency in Food sector owing to Pay Per Click advertising during COVID-19 pandemic.	.000	Reject the null hypothesis
There is no significant difference in distribution of purchase frequency in FMCG sector owing to Pay Per Click advertising during COVID-19 pandemic.	.000	Reject the null hypothesis
There is no significant difference in distribution of purchase frequency in Retail sector owing to Pay Per Click advertising during COVID-19 pandemic.	.000	Reject the null hypothesis
There is no significant difference in distribution of purchase frequency in Real Estate sector owing to Pay Per Click advertising during COVID-19 pandemic.	.523	Retain the null hypothesis
There is no significant difference in distribution of purchase frequency in Sports sector owing to Pay Per Click advertising during COVID-19 pandemic.	.057	Retain the null hypothesis
There is no significant difference in distribution of purchase frequency in Entertainment sector owing to Pay Per Click advertising during COVID-19 pandemic.	.004	Reject the null hypothesis
There is no significant difference in distribution of purchase frequency in Tourism sector owing to Pay Per Click advertising during COVID-19 pandemic.	.004	Reject the null hypothesis
There is no significant difference in distribution of purchase frequency in Education sector owing to Pay Per Click advertising during COVID-19 pandemic.	.000	Reject the null hypothesis

There is no significant difference in distribution of purchase frequency in Services sector owing to Pay Per Click advertising during COVID-19 pandemic.	.004	Reject the null hypothesis
--	------	----------------------------

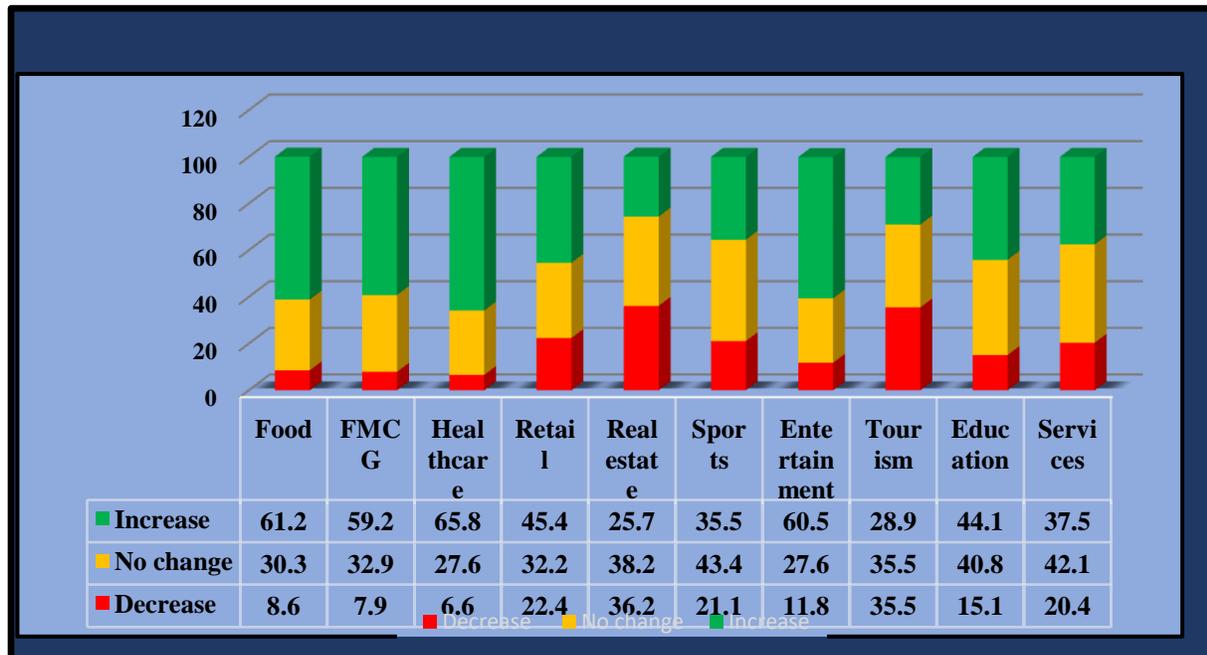
*Source: Researcher's compilation*

Mann-Whitney U Test results show that the 'p' value was less than 0.05 (5% significance level) for sectors Food & Beverage, Healthcare, FMCG, Retails, Entertainment, Tourism, Education and Services. Hence, the null hypothesis has been rejected. So, it I observed that there is a difference in distribution of purchase frequency across the above-mentioned sectors owing to Pay Per Click advertising during COVID-19pandemic. Whereas, for sectors such as Sports and Real Estate, the 'p' values were higher than 0.05 (5% significance level). So, the study fails to reject the null hypothesis. Thus, it can be observed that there is no significant difference in distribution of purchase frequency across Real Estate and Sports owing to Pay Per Click advertising during COVID-19pandemic.

The distribution of Purchase frequency across Sectors based on respondent data has been presented in Figure No.2

**Figure No. 2**

**Distribution of Purchase frequency across Sectors**



*Source: Researcher's compilation based on frequency distribution conducted on SPSS 21.0*

## 6. Conclusion

It has been observed that there is an impact of the COVID-19 on Pay Per Click advertising. This was also due to the shift in focus of people from the traditional advertising mediums to the online mediums. However, although the audience attention shifted to searching products on search engines, the marketers seemed to reduce expenditure on Pay Per Click advertising due to the volatility of the market. From the statistics provided by business analytics about certain select sectors, it is observed that sectors like healthcare & medical, food & beverages, FMCG and entertainment have seen an upward trend and tourism sector has shown a decline. However, sectors such as real Estate and Sports have shown no significant variation in the frequency. It can be concluded that COVID-19 has an impact on Pay Per Click advertising as evident from the fluctuations observed in the selected sectors in the pandemic phase.

## 7. Suggestions

From an advertiser's perspective, it is productive to consider the conversion rate of the sector before increasing advertising expenditure in Paid search. Companies operating in the Sports and Real Estate sector need to work on Re-engaging customers post the pandemic period. Investing more in the promotion via Pay Per Click may not yield results during pandemic since these customers do not look at these sectors as essential. The advertisers can also try a hybrid model of combining Pay Per Click with social media sites and not just search engine. This is because the lockdown has led to more time spent by people indoors and most of them stay connected using social media. The advertising content displayed through Pay Per Click ads needs to be modified and customized keeping the pandemic norms. Sectors dealing with food can emphasize on the keywords Hygienic and No contact delivery to attract clicks from customers who have become more skeptical than before. For categories such as Services, Education, etc. link the advertisement to landing page where customers can interact with the executive who will be providing online service to build trust first.

## References

1. Amperity . (2020, June 9). *Retail Monitor*. Retrieved June 9, 2020, from Amperity : <http://covidtracker.amperity.com/>
2. Bharti, V. (2020, October 1). *What is the impact of COVID-19 on Google paid ads*. Retrieved March 20, 2021, from bitwise branding.com:

<https://www.bitwisebranding.com/blog/what-is-the-impact-of-covid-19-on-google-paid-ads>

3. Bozkurt, C. (2020, April 17). *The Effect of COVID-19 on Cost-per-Click for Ads in Various Industries*. Retrieved June 9, 2020, from Better Marketing
4. Cobb, A. (2020, April 6). *COVID-19's impact on PPC advertising*. Retrieved March 21, 2021, from Peak.ai: <https://peak.ai/hub/blog/covid19-ppc-advertising-impact/>
5. Cox, J. (2020, March 30). *The coronavirus economic freeze could cost 47 million jobs and send the unemployment rate past 32%*. Retrieved May 8, 2020, from CNBC: <https://www.cnbc.com/2020/03/30/coronavirus-job-losses-could-total-47-million-unemployment-rate-of-32percent-fed-says.html>
6. Davis, S. (2020, May 4). *COVID-19 and Ecommerce: Amazon, Paid Search & Social, and Industry Impacts*. Retrieved June 5, 2020, from ROI Revolution : <https://www.roirevolution.com/blog/2020/05/covid-19-amazon-paid-search-social-industry-impacts/>
7. Edelman, R. (2020, March 20). *Trust Barometer Special Report: Brand Trust & Corona Pandemic*. Retrieved June 9, 2020, from Edelman: <https://www.edelman.com/research/covid-19-brand-trust-report>
8. Guttman, A. (2020). *Impact of COVID-19 outbreak on U.S. ad spend 2020*. Statistica .
9. Irvine, M. (2020, April 16). *How COVID-19 Has Impacted Google Ads Results for 21 Industries*. Retrieved June 9, 2020, from Wordstream: <https://www.wordstream.com/blog/ws/2020/03/18/covid-19-google-ads-data>
10. Linde, J. (2020, May 18). *The effect of coronavirus (COVID-19) on Google Ads and paid advertising overall*. Retrieved March 21, 2021, from Impactplus.com: <https://www.impactplus.com/blog/effect-covid-19-google-ads>
11. Muhammad, F. (2020, April 30). *The Global Impact of the Coronavirus on the Digital Advertising Industry + 6 Tips How to Improve Your Campaigns (Data)*. Retrieved March 22, 2021, from instapage.com: <https://instapage.com/blog/coronavirus-impact-on-digital-advertising>
12. Nanji, A. (2020, March 31). *How COVID-19 Is Impacting Social Media Ad Rates and Engagement*. Retrieved June 2, 2020.