

Study to Analyze the Effect of Online Reviews and Buying Behavior of Customer towards Sale of Mobile Phones in Bhopal Area

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Abstract

The behavior of consumers towards mobile phones is increasingly a focus of marketing research. In particular, consumer buying behavior in the mobile phones industry, online reviews of the existing customers from adoption motivation to post-usage behavior has become a major focus of research in the field of marketing. The results of the research confirm that the online reviews play a vital role and have an influence on consumer behavior towards mobile phones purchase decision by affecting their perception, motivation, and lifestyle.

India is one of the fastest growing economies in the world and the mobile phones industry in India is *also growing very fast. For consumers' mobile phones have become essential parts of personal and business life.* There is a continuous increase in disposable income; there has been a major shift in the attitude and aspirations of the consumers. This research is to analyze the influence effect of online review and buying behavior in purchasing a mobile phone. The recent growth of mobile phones usage is an observable fact that crosses all age and gender boundaries. Hence, this research explores through *quantitative analysis some of the key factors believed to affect consumer's attitudes and behaviors towards mobile phones purchase.*

Keywords – Online platforms, product review, mobile phones, product recommendations, product reviews and user interfaces.

INTRODUCTION

The development of e-commerce and the popularity of the internet, more and more people are accustomed to online shopping, they choose to buy commodities and services what they need on online. Online purchasing has become the main form of daily consumption. In this context, the study of online consumers' purchase behavior has become the main field of consumer behavior. According to a survey report, 97.7 per cent of consumers refer to relevant reviews before online purchase. These reviews, as feedbacks of buyers, largely affect the purchase intention or purchase behavior of potential consumers. Thus, online reviews can serve as a promising data source to predict online purchase behavior.

In addition, the risk perception of online purchase (when faced a buying situation, a consumer perceives a certain degree of risk involved in choice of a particular brand and how to buy it) also affects the purchase intention or decision (Sun et al., 2006). Therefore, risk perception is also a psychological variable that affects consumer purchase behavior (Lawrence and O'Connor, 2000). Of course, the impact of this information on purchase intentions will be different which also depending on the type of commodities. Consumption of some commodities is common, while others have personal characteristics, making the impact of online reviews and perceived risk different.

Psychologists often use behavioral experiments in the laboratory setting to study the influential factors of consumers' consumption decisions. Most of the methods adopted to first propose research hypotheses under the guidance of theories or based on existing studies, and then test these hypotheses under strictly controlled experimental conditions. For example, manipulate the proportion of positive online reviews, risk level and commodity types to explore the purchase intentions under these conditions, and then draw causal research conclusions. The biggest advantage of psychological behavioral research is repeatability, can withstand repeated tests and can get causal inferences.

In recent years, with the popularity of online purchase and the rapid development of computer computing capabilities, people can use digital traces of online purchase to analyze online purchase behaviors to infer the factors that affect people's purchasing decisions and analyses it based on big data. However, it tracks commodities. For example, the actual sales volume of different types of commodities can be seen by the proportion of positive online reviews and risk perception level of commodities. The advantages of this method are:

- This kind of studies can use people's actual purchase rather than purchase intention; and
- Researchers can obtain a large amount of consumption data, without having to collect it with great effort.

At the same time, these data are real, real-time, and can be verified repeatedly. However, the conclusion is based on correlation analysis and is about the correlation between the variables. The reasons behind the inference are not clear. Meanwhile, this kind of studies is the research about the commodity rather than the persons who do the purchase.

LITERATURE REVIEW:

- Studies about online purchase behavior an online review is a positive, neutral or negative statement, which is created by a future, actual or former consumer about a commodity or a company, and made available to the public through the internet. A growing number of researchers begin to focus on the relationship between quality of online reviews and the purchase intention. However, existing studies have found that the purchase intention of consumers is influenced by the online reviews' quantity, which is positively correlated with the purchase intention (Lawrence and O'Connor, 2000).
- Consumers tend to observe the proportion of positive and negative online reviews as well. The more positive reviews lead to the stronger purchase intention (Zheng, 2008).
- However, consumers place greater emphasis on negative information in deciding to purchase (Senecal and Nantel, 2004). Negative impulses attract more attention and act as stronger stimuli than positive ones. The work shows that consumers' intention declines when the proportion of negative online reviews about a given commodity rises.
- When a potential consumer is exposed to a large number of negative online reviews, a negative expectation of the commodity is formed (Chen et al., 2012). Based on the existing studies, this work will further explore the impact of online reviews (positive/neutral/negative) on purchase behavior.
- There are copious commodity classifications associated with online reviews. A frequently used classification is that of search and experience commodities, which is used by researchers to evaluate consumer purchase intention (Nelson, 1974).
- A search commodity is one where information on commodity attributes is easily obtained by consumers without having to make a purchase in advance (Hao et al., 2009).
- Therefore, the information obtained in a search commodity is usually objective and easily compared with other similar commodities, cameras, cell phones and computers being common examples (Li and Ren, 2017).

- An experience commodity is a commodity whose attributes are difficult to obtain. Consumers frequently want to feel and experience the commodity prior to any assessment. Thus, information pertaining to these commodities is mostly subjective, and evaluations conducted are based on previous experience (Hao et al., 2009)
- Consumers behave quite differently when looking for information on these two types of commodities: they tend to seek more information on other reviews concerning an experience commodity than on a search commodity (Schlosser, 2011).
- However, some studies have pointed out that consumers are more dependent on the information provided by online reviews when purchasing search commodities (Brodie et al., 2013). The results of previous studies on the relationship between commodity types and purchase intention are not consistent.
- Bauer first introduced the perceived risk concept to consumer behavior research to explain such phenomena as information seeking, brand loyalty, opinion leaders, reference groups and pre-purchase deliberations (Bei et al., 2004).
- Perceived risk is a fundamental concept in consumer behavior that implies that consumers experience pre-purchase uncertainty as to the type and degree of expected loss resulting from the purchase and use of a commodity (Ma, 2011).
- According to the S-O-R theory, consumers will be stimulated externally when they shop on the internet, which will change consumers' psychology and perception and then affect their purchase behavior. Among them, risk perception is the most influential factor. Perceived risk determined the consumer's attitude toward online purchase, which subsequently affected willingness to purchase and actual purchase behavior (Zhao and Ji, 2010).
- Previous studies have found that risk perception is negatively correlated with purchase intention (Zhao and Ji, 2010). The traditional inventory used to measure perceived risk will not be applicable to measuring internet consumer's perceived risk. Studies have pointed out that shopping risk perception of consumer network refers to consumers' perception and judgment of possible adverse consequences brought by their shopping behaviors in the process of shopping network. Online shopping consumer's perceived risks consist of five dimensions:
 - perceived store-opportunism risk;
 - perceived commodity-performance risk;
 - perceived financial risk;
 - perceived delivery risk; and
 - Perceived privacy risk (Yu, 2016). Online risk perception of consuming refers to consumers' perception and judgment of possible adverse consequences brought by their shopping behaviors in the process of shopping (Yu, 2016).

Therefore, this study aims to explore how network risk perception influences purchase behavior in the network shopping context.

Purpose

The purpose of this research is to study the effect of online review and buying behavior on sale of mobile phones.

Statement of the problem

A lot of brands of mobile phones are available in the market. But the consumers prefer a particular brand of mobile phone. In the modern business world, due to the development of science and technology, many new brands have been introduced in the market every year. the technological innovation in mobile phone technologies the products are created beyond what consumer needs and wants. There are large number of manufactures producing and selling different variety of mobile phones and models into the mobile phones and models into the mobile market. Therefore, creating a huge competition.

In today's world nothing is permanent except change. We are now a days witnessing changes in all aspects of today world. It is said that necessity is the mother of invention. In the often day, there were a lot of unsophisticated way and means of communication like birds, messenger, postal mail, etc. Today is the era of communication as innovative and novel means of communication came into existence. Traditional way of mailing has been replaced to certain extent by e-mail and landline is being replaced by mobile phones. It is reported that after the invention and introduction of mobile phones the rate of surrounding landline is at a decreasing rate and the number of users of mobile phones is increasing even day by day. Now, the usage of cell phones is not restricted to urban area and educated youth only.

Objectives of the study

The research objectives of this study are as follows:

- a. To identify to what extent evaluation of outcomes and beliefs affect consumers' attitudes and intention to purchase in the mobile phones market in India.
- b. To develop a framework on the effects of external influence and internal influence which affect self-concept and lifestyle of the consumer which result in purchasing decision making process.
- c. To analyze what are the factors which influence and eventually motivate the customer to buy a mobile phone in the Indian market.

Data Collection Methods

Primary Data Collection:

Primary data are the data that are collected for the specific research problem in hand, using procedures that fit the research objective best. For this research, to analyze the consumer behavior toward mobile phones in Indian market primary data are collected through surveys. As this research uses the quantitative method for data primary data collection, the research questionnaires were distributed. The survey was done with 100 people living in Vadodara, Gujarat. The data collected in a spreadsheet were exported to a statistical tool for data analysis. Then descriptive statistics like a graph, pie chart and cross tabulation tables were prepared according to the data collected.

Statistical Tools Used

For the analysis of the info and its interpretation, various tools of research were used.

Mann Whitney U-Test

The Mann-Whitney U test compares the number of times a score from one sample is ranked above a score from another piece. Once the info is organized, calculations are going to be administered on the ranks. Given the nonparametric nature of this statistical analysis, there are fewer assumptions to assess. In statistics, the Mann-Whitney U test may be a nonparametric test of the null hypothesis that, for randomly selected values X and Y from two populations, the probability of X being more significant than Y is adequate the possibility of Y being more significant than X.

Ranks				
	Online Reviews	N	Mean Rank	Sum of Ranks
Values	Triggers to Purchase Mobile	25	58.00	3215.00
	Change Attitude for Mobile Purchase	25	53.00	2875.00
	Total	50		

Test Statistics ^a	
	Values
Mann-Whitney U	1268.000
Wilcoxon W	2885.000
Z	.973
Asymp. Sig. (2-tailed)	.004
a. Grouping Variable: Social media purchase	

Interpretation: From the above table, P-value (0.004) is less significant than LOS (0.05), H_0 is rejected. Therefore, Online review has a positive impact and it changes people's attitude for mobile purchase.

Table 1: Classification of Online Review on various platforms is Likely to buy Mobile Phones

S. No.	Particulars	No. of Respondents	Percentage
1	Flipkart	8	16%
2	Youtube	12	24%
3	Amazon	9	18%
4	Others	21	42%
Total		50	100%

Inference: From the above table, it is inferred that 42% of respondents liked to buy the mobile from other platforms as official websites, expert blogs etc.

Table 2: Classification of Online Review to Purchase a Mobile Phone

S. No.	Particulars	No. of Respondents	Percentage
1	Yes	39	78%
2	No	11	22%
Total		50	100%

Inference: From the above table, it is inferred that 78% of respondents said online reviews triggers purchase of mobile phone.

**Table 3: Classification of Online review Influence
Mobile buying Decision**

S. No.	Particulars	No. of Respondents	Percentage
1	Yes	43	86%
2	No	7	14%
Total		50	100%

Inference: From the above table, it is inferred that 84% of respondents said that online review influences the mobile buying decision.

**Table 4: Classification of Social Media Advertisements Influence to Try a new
Mobile Brand**

S. No	Particulars	No. of Respondents	Percentage
1	Strongly Agree	14	28%
2	Agree	16	32%
3	Neutral	8	16%
4	Disagree	7	14%
5	Strongly Disagree	5	10%
Total		50	100%

Inference: From the above table, it is inferred that 32% of Respondents' agree for social media advertisements influence to try new mobile phone brand.

**Table 5: Classification of the Attitude Towards a
Positive Comment about New Brands of Mobile**

S. No.	Particulars	No. of Respondents	Percentage
1	Yes	46	92%
2	No	4	8%
Total		50	100%

Inference: From the above table, it is inferred that 92% of respondents said that the positive comments on online reviews create an attitude towards a particular brand of mobile phones

**Table 6: Classification of the online reviews are more valuable than the traditional
advertisements**

S. No.	Particulars	No of Respondents	Percentage
1	Strongly Agree	16	32%
2	Agree	18	36%
3	Neutral	6	12%
4	Disagree	6	12%
5	Strongly Disagree	4	8%
Total		50	100%

Inference: From the above table, it is inferred that 54.5% of respondents agreed that the online reviews are more valuable than the traditional advertisements.

Table 7: Classification of Social Media Sites that Influence Mobile Purchase on the Day to Day life

S. No.	Particulars	No of Respondents	Percentage
1	Daily	2	4%
2	1-2 times a week	3	6%
3	3-4 times a week	5	10%
4	Once a month	8	16%
5	Only when needed	31	62%
Total		50	100%

Inference: From the above table, it is inferred that 62% of respondents said that social media sites influenced only when they needed time for mobile purchase.

Suggestions

Based on the findings of the study the following suggestions are made for attracting the consumers' mobile phones has increase the market share.

- The marketers should Share valuable and informative content and engage with the audience.
- The mobile companies which used social media strategies should build their brand authority.
- Social media marketers should overcome the bad reviews and comments with their high-quality, unique content and post videos to drive their reach.
- Having a social media profile and posting random content will not take social media marketers' brand anywhere. Produce engaging content that grabs their audience's eyeballs and further pushes them to like it and share it.
- Price plays a significant role in the purchase decision. Price has significant positive impact on consumer perception choice in selecting mobile phones.
- To explore the market, mobile industry has to concentrate more on youth segment by giving more advanced features.
- Product quality from the marketer's perspective is associated with communication, price, feature, function, or performance of a product.
- Consumers regularly face the task of estimating product quality under conditions of imperfect knowledge about the underlying attributes of the various product offers with the aid of personal, self-perceived quality criteria.
- Enormous facilities can be included in the mobile phones.
- New model hand set can be introduced exclusively for females.
- Various kinds of sales promotional activities can be introduced by the cellular companies.
- A company that offers lower charges would be able to attract more customers committing themselves to the mobile phone networks and significant number of "call minutes" might be achieved.
- The cellular companies should take necessary steps to give special promotional schemes for disabled, students and women, and try to reduce the health side effects from mobile usage etc. in order to increase the market share.
- The mobile sellers should take necessary measures to increase the number of services centers in rural areas and try to offer free service for rural people.
- The government and TRAI should intervene and regulate the cost, facilities and system of mobile.

- Along with the defensive schemes, mobile phone is a necessary thing. new and improved features have to be introduced, which can attract the customers to the mobile phone selecting.
- More offers and discounts should be used as a weapon to attract customers.

Limitations and Conclusions

When drawing the conclusion of this research some limitations were encountered. The research was conducted on a limited number of respondents for practical reasons. The sample used cannot be representative of the entire population of the country. Thus, it was difficult to draw a conclusion on this small sample. The sample mostly focused on people in the age category of 18-35 years, so this sample does not represent all age categories evenly. India is a very vast country; it was difficult to select samples from every state in the country.

Discussion

In the simulation of online purchase behavior, it is found that the reviews had significant impact on the purchase intention, and the purchase intention of commodities with high ratio of positive online reviews is significantly higher than that with high ratio of negative online reviews. What is inconsistent is that the analysis of real big data information found that the positive online reward was not significantly correlated with the purchase behavior, and the neutral and negative online reviews online negatively predicted the purchase behavior of consumers. Because the default set of good reviews on the website and some measures taken by merchants to get good reviews from buyers, which leads to the low reference value of favorable comments increasingly. So, consumers focus more on the relatively true descriptions of neutral and negative reviews in the purchase process. Meanwhile, in the process of shopping online, consumers will form a preliminary impression on the commodity based on the online reviews of buyers. In the process of impression formation and evaluation, more attention is paid to the negative side (Jiang, 2015). Study indicates that negative ratings carry a much stronger effect than positive ones on a buyer's trust level (Sparks and Browning, 2011). Negative online reviews are viewed as an important source of information enabling online buyers to assess the quality of commodities/services. An important function of reviews is to reduce the risk and uncertainty that online buyers perceive relating to the commodity (Ye and Zhou, 2014). Therefore, negative information is more likely to receive more attention and purchase behavior will be directly affected by the neutral and negative online reviews. In psychological simulated situations, the purchase intention often as a substitute for purchasing behavior also needs to be explored. Although intentions are presumed to be an indicator of to what extent people willing to approach certain behavior and how many attempts they are trying to perform certain behavior. However, there is a considerable distance between the laboratory situation and the real online shopping context, and the laboratory atmosphere also affects the psychological performance of the subjects. Although intention has been determined as a salient predictor of actual behavior to shop online, it should be acknowledged that purchase intention does not translate into purchase action (Mo and Li, 2015). Researchers should explore the influencing factors of purchase behaviors in the real online context and provide reasonable suggestions for websites and sellers to generate more consumer purchase behaviors.

The research has considered various online platforms that do the work of Networking that's Facebook, WhatsApp, Twitter, and lots more. The study explains how individuals are attending processing and selecting the knowledge on social media before buying. The findings indicate that individuals pursue an active role in information search on social media comparing to mass media. Yet, information exposure is selective and subjective during knowledge search. Results show that social media usage influences consumer satisfaction within the stages of data search and alternative evaluation, with happiness getting amplified. The consumer moves along the method towards the ultimate purchase decision and post-purchase evaluation.

Results conducted through this study suggest that companies should specialize in being present on social networks, visible on search engines and supply continuous online feedback. Finally, results show companies should specialize in improving their online perception through customer engagement since it's one of the most ways in which customers nowadays decide whether to shop for product or not.

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