

ANALYZING THE EXPERIENCE OF ONLINE USERS USING B2C WEBSITES

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Abstract— With the commercialization of the Internet there has been an extraordinary growth in business to customer (b2c) e-commerce. It has become a great medium to shop the products which are available in the markets because of interactive capabilities offered by the internet. The user can search for varieties of product available along with the comparative chart in terms of its price and product Quality. Due to extreme increase in the number of organization using online source, it has become a platform for promotion of various products and services, for information search and online shopping. The increase in B2C e-commerce has encouraged the organization to come forward with different ideas to understand online shopping behavior. For the successful development of a B2C e-commerce organization the experience of the users matters a lot. There are various key factors which affect customer's perspective related to online shopping.

Index Terms— E-commerce, Shopping Experience, Statistical Analysis, Sampling

I. INTRODUCTION

In Electronic commerce (E-commerce) consists of buying and selling of products or services over electronic systems such as the Internet and other computer networks. Electronic commerce mainly uses the World Wide Web for the transaction's lifecycle [Wikipedia]. The Organization for Economic Development (OECD) (1997) defines e-commerce as "All forms of digitized data such as text, image and visual images which are processed and transmitted through electronic means." It is helpful browser for an organization to become a communicative medium for selling goods and services to consumers over the Internet.

Following feature attract customer to use e-commerce.

- The consumer can globally reach the suppliers or the producers or the organizations for transaction of product.
- There are no limitations of time and place.
- The consumer can shop anytime and from anywhere, which makes it easy to place orders globally and saves time.

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- Consumers can compare the price and reputation of the various suppliers, manufacturers or producers and select the best according to convenience and crack the best deal.
- The consumer can purchase products which are not available in the near market.

The suppliers or the producers are also benefited from the E-commerce. The following are the advantages:

- For the expansion of the business interaction to global customer became easier.
- Sellers can receive the orders at any time and buyers can place the order on the Ecommerce site at any time.
- The suppliers need not to invest in showroom as the products can be displayed on the Ecommerce.
- Customer database is created which will help in predicting future trends, and making business strategies.

A. Classification

According to market relationship [1] E-commerce can be classified as following:

- **Business to Business (B2B)**: B2B E-commerce deal with the transfer of goods and services between businesses through electronic means.
- **Business to Customer (B2C)**: In B2C e-commerce, consumers purchase a product or a service that is advertised on a website. They can use variety of function available such as comparison of goods in terms of price, Quality etc, new trends in market and so on. It describes the activities of businesses in selling products or services.
- **Customer to Business (C2B)**: In C2B e-commerce individual customers offer to sell products and services to companies who are prepared to purchase them. Consumer to Business is the most recent E-Commerce business model. This business model is the opposite of the traditional B2C model.
- **Consumer to Consumer (C2C)**: In C2C (or citizen-to-citizen) e-commerce, third party is involved in transaction of goods between customers.

II. RESEARCH METHODOLOGY

The study of factor dealing with B2C website is based on Quantitative research. In this the primary data is collected

through the survey conducted among the sampling unit. Further the data quantified and with the help of statistical software the result to the Research questions are answered.

Data is collected by various means following a procedure prepared for statistical analysis. Nowadays, this is carried out through statistical computer packages. The analysis determines the relationship between two or more variables [3].

The study follows descriptive research. Descriptive Research was applied in forms of survey to find out the overall experience of users over online transactions. Hypothesis was design based on experience and then T Test was applied to prove it. The experienced of users lead to grow of more and more organization dealing with online source. Non probability sampling technique was used. The responders to the survey were in the form of students, professional as well as unprofessional e-commerce users. These groups represent the whole population dealing with the B2C websites [4].

III. SHOPPING EXPERIENCE REPORTED

The survey was conducted in which user were asked to report their experience in terms of online shopping. Maximum users were satisfied by the services they opt during online process.70% user reported that their experience in using E-commerce was good, 17% reported that experience was excellent while 12% had average experience.

A. One Sample T-Test-

Null and alternative hypothesis was design to report the experience of respondents regarding shopping

a) Null Hypothesis –

The online shoppers are satisfied with the experience of online shopping.

$H_0: (\mu = 3)$

b) Alternate Hypothesis –

The online shoppers are not satisfied with the experience of online shopping.

$H_1: (\mu \neq 3)$

One sample T Test was applied to test the hypothesis.

Shopping Experience	N	Mean	Std. Deviation	Std. Error Mean
	500	3.0300	.5766	5.766-02

Table 1: One sample Statistic T Test

Online shopping Ranking By Respondents

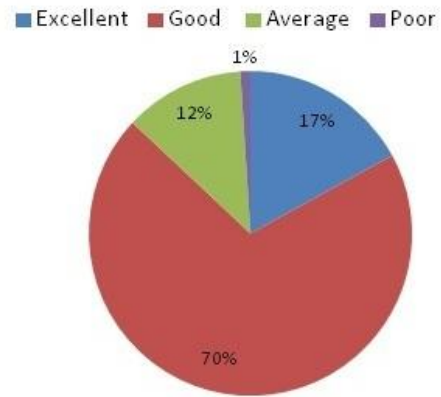


Figure 1: Chart representation

According to the one sample statistic table, mean shopping experience ($3.03 \pm .05$) higher than the expected mean record [4]. The **One-Sample Test** table reports the result of the one-sample t-test. The top row provides the value of the known or hypothesized population mean ($\mu = 3$)

Shopping Experience	Test Value=3			
	t	df	Sig. 2-tailed	Mean Difference
	.520	499	.604	0.03

Table 2: One sample test table

In the One sample Test table

t (t value)	Indicates that we are comparing to a <i>t</i> -distribution (<i>t</i> -test).	.520
df	Indicates the degrees of freedom, which is $N - 1$	499
Sig.(2-tailed) d) (p value)	Indicates the probability of obtaining the observed <i>t</i> -value if the null hypothesis is correct.	.604

Table 3: Sample test value table

Online shopping experience was statistically significantly higher than the population normal shopping experience,

$t(499) = .520, p = .604$

If $p > .05$, the difference between the sample-estimated population mean and the comparison population mean would not be statistically significantly different else if $p < .05$ comparison is different. Confidence level was set at 95% thus p is check against .05 values.

The table also shows that the mean difference in the population means is 0.03 ("**Mean Difference**" column) and the 95% confidence intervals (95% CI) of the difference are -0.08 to .14 ("**Lower**" to "**Upper**" columns). Satisfaction score was statistically significantly higher by 0.03 (95% CI) than a normal shopping experience of 3.0,

$t(499) = .520, p = .604$

There was a statistically significant difference between means ($p > .05$) and, therefore, we can reject the alternative

hypothesis and accept the null hypothesis i.e. the sample estimated populations mean agree that their online shopping experience was good.

IV. CONCLUSION

The growth of any organization depend on the feedback generated by the users who are using its services thus experience of the online users matters a lot in designing the website dealing with such task. The T Test perform on the data reveal that the users who prefer online activities are satisfied by the services provided by different organization handling B2C e-commerce trading. Thus using this statistical proof we can conclude that the scope of e-commerce in India will lead to a drastic growth.

V. FUTURE WORK

As the experience of online users is good in India thus their can me improvement in website handling criteria by analyzing different factors which are essential for developing Quality B2C websites.

REFERENCES

- [1] Pai, G.J.; Dugan, J.B.; Fraunhofer Inst., **Empirical Analysis of Software Fault Content and Fault Proneness Using Bayesian Methods**, Software Engineering, IEEE Transactions Volume 33 Issue 10.
- [2] Antonia Stefani and Michalis Xenos, **E-Commerce System Quality Assessment using a Model based on ISO 9126 and Belief Networks**, Software Quality Journal, Volume 16, Number 1.
- [3] C. R. Kothari, "**Research methodology: Method and Technique**", ISBN 81-224-1522-9, Second Edition
- [4] Naresh K. Malhotra, "**Marketing research : an applied approach**" ISBN 987-0-273-70689-2, Third Edition
- [5] Chang Jinling; Song Tong; Li Chuncan; Song Tao, **Modeling E-Commerce Website Quality with Quality Function Deployment** 2009 IEEE International Conference on e-Business Engineering, 21-23 Oct. 2009, 417 – 422. 107
- [6] Isaac J. Gabriel, **Usability Metrics for Measuring Usability of Business-to-Consumer (B2C) E-Commerce Sites**, In Proceedings of the 6th Annual ISONEworld Conference, April 11-13, 2007, Las Vegas, NV, 74.1-74.19.
- [7] Moshe Zviran, Chanan Glezer , Itay Avni, **User satisfaction from commercial web sites: The effect of design and use**, Information and Management, v.43 n.2, p.157-178, March 2006.
- [8] Anjali bhargav, Bharat bhargav, **Measurements and quality of service issues electronic commerce software**, Application-Specific Systems and Software Engineering and Technology, 1999. ASSET '99, Proceedings, 1999, 26 – 33.
- [9] C. Ranganathan, Shobha Ganapathy, **Key dimensions of business-to-consumer web sites**, Information and Management Volume 39, Issue 6, May 2002, 457 – 465, 2002.
- [10] Oreste Signore, Barbara Leporini, **Web Accessibility: Principles, International Context and Italian Regulations**, Proceedings of CMG Italia, Conferenza annuale, Pisa, 2004.
- [11] J.D. Calkins, M.J. Farello, C.S. Shi, **From retailing to e- tailing**, McKinsey Quarterly (2000) 1; <http://www.mckinsey-quarterly.com/electron/reet00.asp>.
- [12] Survey reveals Internet shopping habits, Direct Marketing (2000).
- [13] O.A. El Sawy, A. Malhotra, S. Gosain, K.M. Young, **IT- intensive value innovation in the electronic economy: insights from Marshall Industries**, MIS Quarterly 23 (3), 1999, pp. 305±336.
- [14] D.L. Hoffman, T.P. Novak, P. Chaterjee, **Commercial scenarios for the web: opportunities and challenges**, Journal of Computer Mediated Communications 1 (3), 1995, pp. 1± 20.
- [15] D.L. Hoffman, T.P. Novak, **How to acquire customers on the web**, Harvard Business Review, Boston (2000) 179±183.
- [16] Patrick, P. Joe, **Consumer purchasing on the Internet: processes and prospects**, European Management Journal 16 (5), 1998, pp. 600±610.



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