



FACTORS CAUSING TRANSFORM IN CONSUMER BEHAVIOUR DURING COVID-19 PANDEMIC-A SDUDY

Dr.Chetana M R

Associate Professor, Department of Commerce and Management
Sheshadripuram Academy of Business Studies, K.S.Town, Bangalore

ABSTRACT: Consumer behaviour plays an important role in maintaining profit and market reputation of any product and it has been impacted severely due to COVID-19 pandemic. This research is focussed on identifying the factors which have triggered such changes and ranking the factors based upon the degree to which they have influenced the consumer behaviour. An online survey was conducted which had elicited 239 responses, the survey was divided into three sections wherein first and second section drew responses related to factors of change in consumer behaviour and the third section had questions linked to sectorial analysis of industries during COVID-

19. As per the survey, five factors were identified, and regression analysis was performed to test their effect on the change in buying patterns of consumers. For sectorial analysis, twelve sectors were identified and t-test was performed on them to check the change in spending limit of individuals. The proportions of survey respondents were well balanced between working male and females, housewives, teenagers and students and were aged between 15 to 66 years. By means of regression analysis we identified that factor of "Quality" plays an important role for shaping consumer decision of buying a product. Also, through sectorial analysis, it was identified that spending limit on all sectors are impacted except education sector. The method of using "independent variables as factors" further helped us in understanding the degree of their impact on consumer behaviour. Through this method, organization can identify and implement the factors, that their product lack and thus, can improve its sales. Sectorial analysis can serve both individuals and organizations to understand the changing conditions of various sector, thus enabling to make a wiser investment decision. In a pandemic situation, the organizations must focus on building their strategy by knowing the reasons behind changes in buying pattern of the consumers which in turn helps organizations to gain better insights on the market. This method will help organizations to boost their current sales and launch new products into the market.

KEYWORDS: Change in buying behaviour, Consumer behaviour, COVID-19 buying patterns, regression analysis, Consumer behaviour COVID-19 pattern, COVID-19.

I. INTRODUCTION

COVID-19 pandemic has influenced daily routines of individuals and has severely jammed the work, socialization, business activities of people; furthermore, it has altered the consumers buying behaviour for different products. [1] The effect of great influenza (WHO 1918-1919) is comparable to the current COVID-19 pandemic to a certain extent but the economic implications may be devoid of COVID-19 effects due to technological advancement. This research paper is focused on how factors such as product quality and availability, influence through public sentiment, financial savings and fear of health influence the consumer behaviour and business sectors during the pandemic. [2] To understand the effects of COVID-19 on healthcare sector, we studied the increase that stock prices of pharmaceutical companies and the surge was attributed to potential chance of finding COVID-19 vaccination. The paper focussed on the reaction that investors were giving on DRN's (Disease related news) and the DRN's created a boost in pharmaceutical firm's stocks by generating panic, fear and anxiety among the investors and further the impact of DRN increased sale and stock prices on the other sectors was also studied. We mainly focused on factors that triggered the change in consumer behaviour and the level of their effects. The COVID-19 pandemic has influenced the nutrition and dietary intake of people as well [3], and this effect might have surpassed the individual and community tolerance level to reach the national and global levels.

The authors demonstrated how health of the individuals became a direct function of their awareness and choices, unity in the community, preparedness of the government, and ultimately the global engagement in context to this threat. This research is important because the effect of COVID-19 on various sectors might need to develop cognizance regarding producing and advertising a product.

For this research we have taken individual variables as availability of product, financial savings, influence through public sentiment, fear of health and quality of product. [4] While researching on how a pandemic can impact the economy of a country and its influence on the health of individuals, the importance of preparedness measure that one can take during such a situation with respect to health, hygiene and awareness of the precautionary measures was presented. During a pandemic, such awareness about the precautionary measures may not necessary be consistent among the laypeople, so a detailed study must be conducted for better preparedness of people and for the profit of various industries.

II. LITERATURE REVIEW

1.1 A light on past pandemics and its impact:

People have survived pandemics in the past such as Avian Flu, Ebola, Spanish Influenza etc. and researchers have studied and analysed the impact of these pandemics on the economy of a nation. [5] Avian flu infected the livestock in the state of Manipur and it in-turn, impacted the economy of the state as the state witnessed 14 % loss of total livestock, which impacted producers and industries such as poultry, egg traders etc. Pandemics not only impacted the livelihood of people, but also negatively altered society's trust in associated industries [6] as the same was experienced in agricultural sector of Liberia during the outbreak of EVD (Ebola Virus disease). An analysis was presented about the impact of EVD epidemic on efficiency of agricultural production and productivity of farm households, wherein it was discovered that EVD might not only be limited to communities that are directly affected, but also the communities where EVD cases were less or not reported. COVID-19 has impacted the livelihood of everyone in terms of migration from one place to another, due to lockdown. A similar situation was encountered during H1N1 influenza in United States [7], wherein, restriction on people's movement from one state to another was imposed to avoid the spreading of H1N1 pandemic. Current research ideas provide the findings that a pandemic can, not only increased the health risk for the population, but also directly impacted the financial stature of affected industry people. It led to restriction on the use of various products and services which altered consumers buying pattern.

Although several findings were observed about the effect of the pandemic on people, less studies focussed on the responses that people gave during the pandemic, such as risk perception and [8] precautionary behaviour towards the disease. The rate at which a pandemic spread depends on the behaviour of individual, which is shaped by their risk perceptions about the epidemic. The respondents from less affected areas of H1N1 influenza reported stronger interest in taking medications, pharmaceutical preventive interventions and engaging in precautionary activities. Whereas, people living in areas of higher likelihood of infection has expressed less interest in pharmaceutical interventions and precautionary activities. Findings from the research indicates that the factor of risk perception varies based on demographic characteristics and geographic locations and so does consumer's pattern of purchasing a product.

COVID-19: Effect on Economy and Sales:

The impact of COVID-19 had been severe on global economy as it impacted various sectors and industries within a span of few months [9] and one such service was Google search engine, wherein, the usage had increased since the outbreak of corona virus. Pandemic related news and hygiene products such face mask, hand sanitizer etc. were among the top searches in Google. This boosted the profits of Google search engine and, also increased the awareness amongst individuals about products and services to be used during pandemic. Due to COVID-19, the restriction on mobility was imposed by banning aviation sector during lockdown [10] and this affected the socio economical aspect on the economy. Here, a forecasting model was developed to analyse the data of past decade and flight change activity due to COVID-19. This ban resulted in a drop in airline sector and also affected world GDP and caused several job losses in the sector. Thus, it was anticipated that COVID 19 had a clear impact on various sectors and due to the restriction and lockdown, people were more cautious towards the purchases that they made. Therefore, people would search more thoroughly and tend to buy the products that had positive reviews and catered to their needs.

Due to COVID19, various services had witnessed fluctuations in their usage and sales. [11] The sale of B2B domain had gotten affected and its influence can be observed by studying with Leavitt's model. Leavitt's Model includes both social as well as technical factor and helped to identify the effectiveness and application of potential sales force responses in a situation. The sector of B2B sales had faced decline as the pandemic caused a negative impact on its operation and it caused an imbalance between intra-organizational and inter-organizational sales.

[12] Research compared current coronavirus crisis and previous financial of the firm and measured the crisis in the sector by segregating SET theory on eight parameters. This helped to draw an inference that many services and operations might be facing similar difficulties like B2B sales, while execution and production in an organization.

2.3 COVID-19 - Present situation and usage of various products:

In this pandemic situation, certain section of products such as disinfectants, face masks etc., had gained profits in their sales. There has been an increase in usage of healthcare products such as hospital equipment, PPE kits and other products. [13] Moreover, irregular routine had also altered people's sleep pattern and increased their digital media streaming substantially which led to an increase in use of products such as video games, MP3, social media's throughput etc. [14] Since the outbreak of corona virus, all the medical students and medical professionals have been using PPE (Personal Protective Equipment) in performing their duties for COVID-19 patients. Studies have mentioned that it helped doctors to monitor and

operate patient, while simultaneously reducing the risk of getting infected from COVID-19 suspected patients. Since, the outbreak of COVID-19 pandemic, the sale of disinfectant products and services have also increased, as they were periodically performed by organizations and individuals. [15] Study showed that need to maintain a proper disinfectant system before releasing wastewater from hospitals, were also taken into consideration by people, as they were more dangerous for any individual who comes in its vicinity.

The findings drawn here were that due to nationwide lockdown and restricted facilities, people changed their routine and thus, their product choices and usage had also witnessed a difference. People were now more aware about the use of products and services available to them because of their change in routine. Studies here also concluded that there was an increase in sales of healthcare sector products because many products such as PPE kits, gloves and other medical supplies, which are mandatory for professionals, were not re-usable. New services such as wastewater management, hospital waste management etc., are also expanded, which depicted consumers cautious behaviour. Therefore, the factor of health getting compromised could alter an individual's behaviour and the same could be reflected while making decisions of buying a service or a product.

Today, livelihood of almost every individual has been affected by COVID-19 pandemic regardless of their demographics, financial stature etc. This research focuses on the effects that COVID-19 pandemic has caused on consumer behaviour and the extent by which these factors will influence the change. The research had also conducted a sectorial analysis on twelve sectors and performed t-test to check the change in spending limit of buyers before and during COVID-19 lockdown. The study includes following factors namely; Availability of product, Financial Savings, Quality of Product, Influence through public sentiment and Fear of Health to monitor the change in consumer behaviour. Based on each individual factor's contribution towards change, this paper attempts to discover the degree up to which one factor is influencing change, to sort and find the most impacting and least impacting factor.

III. METHODOLOGY

The aim of this research was to identify factors and their impact on a consumer buying behaviour and sorting those factors on a scale of high dependence to low dependence as per the change in buyer's behaviour and to achieve the objectives, a pilot study was conducted to understand the suitability of analysis method. A survey was conducted by means of a questionnaire and their responses were analysed by applying univariate linear regression analysis on the data to check their dependency on the dependent variable. Also, a sector wise analysis was conducted based upon spending limit of respondents on various areas such as domestic travel, life insurance schemes etc., before and during COVID-19, to check the impact of pandemic on those sectors.

Questionnaire:

To conduct the survey, five parameters were identified that affected consumer behaviour the most and those parameters were availability of food, financial savings, fear of health, influence from public sentiment and quality of items to be purchased. A total of 239 responses were received, after a structured online survey was circulated to collect primary data. The survey was based on factors that lead to change in consumer behaviour while buying a product in a pandemic situation. Respondents were from different age groups comprising of working male and female, housewives, students and teenagers. This survey was divided in three sections; first section included general information from user and their response to the factor called fear of health and second section includes the respondent's reaction on factors like availability of food, financial savings, influence through public sentiment and quality of items. Lastly, the third section aimed at the questions regarding sectorial analysis, which provided participants a Likert scale (1 to 5), and recorded the responses about spending limit of the consumer's pre and during COVID-19 outbreak.

Quantitative method:

The sections one and two of the questionnaires were specifically designed for qualitative study. Various methods of data analysis have been used by researchers in the past. One such paper presented [16] the checking impact of anti-rheumatic treatment on immunogenicity of H1N1 influenza vaccine. Here, univariate regression analysis was performed on each factor namely patient with negative antibody level, seasonal influenza, predictor of positive immune to check their dependency. Univariate Regression analysis was adopted to check the dependence of change in behaviour (dependent variable) with respect to factors (independent variables). After the initial responses to the questionnaire, data pre-processing was done based on age group which was divided in the range of 10 years. During pre-processing, the categorical data of Yes and No were translated to 1's and 0's respectively and the sum of responses was calculated. Henceforth, for this analysis we have considered the "change in behaviour" as dependent variable for all the mentioned factors (Independent variables) and abbreviated it as "change" for our reference.

The third section of questionnaire was specifically designed for sectorial analysis. Based on the study of Hypothesis testing,

[17] an insight on statistical hypothesis, testing a hypothesis, importance of p-value and significance level were attained. Also, through an in-depth study of t-test [18], better knowledge involving various types to t distributions were obtained such as one sample t-test, two sample t-test. Therefore, to test the change in consumer behaviour, one-tail t-test hypothesis method was adopted. Below are the factors- wise analysis of the survey and its impact is on the buyer's behaviour:

Availability of Products:

One of the factors affecting consumer's behaviour was found to be availability of products. For a detailed analysis, we segregated this questionnaire in few sub-categories namely;

- Not known brand – Bought in bulk,
- Bought In bulk even if it's out of buyer's estimated budget,
- Brand not known but only few pieces are available in stock
- If the product is out of your estimated budget,
- If the product is not of a known brand.

R square and adjusted R square values are mentioned as below:

Table 1: Impact of Availability of product on Buying Behaviour

Factors	R Square	Adjusted R Square
Not known brand – Bought in bulk	84.1%	78.8%
Bought In bulk even if it's out of buyer's estimated budget	69.9%	59.9%
Brand not known but only few pieces are available in stock	74.4%	65.9%
If the product is out of your estimated budget	76.2%	68.2%
If the product is not of a known brand	84.2%	79.0%

Financial Saving

Financial saving was the second factor for the analysis. During a pandemic and lockdown situation people are inclined towards saving the money, and a detailed analysis on this factor had the sub-categories namely;

- Not known brand – Bought in bulk,
- Bought In bulk even if it's out of buyer's estimated budget,
- Brand not known but only few pieces are available in stock and R square and

adjusted R square values are mentioned as below,

Table 2: Impact of Financial Saving on Buying Behaviour

Factors	R Square	Adjusted R Square
Not known brand – Bought in bulk	82.9%	77.3%
Bought In bulk even if it's out of buyer's estimated budget	47.5%	30.5%
Brand not known but only few pieces are available in stock	77.8%	70.4%

Fear of Health:

Fear of health was the most common factor in a pandemic which affected the consumers buying behaviour. Based on fear of health factor, we segregated this questionnaire in the sub-categories namely;

- Duration of conducting any important ceremony after the lockdown and
- The duration after which socializing and gathering is suitable.

While pre-processing the data, we converted the categorical data into numerical data for socializing and duration of socializing provided here were

- “less than a month”,
- “within 1-2 months” and
- “after 2 months”,

Which were converted to 1, 2, 3 respectively. R square and adjusted R square values are mentioned as below

Table 3: Impact of Fear of Health on Buying Behaviour

Factors (Independent variables)	R Square	Adjusted R Square
Conducting an important ceremony	83.2%	77.6%
Duration of Socializing	79.4%	72.6%

Influence through public sentiment:

Whenever, world faces a pandemic, it gives rise to various news segments. Some of them influence the masses and their choice of purchasing a certain product. Therefore, one of the factors that we included in this survey was the impact of Anti-China Sentiment on buyer’s behaviour. Another factor included was the time preference of an individual in buying of some products from the shop during national lockdown. Basically, we recorded participant’s time preference for purchasing a product and whether it changes if the shop will follow government guidelines such as social distancing etc. In questionnaire, we had mentioned the time as (below) and the reason to choose the slot

- Morning (8am – 10 am),
- Afternoon (10am – 4pm),
- Evening (4pm – 8 pm) and
- Night (8pm – 10 pm),

The impact of both factors is shown below.

Table 4: Impact of Influence through Public Sentiment on Buying Behaviour

Factors (Independent Variables)	R Square	Adjusted R Square
Anti-China Sentiment	80.4%	73.9%
Time Preference	84.4%	79.2%

Quality of Product:

An extremely important factor which can alter buyer’s behaviour was the quality of product. For analysis, we provided the participants with a few categories of products and asked them to mark their preference of buying the product online or prefer to go to the shop. The preview of respondent’s choice as per product category is as follows:



Fig – 1: Respondent’s preference based on Product Category

Based on the above data, “Clothes and Apparel” was preferred to be purchased by visiting the shop instead of online purchasing whereas “Fruits and vegetables” was most preferred sector for online purchase instead of visiting the shop. The data showing R square and Adjusted R square values are as follows:

Table 5: Impact of Quality of Product on Buying Behaviour

Factors (Independent Variables)	R Square	Adjusted R Square
Packaged food item	63.9%	51.9%
Personal Care and pharmacy	84.4%	79.2%
Clothes & Apparel	74.9%	66.6%
Household & cleaning supplies	84.3%	79.0%
Baby infant & products	73.9%	65.2%
Luxury items	79.9%	73.2%
Fruits and Vegetable	74.7%	66.3%

Consolidated View:

Based on the research, the five most preferred factors (along with its sub-category) influencing the consumer’s buying behaviour during COVID-19 are presented along with its R square and adjusted R square values:

Table 6: Top 5 Most Preferred Reasons for Change in Buying Behaviour

Factors (Independent Variables)	R Square	Adjusted R Square
(Quality) Personal Care and pharmacy	84.40%	79.20%
(Influence) Time Preference	84.40%	79.20%
(Quality) Household & cleaning supplies	84.30%	79.00%
(Availability) If the product is not of a known brand	84.20%	79.00%
(Availability) Not known brand – Bought in bulk	84.10%	78.80%

We have also mentioned five least preferred factors (along with its sub-category) that have not influenced the consumer’s buying behaviour. The data along with its R square and adjusted R square values is shown below:

Table 7: Top 5 Least Preferred Reasons for Change in Buying Behaviour

Factors (Independent Variables)	R Square	Adjusted R Square
(Savings) Bought In bulk even if it’s out of buyer’s estimated budget	47.50%	30.50%
(Quality) Packaged food item	63.90%	51.90%
(Availability) Bought In bulk even if it’s out of buyer’s estimated budget	69.90%	59.90%
(Quality) Baby infant & products	73.90%	65.20%
(Availability) Brand not known but only few pieces are available in stock	74.40%	65.90%

IV. For reference, we have kept an abbreviation of the factors (independent variable) with all the sub-categories. They are “Quality” for quality of product, “Influence” for influence through public sentiment, “FOH” for fear of health, “Savings” for financial savings and “Availability” for availability of products

Questionnaire Response:

In this research, we have also presented a sector wise analysis of various domains. These domains include Life Insurance,

Local leisure activity, Domestic travel, Restaurant Dine In, In-house entertainment, Education, Video Streaming & Social Media, Alcohol, Restaurant Delivery, Cars & Automobiles, Real estate Buying and Cleaning & Disinfection services. A Likert scale of 1 to 5 wherein 1 being extremely unlikely to 5 being extremely likely was used for taking responses from the respondents and they were asked to mark their spending limit on these sectors before and during COVID- 19 pandemic lockdown. Based on the responses, spending limits of the participants mentioned, in questionnaire about these services, before and after COVID-19 lockdown are as follows:

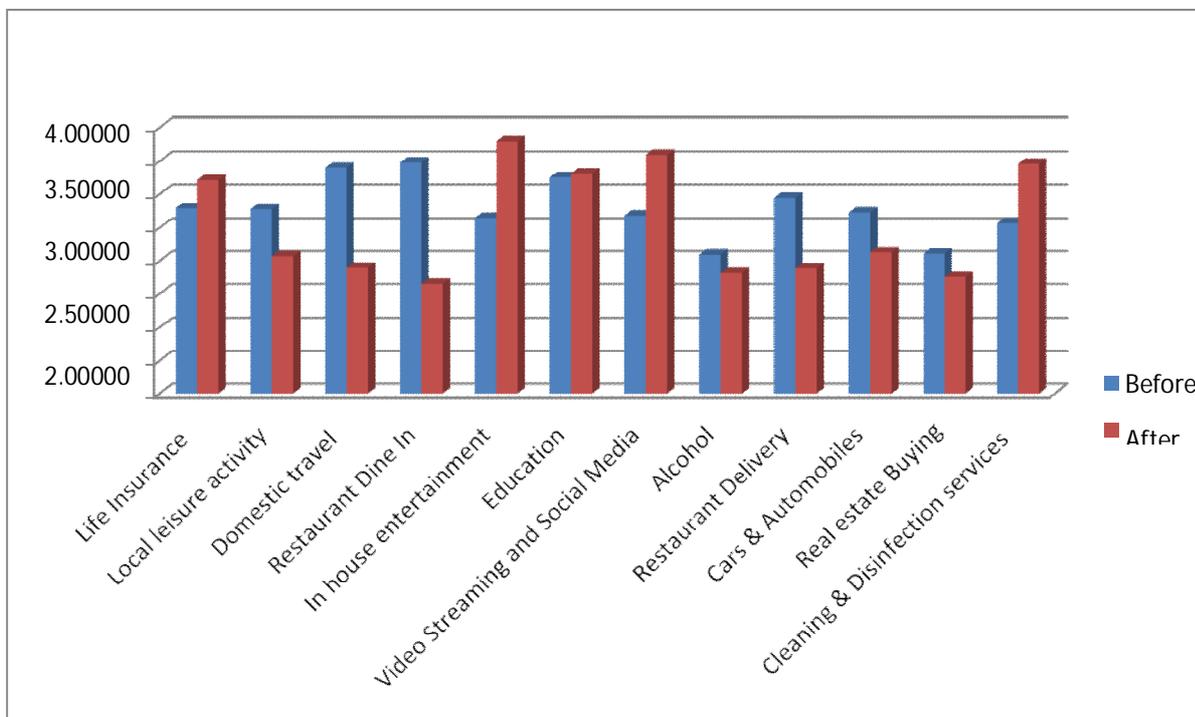


Figure 2: Spending of Respondents based on Sectors

Hypothesis Testing:

The data collected in the third section of questionnaire was used for hypothesis testing. The reason for conducting a t-test was because each sector had two groups, which were related in certain features but with significant difference in means. We used each of the variables i.e., sectors and performed a paired t-test for two sample means.

We will present the null hypothesis as:

- **Ho (Null Hypothesis):** No changes in the spending limit of participants in the sector before and during COVID-19 pandemic
- **HA (Alternate Hypothesis):** Change was observed in the spending limit of participants in the sector before and during COVID-19 pandemic

For all the variables, the p-value of 0.05 was considered significant and the corresponding p-values of all the sectors are:

Table 8: p-Values for sectors

Sectors	P- value - one tail	Ho
Life Insurances scheme & Savings	5.00154E-09	Rejected
Local leisure activity (Example- swimming, gym etc)	7.74811E-12	Rejected
Domestic travel	3.77307E-40	Rejected
Restaurant Dine In	1.15444E-53	Rejected
In house entertainment (Example - Cooking, Reading)	7.02818E-30	Rejected
Education	0.196787323	Accepted
Video Streaming and Social Media	9.07436E-30	Rejected
Alcohol	1.23557E-05	Rejected

Restaurant Delivery	4.52593E-24	Rejected
Cars & Automobiles	1.89068E-11	Rejected
Real estate Buying	3.88297E-06	Rejected
Cleaning & Disinfection services	1.89968E-21	Rejected

V. DISCUSSION

Whenever world faces a pandemic, the perspective and behaviour of people changes towards buying products, which creates a ripple effect for associated sectors. [19] A study focused on the chronology between a pandemic, people's reaction and its impact on subsequent sector. During H1N1 influenza, people refrained from travelling through air, which impacted the airline sector. Study helped us to infer that similar impact could be replicated on consumer's behaviour, which can ultimately impact several sectors during COVID-19 pandemic.

As per the questionnaire, 239 people participated, which consisted of 42.7% female and 56.9% male. The respondents of the survey were from an age of 15 to 66 and 87% of the respondents agreed that COVID-19 pandemic has affected their buying behaviour whereas 13% didn't report any such change. The consolidated results of the factors (Independent variables) identified during this research are as below:

a) Availability of product:

During COVID-19, factor of availability helped the products of unknown brands as they are purchased most by buyers. But a variation was observed wherein consumers are not making a bulk purchase of such products, if the product is falling out of buyer's estimated budget.

b) Financial Savings:

Due to the pandemic and the lockdown, the economic situation of people was not very stable. Layoffs and pay occurred across several organizations, which had triggered the behaviourism of savings in several households. Study observed that consumers purchased a product the most when the brand is not known but only few pieces were available in stock whereas consumers were buying less products in bulk when it was falling out of buyer's estimated budget.

c) Fear of Health:

Fear of health was an important factor while conducting this survey because the spread of corona virus increased at a high rate. As per this research, we can infer people were very reluctant towards arranging or going to a ceremony. The impact of duration of socializing had also impacted the factor of fear of health by a good correlation. Since, both the values of R square were higher than 75%, we also inferred that the data had fit in the regression model and their impact on the dependent variable i.e., change was high.

d) Influence through public sentiment:

Amid the chaos of a pandemic, several protests and movements happened, which shaped a laymen's perception towards various products and services. These notions and perceptions impacted their behaviour towards a product purchase. During COVID-19, many people were influenced by the protest of boycotting/ banning China based products. The factor of Influence had the most impact on the consumer buying behaviour as its R square value is 80.4% & 84.4%. It demonstrated that there is a good co-relation between the dependent and independent variables and, displayed that the model suited the data well.

Time preference: In the questionnaire, participants also mentioned their preferred time to visit the shop to buy daily essentials during the lockdown and the reason for selecting that slot. The most preferred time for the people to visit the shop was morning between 7 am and 10 am, with 46% followed by Afternoon slot between 10 am and 4 pm with 27% and evening time between 4 pm to 8 pm with 23%. The least preferred time for people to visit the shop was the night-time between 8 pm and 10 pm with 4%.

Research suggested that the most mentioned reason for people opting for morning time was fewer crowds. Other reasons mentioned were due to the weather, government guidelines, and work from home timing after 10 am. The second most preferred timing was afternoon and the preferred reason was the fewer crowd because as per most participants, due to weather, fewer individuals would have preferred this slot and therefore they would have encountered less crowd at the shop. Another reason was the convenience of the people. The third preferred timing was evening and the most mentioned reason for this slot was that, it fitted in people's schedule with morning shift. Other mentioned reasons were fewer crowd and weather.

The least preferred timing by participants were Night- time and the reason mentioned for this same were fewer crowd, work schedule during daytime and weather. This presented an ideology that people preferred to encounter area with fewer crowd to avoid the chances of being infected with the corona virus.

64% respondents agreed that these "time preference" would change, if the shops will follow the government mentioned guidelines such as Social Distancing, wearing of gloves etc. 36% respondents mentioned that such guidelines will not impact their time preference of visiting the shop.

e) Quality of Product:

Quality of product is considered an important factor for shaping consumer's buying behaviour, even without a pandemic condition and through this survey, the importance of product's quality was tested during a pandemic condition. Here, the inference was that people who preferred to go out to shop to buy the products even during COVID-19 lockdown, would prefer the factor of quality more than others and thus, the data was pre-processed based on it. The analysis indicated that the industry of personal care and pharmacy most with an R square value of 84.4%. It depicted that people preferred to buy products from this industry directly from the shop, whereas, the industry of packaged food was impacted least with an R square value of 63.9% i.e., people preferred to purchase such products online instead of visiting the shop.

f) Consolidated View:

Through the research, one can observe buyer's preference at a granular level and discovered that during a pandemic situation, consumers were most inclined towards the factor of "quality of food" for Pharmacy and household-cleaning products, "influence of public sentiments" for time preference to the shop following government guidelines and "availability of products" for unknown/ new brands.

It was also observed that during a pandemic situation, the least preferred factors impacting the buyer's behaviour were "Financial savings" as less people were inclined towards bulk buying especially when product is out of buyer's estimated budget. It was followed by "Quality of product" for Packaged food item and Baby & infant products. And the factor of "Availability of product" as less people were inclined towards bulk buying especially when product is out of buyer's estimated budget and of unknown brand when only few pieces are left in stock.

g) Sectorial Analysis:

The effect of COVID-19 lockdown was observed on all the industries and had impacted livelihood of people to a larger extent. Based on a study focussing on the sector of travel and tourism [20] during COVID-19, showed that due to fewer travellers, the low paying jobs in that sector faced severe impact. One could infer that similar kind of interrelated impact on sectors could be reciprocated with different sectors. It can be considered as a trigger for saving of money which could in-turn alter consumer behaviour.

Based on this research, the sectors of Local leisure activity, Travelling, Restaurant dine in & delivery, Cars and automobiles, Real estate and Alcohol seems to be negatively impacted by the COVID-19 lockdown. But, the sectors of life insurance, In-house entertainment, Education, video streaming, Social media and Cleaning & Disinfection services were expected to gain a profit during this lockdown, as people are more inclined towards spending on these sectors.

Hypothesis Testing:

The data collected for hypothesis testing was used for a paired t-test using Excel tool. The results indicated that for every sector namely Life Insurances scheme & Savings, Local leisure activity, Domestic travel, Restaurant Dine In, In-house entertainment, Video Streaming and Social Media, Alcohol, Restaurant Delivery, Cars & Automobiles, Real estate Buying, Cleaning & Disinfection services had observed a change in spending limit H_A (p -value < 0.05) except Education sector H_0 (p -value > 0.05), where no change in spending limit was observed.

VI. CONCLUSION

We aspired to find out the factors that triggered the changes in the consumer behaviour and their extent. Our aim is to understand the reasons for change and use it to reflect positively on both consumer and business end. The paper explored various researches that showed a sudden increase in the consumption of products in certain sectors such as healthcare, disinfectants, video streaming, media etc. These changes had simultaneously led to a change in the economy of the nation. Most studies focussed on the sale of various sectors due to lockdown. But, the area of capturing the reasons that triggered such changes in consumer buying behaviour was less observed.

Thus, it can be inferred through the research that the independent variable of "Product's Quality" impacted the buyer's behaviour most. This variable was closely followed by the "influence through public sentiment [21] , fear of health risk [22]

and availability of product". The least impacted variable was financial savings. It was observed that during a pandemic situation, people were not inclined to spend the money especially when the product is required in bulk and is out of buyer's estimated budget. The reason inferred for this was that people were getting their salaries with subsequent pay cuts, due to national lockdown, and therefore people were more inclined towards cautious buying of products. They didn't want to go ahead with the bulk buying even in the chaos of products running out of stock. Instead people planned to manage their budget and buy efficiently. Therefore, it was concluded that during a pandemic situation, individuals were making money related decision cautiously. Other factors like influence on people due to protest or news (public sentiment) and product's quality had a higher of impact on the buyer's behaviour as well.

Also, we collected the response of participants about "changes in spending limit during the lockdown". Based on the analysis of hypothesis testing (t-test), it was discovered that, the change in spending limit had collectively affected every sector (both positively & negatively), except the sector of education, where no change was observed in spending limit before and during COVID-19 pandemic and lockdown. Also, it was discovered that the sector of In-house entertainment, Video streaming and Social Media had gained most profit during this time. The reason behind the profit was because people were in home lockdown and these methods were easily available to most of the residents. Therefore, we saw a gradual increase in its use. Due to the fear of getting infected by coronavirus, people were more inclined towards staying hygienic, which shifted them more towards cleaning services such as sanitizing, disinfecting etc. Therefore, a moderate profit was observed in the sector of life insurance schemes and cleaning services during pandemic. Due to this fear of health, people were also more interested in investing in life insurance schemes as well. The sectors that faced most negative consequences due to COVID-19 pandemic lockdown was restaurant dine in and restaurant delivery and travelling sector. In these sectors, people had restricted their spending the most as they feared getting infected and hence, complicating one's health. Other sector such as local leisure activity, alcohol, cars & automobiles and real estate also got moderately affected. The reason for only mild impact in these sectors was because frequency of their purchase before lockdown was also occasional.

Limitation and Future Scope: Limited by the scope of this current research, following suggestions may be incorporated in a study in future: The proposed model can be further replicated on all the factors to understand the reasons that impacts consumer's behaviour at a more granular level. Like, for influence through public sentiment, one must understand what kind of approach a news segment or a protest has on buyer's perception that triggers them to change their buying pattern. Elaborate responses on the area of sectorial analysis to conduct an in-depth analysis on monetary gain and losses. The outcome of this analysis will provide an in-depth understanding of sector with most profit and conversely with most losses.

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