

## Empirical evidence of user satisfaction in relation to brand equity and product sale

Humaira Nadeem<sup>1,\*</sup>, Babar Hameed<sup>2</sup>

<sup>1</sup>*Department of Management and Administrative Sciences, University of Sargodha, Bhakkar Campus, Pakistan*

<sup>2</sup>*Noon Business School, University of Sargodha, Sargodha, Pakistan*

---

**Abstract:** This study is conducted to investigate the effect of brand equity as a mediating variable on the consumer purchase decision making behavior, along with user generated content. The variables undertaken in this research were word of mouth, channel of media, past experiences, purchase intent, and, buying class and selling situation. The data was collected from 500 students in the University of the Punjab, along with online responses from other students in other universities, to get a more rounded audience for this research. The data was collected using close-ended questionnaire. A cross-sectional population was analyzed using techniques like Pearson correlation, Cronbach's alpha, A.F Hayes Process. Although the sample was chosen using convenience sampling, it was well categorized into different age groups ranging from 18-26 years, varying qualification level from bachelors to PhD, income groups, professions, and other groups such as students and professionals, etc. The statistical analysis of the data reflects that with brand equity as a mediating variable, all the independent variables have a significant impact on the dependent variable i.e. consumer decision making process. Although this paper uncovers the determinants of the brand equity and consumer decision making process in a very systematic way, it does have certain limitations as per using the convenience sampling. Future research may try to overcome such shortcomings by specifically targeting buyers who have a greater influence involving user generated content.

**Key words:** *Consumer decision making; Brand equity; Effect of brand equity; Purchase decisions*

---

### 1. Introduction

In the modern world, one of the fastest growing trends is writing online reviews for products. Many YouTube channels and Facebook pages are simply dedicated to trying out new products and then writing what they think about the said product. Other than that, there are Instagram accounts and twitter accounts that provide reviews and demonstrations for suing a product. In the digital fishbowl that is the world right now, it is the fastest means of providing information to people. A long time ago, the only way to learn about a new product was to either try it out, or through word of mouth from a friend and family. The word of mouth or the WOM trend has not yet been surpassed but has taken a new form, called eWOM, or electronic word of mouth. To put it simply, consumers are now greatly affected by what they read on the internet about a product. There are many factors that help a consumer make a decision about a purchase. Not only eWOM or WOM, but also what channel of media they are getting the content from, along with their purchase intention greatly affects their final decision. Another major factor is their past experience with the brand or any product. If a person has had a good experience in the past and has also seen positive reviews about that product, they will be more inclined to make a positive purchase

decision about that product. One very significant factor that helps people make up their minds about buying or not buying any product is the brand equity of that brand. Defined simply, brand equity is the value that is generated by having a well-known and well trusted brand name. What this means is that the more well-known your brand is, the greater the value of this brand is. This term is usually used in marketing circles to understand the value a brand creates. When a brand has high brand equity, consumers believe that any product launched by said company will be a good and trustable product. Positive user generated content, along with great brand equity should be able to help consumers make quick and positive purchase decisions, and this is what this paper hopes to prove.

#### 1.1. Significance of the study

As this is the digital age, people are greatly affected by and choose to trust the information that they receive online, about any product, goods or service. Brand equity is also a great part of that decision making process that allows a consumer, even after reading a bad review, to decide whether or not they want to buy that product. The significance of this research is that we hope to allow companies to see how people are affected by a combination of user generated as well as company generated content over the internet in with brand equity, so that they can influence their customers for

---

\* Corresponding Author.

the better, either through building better brand equity or through influencing their online presence into the mind of their potential consumers.

## 1.2. Research questions

The research questions that this study intends to look into include the following. These questions were influenced by the literature that was reviewed along with the intent that we started this research with.

1. How does user generated content affect the purchase decision making of the consumer?
2. How does negative content affect the consumer purchase decision?
3. How does brand equity affect the decision making process of the consumer, given that they are significantly influenced by user generated content?
4. What is the most trusted form of user generated content, i.e. word of mouth, or social media?
5. How do purchase intentions and past experiences get affected by brand equity?

## 2. Literature review

The literature review is as follows, starting with the dependent variable, then the mediating variable, and then the five independent variables:

Consumer purchase behavior can be defined as the activities through which people decide to, possess consume, and eventually dispose of certain goods and services. Consumer buying behavior is one of the most researched topics as of now, considering that it is one of the most diverse and ever-changing studies. Most often, consumer behavior changes due the growth in international trading as well as the acceptance that has been built into people due the new brands and varieties of one product. Most studies, however, focus greatly on one country, or region. (Blackett, 1993)

Brand equity is one of the most important terms for managers. It directly pertains to what the brand holds in term of its market and its competitors. Brand equity can be considered a reservoir, which holds the brand loyalty and trust of the consumers. Brand equity is affected by brand trust, the awareness of it among consumers and the loyalty it holds in the market. Brand equity is getting quite an attention in the past few years. All the promotions, ads, direct marketing efforts or free give always are the causes to create brand equity. Thus, brand equity is said to have two perspectives among researchers. First one is the financial perspectives. The mergers, acquisitions of brands, investing in existing brands, its cost and ROIs all are the part of its financial perspectives. The second one that holds the most importance to marketers is the behavior of the

consumers; the cognitive effects that the consumers hold in relation to the brand.

Word of mouth has got a great importance with the digitalization of markets and information. Consumers have become quite powerful in today's markets due to the access of information and communication channels. If we see the impacts of word of mouth then, one customer can create ten or lose ten customers only due to word of mouth. Normally word of mouth comes from two sources. One is the personal sources and the second are the non-personal sources.

Usually it has been seen strong relation between purchase intention and purchasing behavior of a customer. Customer's interests in buying arose when from back of mind there is an intention to accept it. Advertising, past reviews, quality, income level, choice of fashion have had been as a base for their interest in a particular product. Advertising is widely used as a medium to convey the product message to the customer which attaché motional values and unique associations of the brand in the minds of the customers (de Chernatony, 2010).

Companies in the era of 21st century cannot solely rely on the price or product in order to compete in the industry. Nowadays companies pay more attention to the customer' experiences with their product. Customers look for a unique experience to show continuous commitment with products in long term relation. The future sales deeply depend on the experiences of customers, if a customer expectations did not meet his actual desires then he/she might not use that product again.

It may be same with the previous buying situation and may be different. Hansen (1972) and Lie (1991) has given three buying situation that can be related to strategic marketing. This includes the purchase situation, the communication situation and also the consumption situation. According to the author's for intention to buy, consumption situation is of great importance.

## 3. Hypotheses

The hypotheses designed from literature are as follows:

**H1:** Brand Equity plays a significant role in the relationships between the dependent and independent variables

**H2:** A significant and positive relationship exists between word of mouth and the customer decision making process

**H3:** A significant and positive relationship exists between channel of media through which consumer accesses the user generated content and the customer decision making process

**H4:** A significant and positive relationship exists between purchase intention and the customer decision making process

**H5:** A significant and positive relationship exists between past experiences with a certain brand or product and the customer decision making process

**H6:** A significant and positive relationship exists between a certain buying class/ selling situation and the customer decision making process.

#### 4. Theoretical framework

Theoretical framework is shown in Fig. 1.

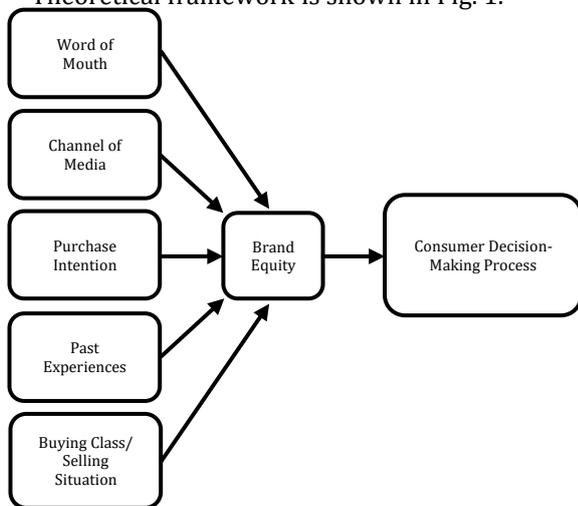


Fig. 1: Theoretical framework

#### 5. Methodology and research design

We designed our research to show a causal relation between our independent and dependent variables. In addition to that, we introduced a mediating variable named as brand equity to show the strength of relation between independent variables and the dependent variables after introducing it. Data from large number of participants was gathered and was tried to be as transparent and valid as possible. Data was gathered from 500 participants. Questionnaire was developed with extreme care as to cover each aspect and be as simple as possible for the participant keeping ambiguity as low as possible.

Firstly, a sample of 50 participants was tested for data reliability. Upon satisfaction from it, further data was collected and reliability was again checked at every point to make sure it keeps consistent and data gathered was correct. To gather the data convenience sampling was done but male and female participation was taken care of.

Secondly, to keep the data and study consistent and accurate to the population statistics, a large number of participants were involved in data gathering. Incomplete and ambiguous questionnaires were discarded and only correct and sound data was used for analysis.

##### 5.1. Population

The sample was selected from business oriented schools of Punjab University. One was selected outside of Punjab University but that also is of the same field. Convenience sampling was used for data analysis. Male and female participation was given due importance in data gathering both had equal

share in the data collection. Also, Bachelors, Masters, M.Phil and Ph.D level participants were encouraged for data accumulation purposes and no participant was below undergraduate level. The following departments were selected:

- Institute of Business Administration
- Institute of Administrative Sciences
- Institute of Business and Information Technology
- Hailey College of Commerce

##### 5.2. Sampling technique

Convenience sampling was done for data collection. Male and female participation was kept in care. Both had contribution in data collection.

##### 5.3. Target population

Our target population was the students having business and managerial background. Their age ranged between 19 years to 26 years approximately. All the respondents were of undergraduate level and above. Moreover, students of Punjab University were targeted. 25% data was gathered from CFE, Lahore. Male and female was given due participation in the data accumulation.

##### 5.4. Analysis techniques

After gathering data from all the participants, first of all reliability analysis was performed and Cronbach's alpha value was checked to be satisfactory. Then other analyses were performed on the data. Descriptive statistics were derived from the data giving the information on the different frequencies of data. Pearson's Correlation was performed on the data showing the relation between independent and dependent variable. As there was a mediating variable in the study instead of linear regression, process was implemented on the data and values before and after the introduction of mediating variable were studied to see if they cause some effect in the strength of relation between independent and dependent variables.

#### 6. Data analysis and results

The Cronbach's value for all variables is more than .5. For this we infer that the questionnaire employed for the research purpose was reliable and extracted sound results. The one sample t test deducted for the data is as follow:

##### *Brand equity*

The relation of brand equity with consumer purchase decision gives a t value of 20.661 with significance level of 0.000 that shows that there is a positive relation between the mediating variable brand equity and consumer purchase behavior and the relation is highly significant.

**Word of mouth**

The relation of word of mouth with the dependent variable with the effect of mediating variable brand equity shows that the t test value is 13.884 with significance value of 0.000 that shows there is positive relation between WOM and consumer purchase decision, and thus concluded that word of mouth has quite an impact on the purchase decision made by consumers and they focus on WOM when making a purchase.

**Channel of media**

Channel of media in relation to dependent variable Consumer Purchase Decision gives a t-value of -2.017 with significance value of 0.044 which shows that there is a negative relation between the two variables and the relation is not quite significant. This concludes that when a consumer is making a purchase he/she is not affected by channel of media from where he has seen an advertisement of a product. He/she is not affected that much by the channel through which the ad or information of the brand was conveyed.

**Purchase intention**

The t-value for purchase intention turns out to be 5.925 with significance level of 0.000 which shows that the independent variable Purchase Intention has a positive relation with the dependent variable Consumer Purchase Decision and the relation is quite significant.

**Past experience**

The t value for past experience turns out to be 14.029 with significance level of 0.000. This shows that there is a positive strong relationship between Past experience and purchase decision and the relation is highly significant.

**Buying/selling situation**

The relation of buying situation with dependent variable Consumer Purchase Decision gives out a t-value of 8.735 with significance level of 0.000 which shows that there is positive relation between the two variables and the relation is significant. This means that consumers while making a purchase, make their purchase while keeping in mind their buying situation.

- The Pearson correlation coefficient is .426, the significance level or p is at .000 and the number of participants of both variables (consumer purchase behavior and brand equity) was 500. The correlation between (consumer purchase behavior and brand equity) is significant i.e. strong because sig is less than 0.05. Therefore, we can conclude that there is strong and significant relationship between the two variables.
- The Pearson correlation coefficient is .328, the significance level or p is at .000 and the number of participants of both variables (consumer purchase behavior and word of mouth) was 500. The correlation between (consumer purchase

behavior and word of mouth) is significant i.e. strong because sig is less than 0.05. Therefore, we can conclude that there is strong and significant relationship between the two variables.

- The Pearson correlation coefficient is .345, the significance level or p is at .000 and the number of participants of both variables (consumer purchase behavior and purchase intention) was 500. The correlation between (consumer purchase behavior and purchase intention) is significant i.e. strong because sig is less than 0.05. Therefore, we can conclude that there is strong and significant relationship between the two variables.
- The Pearson correlation coefficient is .359, the significance level or p is at .000 and the number of participants of both variables (consumer purchase behavior and past experience) was 500. The correlation between (consumer purchase behavior and past experience) is significant i.e. strong because sig is less than 0.05. Therefore, we can conclude that there is strong and significant relationship between the two variables.
- The Pearson correlation coefficient is .345, the significance level or p is at .000 and the number of participants of both variables (consumer purchase behavior and situation) was 500. The correlation between (consumer purchase behavior and buying situation) is significant i.e. strong because sig is less than 0.05. Therefore, we can conclude that there is strong and significant relationship between the two variables.

**6.1. Regression (process analysis)**

We have used 'Process by Andrew F. Hayes' for regression of the model with mediating variable. Consumer purchase decision is taken as response, outcome or dependent variable, Brand Equity is taken as moderating variable; are used as explanatory, predictor or independent variables.

For the purpose of this test, we have denoted the variables as follows:

Consumer purchase decision as CPD, Brand Equity as BE.

**6.2. Interpretation**

The relation between dependent and independent variables gives an R-square value of .2648, while the r-square value is .2892 by introducing the mediating variable. This shows that the value of r square has increased by the introduction of the mediating variable i.e. brand equity which shows that the data is correct. The total effect without the mediating variable is 0.358. After the introduction of mediating variable the effect has increased to 0.716 which shows that the mediating variable plays a strengthening role between the dependent and independent variables.

## 7. Discussion

From the results we can interpret that the most dominating factor, even of it is by 0.014, it as the past experiences that people have with any product or brand. This collaborates with the literature that past experiences have a great effect on the consumer buying behavior. The next strongest effects were by buying class selling situation, and purchase intent. This is also collaborating with the literature. Before we started the study, we expected word of mouth to have the most effect but with the literature and the results, we saw that the case was not exactly so. It did, however, have a very significant effect.

The hypotheses that were proven from this research are:

**H1:** Brand Equity plays a significant role in the relationships between the dependent and independent variables

**H2:** A significant and positive relationship exists between word of mouth and the customer decision making process

**H3:** A significant and positive relationship exists between channel of media through which consumer accesses the user generated content and the customer decision making process

**H4:** A significant and positive relationship exists between purchase intention and the customer decision making process

**H5:** A significant and positive relationship exists between past experiences with a certain brand or product and the customer decision making process

**H6:** A significant and positive relationship exists between a certain buying class/ selling situation and the customer decision making process.

We can see that all the hypotheses that were constructed at the beginning of the study have been proven to be true. Therefore we can say that there is enough statistical evidence to prove all the hypotheses as correct and that the study is significant.

## 8. Managerial implications

The managerial implications that can be gathered from this study are as follows:

- eWOM is a great source of information for the customers. Managers should try to understand how customers feel about their products from the reviews that are posted online.
- The online reviews that are posted can be a great source of innovation for the company and they should review the user generated content regularly for ideas.
- The data that will be collected from online reviews and other user generated content will be able to give the managers and the company a better idea about what their customers are looking for, and how to give it to them
- Online content can be a great source of competitive information for companies. They can see where their competitors are failing and how

they can use that idea in a better way to make their customers happy.

## 9. Limitations of the study

The limitations of this study include:

- The study was carried out mainly on students of University of the Punjab. This was a demographical limitation. Other age groups may have different approaches towards online reviews.
- Students under the undergraduate education limit were not involved in this study. They may have a different approach
- This study was conducted solely in Lahore. Pakistan. Other cities and provinces were not focused upon
- There may have been other independent variables, affecting the consumer decision making process that was not touched upon. They may also have a significant effect on the study.
- All the data was collected through a close ended questionnaire. We did not collect any data through interviews or surveys.

## 10. Future guidelines to researchers

We would like to hope that future researchers will look at the limitations that occurred in our study and to cover those in their research. We would suggest that different demographics and locations be studied, as people in different areas, ages, genders and ethnicities have varying views about online reviews as a source of information for consumer decision making. Future researchers would also do well to collect information through interviews to get a more rounded view of what the people think.

## References

- Aaker, D. (1991a), *Building Strong Brands*, The Free Press, New York, NY.
- Aaker, D. (1991b), *Managing Brand Equity: Capitalizing on the Value of Brand Name*, The Free Press, New York, NY
- Aaker, D.A. (1992), "Managing the most important asset: brand equity", *Planning Review*, Vol. 20 No. 5, pp. 56-8.
- Aaker, D.A. (1996), "Measuring Brand Equity across Products and Markets," *California Management Review*, 38 (Spring), 102-120
- Aaker, David A. (1991), *Managing Brand Equity*. New York: The Free Press.
- Ambler, Tim and Patrick Barwise (1998), "The Trouble with Brand Valuation," *Journal of Brand Management*, 5 (May), 367-77
- Arussy, L., Starr, M, Yurowitz, R., & Blackmire, M., (2010). *Consumer Experience Study* Retrieved from [www.strativity.com/media/2010%20Consumer%20Study.pdf](http://www.strativity.com/media/2010%20Consumer%20Study.pdf)
- Bagozzi, Richard P. and Utpal M. Dholakia (2002), "Intentional Social Action in Virtual Communities," *Journal of Interactive Marketing*, 16, 2, 2-21.

- Baker, J., Grewal, D., Parasuraman, A., 1994, "The influence of store environment on quality inferences and store image." *Journal of the Academy of Marketing Science* 22, 328-339
- Bass, Frank M. (1969), "A New Product Growth for Model Consumer Durables," *Management Science*, 15 (5), 215-27
- Belk, R.W. (1974), "An exploratory assessment of situational effects in buyer behavior", *Journal of Marketing Research*, Vol. 11, May, pp. 156-63.
- Bickart, B., & Schindler, R. M. (2001), Internet forums as influential sources of consumer information *Journal of Interactive Marketing* 15(3), 31-40
- Bitner, M-J and Hubbert A,R, (1994), "Encounter Satisfaction Versus Overall Satisfaction Versus Service Quality: The Consumer's Voice", in Rust, Roland .T. and Oliver Richard L., (eds), *Service Quality: New Directions*
- Blackett, T. (1993), "Brand and trademark valuation – what's happening now?", *Marketing & Research Today*, May, pp. 111-13.
- Boone, L. E., & Kurtz, D. L. (2007). *Contemporary marketing* (13th ed.). Mason, OH: Thomson/South-Western.
- Boyd, Danah M. and Nicole B. Ellison (2008), "Social Network Sites: Definition, History, and Scholarship," *Journal of Computer-Mediated Communication*, 13, 210-30.
- Brown, Jacqueline J. and Peter H. Reingen (1987), "Social Ties and Word-of-Mouth Referral Behavior," *Journal of Consumer Research*, 14 (3), 350-62
- Carbone, L.P., (2004), *Clued In*, FT Prentice Hall, New Jersey
- Flynn, Leisa R., Ronald E. Goldsmith and Jacqueline K. Eastman (1996), "Opinion Leaders and Opinion Seekers: Two New Measurement Scales," *Journal of the Academy of Marketing Science*, 24 (2), 137-4.
- Forman, C., Ghose, A. & Wiesenfeld, B. (2008). Examining the Relationship Between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets. *Information Systems Research*, 19(3), 291
- Foux, G. (2006, May 8). Consumer-generated media: Get your customers involved. *Brand Strategy*, 38—39.
- Goldsmith, Ronald E. and Charles F. Hofacker (1991), "Measuring Consumer Innovativeness," *Journal of the Academy of Marketing Science*, 19 (3), 209-22.
- Grewal, Dhruv and Michael Levy (2009), "Emerging Issues in Retailing Research," *Journal of Retailing*, 85 (4), 522-6.
- Guernsey, L. (2000), *Bookbag of the Future: Dental Schools Stuff 4 Years Worth of Manuals and Books into One DVD*, *The New York Times*.1-7.
- Hansen, F. (1972), *Consumer Choice Behavior: A Cognitive Theory*, The Free Press, New York, NY.
- Hirschman, Elizabeth C. and Morris B. Holbrook (1982), "Hedonic Consumption: Emerging Concepts, Methods, and Propositions," *Journal of Marketing*, 46 (3), 92-101.
- Hu, N., Liu, L., & Zhang, J. (2008). Do online reviews affect product sales? The role of reviewer characteristics and temporal effects. *Information Technology and Management*, 9(3), 201-214.
- Huang, J.-H., & Chen, Y.-F. (2006). Herding in online product choice. *Psychology & Marketing*, 23(5), 413-428.
- Huang, Peng, Nicholas H Lurie and Sabyasachi Mitra (2009), "Searching for Experience on the Web: An Empirical Examination of Consumer Behavior for Search and Experience Goods," *Journal of Marketing*, 73 (2), 55-69
- Jepsen, A. L. (2007). Factors affecting consumer use of the Internet for information search. *Journal of Interactive Marketing*, 21(3), 21-34.
- Kaplan, Andreas M. and Michael Haenlein (2010), "Users of the World, Unite! The Challenges and Opportunities of Social Media," *Business Horizons*, 53, 59-68.
- Keller, K. L. (1998). *Strategic brand management: Building, measuring, and managing brand equity*. Upper Saddle River, NJ: Prentice Hall.
- Keller, Kevin L. (1993), "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (January), 1-22.
- Lai, A.W. (1991), "Consumption situation and product knowledge in the adoption of a new product", *European Journal of Marketing*, Vol. 25 No. 10, pp. 55-67
- Lee, J., Park, D.-H. & Han, I. (2008). The effect of negative online consumer reviews on product attitude: An information processing view. *Electronic Commerce Research and Applications*, 7(3), 341.
- Lempert, P. (2006). Caught in the Web. *Progressive Grocer*, 85(12), 18.
- Mayzlin, D. (2006). Promotional chat on the Internet. *Marketing Science*, 25(2), 155—163.
- Midgley, David F. and Grahame R. Dowling (1978), "Innovativeness: The Concept and Its Measurement," *Journal of Consumer Research*, 4 (4), 229-42
- Misner, Ivan R. (1999), *The World's Best Known Marketing Secret: Building Your Business with Word-of-Mouth Marketing*, 2nd ed. Bard Press, Austin, TX.
- Mudambi, S. M., & Schuff, D. (2010). What makes a helpful online review? A study of customer reviews on Amazon.com *MIS Quarterly*, 34(1), 185-200.
- Oliver, R.L., (1997), *Satisfaction: A Behavioral Perspective on the Consumer*, McGraw Hill, New York,"
- Utpal M. Dholakia (2006), "Antecedents and Purchase Consequences of Customer Participation in Small Group Brand Communities," *International Journal of Research in Marketing*, 23, 1, 45-61.