Factors Influencing the Likelihood to Purchase on Flash Sales

Athira Ramachandran
Amrita School of Business, Coimbatore
Amrita Vishwa Vidyapeetham
Amrita University
India
athira21.ram.nair@gmail.com

Dr. Deepak Gupta
Amrita School of Business, Coimbatore
Amrita Vishwa Vidyapeetham
Amrita University
India
dgshobs@gmail.com

Abstract—Flash sales refer to an emerging e-commerce practice in which a firm offers one or more products/service at a substantial discount within limited time. The objective of this study was to understand the influence of various factors on the likelihood to purchase on flash sales in India. A conceptual model was developed and verified with pan India survey. A conceptual model was created and the variables were operationalized using standardized scales which were adjusted to better fit an online context. The sample size included 222 respondents. The data was analyzed using binary logistic regression in Stata software. This study found that income, time pressure, utilitarian values, personality type-competitiveness, and frequency of online shopping significantly impact the likelihood to purchase on flash sales.

Keywords—Flash sales, sales promotion, utilitarian values, Time pressure, Binary logit and competitiveness.

I. INTRODUCTION

For the past few years Ecommerce portals in India have adopted various tactics to increase the sales which have been very popular in other parts of the world. One such tactic used is Flash sales. This witnessed a change in the buying process of consumers which was never seen before. While any E commerce store can use flash sales as a valued approach, some companies’ entire business models leverage flash sales. Flipkart, for example was the first ecommerce portal to introduce this concept in India for the very first time in 2014. Since then many companies have adopted this concept to gain maximum attraction from consumers by offering products on sale for a very short period of time, but at a very demand centric price. Flash sales is marked as one of the most successful and marketable sale concept in India. In India at present there are more than a hundred ecommerce sites. The online sites with major market share include Amazon, Flipkart and Snapdeal. Research suggests that customers are more likely to purchase again during flash sales. The lifetime value of customers increases by 385% for sites using flash sales, whereas the other online retail stores show an increase of 94% only. Buyers delay their purchases to be able to derive maximum benefits out of flash sales during which they buy more when compared to other retail stores. Overall, the introduction of flash sales in India has become an attractive deal for consumers to shop online.

This study tried to understand the influence of different variables on proclivity to purchase on Flash sales and constructs a conceptual model that shows the impact of various factors on the likelihood to purchase on flash sales. The flow of the paper is as follows. First, it identifies and examines the research gap found, constructs the conceptual model and develops the hypothesis. Second it emphasizes on the methodology chosen to conduct the study and finally it analysis the data. Lastly, its implication are discussed.

II. LITERATURE REVIEW

E-commerce in India has grown considerably in the last few years, especially in the field of retail shopping. E-tailing gateways have changed the way consumers shop these days in India today. The study intends to understand the impact of various factors on the consumer buying behavior for Flash sales.

A. Sales promotion in E-tailing in India.

Growing competition has required marketing practitioners to constantly progress and reinvent their practices around the world. India is no longer an exception to this. In India, the marketers are using different types of offers and free schemes as a tool for brand building which has become a very popular marketing strategy. These strategies include various time bound sales promotions consisting of various offers which are designed to encourage the purchase behavior for a product or a service. [1]

B. Spending on online shopping in India
In India, according to ASSOCHAM- PwC study on online shopping, the average spending made by online shoppers in a year was around Rs 6000. The average spending of Indians is estimated to rise to 67% annually on online purchases. The reasons for continuous growth of e-commerce has been: 1) aggressive merchandising used by players 2) heavy discounting used to induce customers 3) daily offers 4) loyalty programs to retain the customers and lastly the popularity that smartphones and other electronic gadgets have gained among the consumers.

There are studies that try to understand the relationship between demographics and buying behavior. [2] However there are no studies to the best of our knowledge that look into the various factors that influence the likelihood to buy on flash sales and factors that influence the consumers to purchase again on flash sales.

III. CONCEPTUAL MODEL AND HYPOTHESIS DEVELOPMENT.

Based on the existing literature review, we suggest that the following factors impact the likelihood to buy on flash sales: time pressure, limited quantity, personality type-competitiveness, impulse buying tendency, status and utilitarian values and other factors such as age and income were taken as control variables.

Figure 1: Conceptual Model.

As per marketing framework, any sales promotions that limits the quantity of products offered for sale, time available to avail the offer or limits the offer to a specified set of customers, it is referred to as scarcity appeal. Time scarcity results in time pressure, which is perceived as stressful. On the other hand quantity scarcity refers to how much has been purchased by others, thus it helps to conclude a symbolic benefit. Literature suggests that the purchase intention/ attitude is positive for products/offers that possess scarcity appeal. [3] Thus the hypotheses are as follows:

H1.A: Higher the time pressure faced by consumers, higher is the likelihood to buy on flash sales.
H1.B: The likelihood to purchase on flash sales will be higher for quantity scarcity offers.

B. Personality Type

Personality impacts the consumer buying behavior. The paper found that personality traits such as competitiveness, take charge and security impacts the consumer buying behavior. [4] Thus the hypothesis is:

H2: The likelihood to buy on flash sales will be higher for consumers who are highly competitive.
H3: The likelihood to buy on flash sales will be higher for consumers who take charge of things.
H4: The likelihood to buy on flash sales will be higher for consumers who value security lesser than consumers who value security more.

C. Impulse Buying Behavior

Impulse purchase accounts for good-sized sales across a wide variety of product categories. According to Rook and Hoch (1985) most people experience impulse purchase. Other research also support this statement revealing that 90% of respondents have made purchases on impulse frequently. [5] Thus the hypothesis is as follow:

H5: Higher the tendency of impulse buying behavior, higher is the likelihood to purchase on flash sales.

D. Utilitarian Values and Status

Sales promotion that help consumers increase utility, efficiency and economy of their purchase, it is classified as utilitarian promotions and the benefits are called utilitarian benefits. The size of utilitarian benefits has the potential of making shoppers feel smart about their purchase and also resourceful. [6] And literature suggest that there is a negative relationship between status consumption and price consciousness. Moreover it is also found that consumers who are status conscious are more concerned about the brand and not the price. [7]. Hence the hypothesis are as follows:

H6: Higher the perceived utility of flash sales, higher is the likelihood to purchase on flash sales.
H7: Status seeking consumers are less likely to shop on flash sales.

A. Time Pressure and Limited Quantity
E. Age and Income.
In the current era, the disposable income of consumers has gone up and so have their spending online. Also the percentage of consumers using online shopping has increased over the past few years. Thus the hypothesis is:
**H8: Young consumers are more likely to shop on flash sales when compared to older consumers.**
**H9: Consumers in middle range of income tend to shop on flash sales.**

IV. METHODOLOGY

A. Questionnaire Development and Measures.
In this study, the predominant methodology used was survey research. The research model included in the measurement device were taken from various studies. The objective of measurement device was to discover the variables that affect the user’s behavior and the relationship between these variables in multidimensional manner. Standardized scales were used to measure scarcity appeal, utilitarian values, impulse buying behavior and their impact on the purchase behavior for flash sales. Another variable considered for this study was the personality type for which standardized scales were adopted from various studies on personality traits and their behavior. Impulse buying behavior was measured using impulse buying scale developed by Rook and Fisher. Personality type of users were measured using Multidimensional Personality Questionnaire developed by Tellegen (1982). Utilitarian values were measured using scales developed by Eastlick and Feinberg (1999). The measurement device included 5 point likert scale ranging from strongly disagree to strongly agree to measure the relevance of the above mentioned factors on purchase behavior on flash sales.

B. Data Description
The number of respondents considered for this study were 222, of which 57% were male and 43% female. 71% belonged to Tier I cities in India and the remaining 29% to Tier II cities. There was due care taken to ensure that the data was heterogeneous in nature and was a sample that best represents the population.

<table>
<thead>
<tr>
<th>Table 1 Description of sample across Gender and location</th>
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<tbody>
<tr>
<td>City Type</td>
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<td>Tier I</td>
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<td>Tier II</td>
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V. RESULTS AND DISCUSSIONS

In accordance with the hypothesis, factors like frequency of online shopping have a significant impact on the likelihood to shop on flash sales. This suggest that higher the frequency of online shopping higher is the likelihood to shop on flash sales. **Limited time** for availing the offer on flash sales has a significant impact on the likelihood to shop on flash sales. Higher the time pressure faced by consumers higher the purchase behavior on flash sales.

<table>
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<tr>
<th>Table 2 RESULTS OF THE REGRESSION MODEL</th>
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<tbody>
<tr>
<td><strong>Independent Variables</strong></td>
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<tr>
<td>Online Shopping Frequency</td>
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<td>Time Pressure</td>
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<td>Limited Quantity</td>
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<td>Status</td>
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<td>Impulse Buying</td>
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**Note:** Significance level considered are 5% and 1% respectively.

Other factors such as utilitarian benefits also seems to have a significant impact on the likelihood to shop on flash sales. Thus higher the utilitarian benefits perceived higher the likelihood to shop on flash sales.

**Limited quantity, Status, Impulse buying, Take charge and Security** does not have a significant impact on the likelihood to shop on flash sales. However **competitiveness** among the consumers which the literature shows has a significant impact on the shopping behavior of consumers, in this study indicates a significant impact on the likelihood to shop on flash sales. This implies that higher the competitive the consumer is, higher is the likelihood to shop on flash sales.

**Income** also has a significant impact on the likelihood to purchase on flash sales. This implies that middle income groups are more likely to purchase on flash sales. Factors such as limited quantity and impulse buying which the literature suggested to have a significant impact did not have an impact in this study. Further research can be conducted to understand the reasons for such an effect and to explore various other factors that can have an impact on the purchase behavior for flash sales.

Also, further study to understand the reasons for repeat purchase under flash sales can be conducted, which can be used to improvise on flash sales structure for increased success over the coming events.

VI. LIMITATIONS

In this study, the attempt was to understand what factors are likely to impact the purchase behavior for flash sales with respect to the structure of flash sales. Further study could focus on product categories that are specifically found only on flash sales. Also, a study could be conducted to understand the
factors for the success of flash sales in India. This could help E-tailers improvise on their promotion and communication during big events.

VII. CONCLUSION
The study indicates that value conscious consumers are more likely to participate in flash sales. Personality type such as competitiveness also showed a significant impact on the purchase behavior for flash sales. The time pressure created during flash sales has an impact on the likelihood to shop on flash sales. However limited quantity did not have a significant impact as suggested by literature, which could be taken forward to understand the reasons for such an effect. Other factors such as the frequency of online shopping and income have a significant impact on the likelihood to shop on flash sales.

VIII. ACKNOWLEDGEMENT
This project would not have been possible if not for the guidance from Prof. Dr Deepak Gupta, Amrita School of Business and the respondents. I am immensely grateful for the support and encouragement received for the completion of this paper.

IX. REFERENCES