Resource-Based Analysis of E-Commerce Business Value

Dr. Shine David, Aditi Bansal, Kirti Singh, Swati Rajput

Abstract—In this study, we developed a set of constructs to measure e-commerce capability in Internet savvy customers. Our study has two dimensions: customer awareness and customer experience, which consist of factors such as information, transactions customization and supplier connection. This conceptual framework provides good theoretical platform for empirically grounded research on how customers perceive e-commerce trading. E-commerce is the pre-eminent buzzword of the online business revolution. Electronic commerce is the paper less exchange of business information using electronic data interchange (EDI). This study aims to understand how people view e-commerce as an emerging trend in lieu of their satisfaction and preferences with products, services, safety of personal data etc.

Index Terms—Electronic Commerce E-commerce metrics, Customer Orientation

I. INTRODUCTION

Electronic commerce presents a lot of opportunities and benefits to customers. Today in this fast and competitive environment people prefer easy and convenient things, commerce has come up like a blessing in disguise for the majority of convenient shoppers. The research aims to study how people perceive ecommerce, which will help in analysing the customers’ viewpoint. Electronic commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transactions processing, electronic data interchange, inventory management systems, and automated data collection systems. Modern electronic commerce typically uses the World Wide Web for at least one part of transactions life cycle, although it may also use other technologies such as e-mail. E-commerce business may employ some or all of the following:

- Online shopping websites for retail sales direct to consumers.
- Providing or participating in online market places, which processes third party business to consumers or consumer-to-consumer sales
- Business-to-business buying and selling
- Gathering and using demographic data through web contacts and social media
- Business-to-business electronic data interchange
- Marketing to prospective and established customers by e-mail or fax
- Engaging in pre-etail for launching new products and services

The survey aims to study some of following impacts on customer’s view of e-commerce such as:

- Is online search about specific product available easily
- Is there sufficient online information available to you about product quality usability and viability
- Does the website posts sufficient information on product updates maintenance and repairs
- Does the e-commerce websites offers any space for personalized a/c or private messages
- Is the inventory information updated on regular basis or shared online through electronic links
- Which payment option customers mostly prefer for an online purchase from an e-commerce website

This report will provide with necessary insights into what steps should e-commerce retailers should take to satisfy their customers, thereby increasing customer loyalty as well as the life time value of customers.

II. LITERATURE REVIEW

The understanding of human beings in taking decisions have always been difficult to predict since there is no right tool to measure it. People can change their opinion as people can change it or just make it for future decisions. In accordance with the information quality provided by e-commerce websites whether the information is clear or not it can greatly affect the intention of the customer decision when purchasing once or twice or they won’t just purchase, then right information quality will increase customer trust and satisfaction since trusting the product/service information quality will make people finally decide to make the initial purchase and with this, their satisfaction affecting loyalty positively. Today’s young generation has grown up with the internet differently than their parents and grandparents who have to deal with something they haven’t grown up with new technological advances, so it quotes probable that internet turn difficult to use and affect easily B2C-e commerce business negatively if they are not aware of this. User interface quality should be attractive and easy to use especially for the people who have not grown up with new technological advances.

Nowadays purchasing online does not necessarily need a computer because you can purchase online using your phone and you don’t need to look on different websites since you can purchase from your favourite social networks like Facebook and twitter.

III. METHODOLOGY

1) The survey was filled by filled by 92 respondents taken through both online and offline survey method (personal questionnaire method). Online Survey was online site Survey Monkey website for a period spanning 15 days.
2) The questionnaire was prepared keeping in mind the customer orientation, their preferences and satisfaction level.
3) The questions were framed on the basis of e-commerce determinants and with respect to the topic.
4) The questionnaire was designed into two parts namely **Customer Satisfaction** and **Customer Awareness**.
5) Measurement base of the research is the gender factor among the demographics of name, age, educational qualification and occupation. Calculations were for the analysis through **SPSS Software**.
6) Analysis test were the **Factor Analysis & One Way Anova Test**.

### IV. LIMITATIONS

- The researches conducted were confined to a particular age group namely 20-30 years. Respondents were mainly student and young working professional.
- There were some respondents who skipped the personal demographics, for that reason their data created the problem of ambiguity and their data had to be omitted from the analysis.
- At the time of analysis the value of regression was coming to negative, due to which linear regression test cannot be applied.

### V. FACTOR ANALYSIS

#### TABLE 1

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RECOGNITION</th>
<th>FACTOR LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information available about a specific product and the frequency of transaction.</td>
<td>V 01. Search capability.</td>
<td>.815</td>
</tr>
<tr>
<td></td>
<td>V 02. Product review.</td>
<td>.658</td>
</tr>
<tr>
<td></td>
<td>V 15. Frequency of transaction.</td>
<td>.530</td>
</tr>
</tbody>
</table>

#### TABLE 2

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RECOGNITION</th>
<th>FACTOR LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product catalog and its post information together with space for personalized accounting.</td>
<td>V 13. Product information online.</td>
<td>.798</td>
</tr>
<tr>
<td></td>
<td>V 07. Customer registration.</td>
<td>.659</td>
</tr>
<tr>
<td></td>
<td>V 03. Product update.</td>
<td>.537</td>
</tr>
</tbody>
</table>

#### TABLE 3

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RECOGNITION</th>
<th>FACTOR LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking of product starting from its inception to its delivery with security of data.</td>
<td>V 04. Online order tracking.</td>
<td>.746</td>
</tr>
<tr>
<td></td>
<td>V 06. Security.</td>
<td>.589</td>
</tr>
</tbody>
</table>

#### TABLE 4

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RECOGNITION</th>
<th>FACTOR LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updated inventory information along with hassle free refund and return policy.</td>
<td>V 12. Inventory data sharing.</td>
<td>.894</td>
</tr>
<tr>
<td></td>
<td>V 14. Return policy.</td>
<td>.629</td>
</tr>
</tbody>
</table>

#### TABLE 5

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RECOGNITION</th>
<th>FACTOR LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preferred mode of payment along with different technical support services.</td>
<td>V 19. Payment mode.</td>
<td>.751</td>
</tr>
<tr>
<td></td>
<td>V 09. Online recommendation.</td>
<td>.550</td>
</tr>
</tbody>
</table>

#### TABLE 6

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RECOGNITION</th>
<th>FACTOR LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online communities dedicated to customers and validity of website.</td>
<td>V 11. Online procurement.</td>
<td>.887</td>
</tr>
<tr>
<td></td>
<td>V 10. Content personalisation.</td>
<td>.621</td>
</tr>
</tbody>
</table>

#### TABLE 7

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RECOGNITION</th>
<th>FACTOR LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure for being a registered user, easy and user friendly.</td>
<td>V. 05 Registration.</td>
<td>.801</td>
</tr>
</tbody>
</table>

#### TABLE 8

<table>
<thead>
<tr>
<th>FACTOR</th>
<th>RECOGNITION</th>
<th>FACTOR LOADING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasons and time invested for online purchase.</td>
<td>V. 17 Time invested.</td>
<td>.752</td>
</tr>
<tr>
<td></td>
<td>V. 16 Reasons.</td>
<td>.658</td>
</tr>
</tbody>
</table>

### ONE WAY ANOVA TEST

The one way ANOVA test for the survey in applied on gender.

- P value < tab value
- P value > tab value

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>P value</th>
<th>NH</th>
<th>Tabulated value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.657</td>
<td>NH</td>
<td>.05</td>
</tr>
</tbody>
</table>

P value = significance value
Tabulated value = .05

VARIABLE 1.

- P value = .657
- P value > tab value
Thus, NH$_A$

Hence, the searching about a specific product asked in the survey do make a difference in the result.

**VARIABLE 2.**
P value = .419
P value > tab vale
Thus, NH$_A$

Hence, asking for the information being provided about the product quality, usability and viability makes the difference in the analysis.

**VARIABLE 3.**
P value = .36
P value > tab vale
Thus, NH$_A$

Hence, knowing for the websites, post namely product updates, maintenance and repairs is worth for the research.

**VARIABLE 4.**
P value = .484
P value > tab value
Thus, NH$_A$

Hence, knowing for tracking for the product movement starting from placing of an order till it reaches the people for the research purpose is found to be usable.

**VARIABLE 5.**
P value = .879.
P value > tab value
Thus, NH$_A$

Hence, knowing from the people about the procedure being followed to become a registered user is user-friendly makes the difference in result of our analysis.

**VARIABLE 6.**
P value = .752.
P value > tab value
Thus, NH$_A$

Hence, asking from the people for there security of data and transaction is worth.

**VARIABLE 7.**
P value = .158
P value > tab value
Thus, NH$_A$

Hence, knowing that people get space for personalized accounts of private messages, results found to be worth in the research analysis process.

**VARIABLE 9.**
P value = .354
P value > tab value
Thus, NH$_A$

Hence, knowing about technical support through web-enabled voice communication or through any other mean helps in our research analysis.

**VARIABLE 10**
P value = .826
P value > tab value
Thus, NH$_A$

Hence, customization of the website and knowing that online community dedicated to customer is very important for the analysis.

**VARIABLE 11.**
P value = .821
P value > tab value
Thus, NH$_A$

Hence, asking for the reliability of the website before going for online purchase is woeth in the survey.

**VARIABLE 12.**
P value = .913
P value > tab value
Thus, NH$_A$

Hence, close to 1, hence this question is very important to know the inventory information updation satisfaction level

**VARIABLE 13.**
P value = .081
P value > tab value
Thus, NH$_A$

Hence, not so important but has a bit worth to know the product catalog available fulfills the level of expectation.

**VARIABLE 14.**
P value = .394
P value > tab value
Thus, NH$_A$

Hence, asking from the people for return policy help in the analysis of result.

**VARIABLE 15.**
P value = .915
P value > tab value
Thus, NH$_A$

Hence, asking people how often they shop online is the very important question.

**VARIABLE 16.**
P value = .416
P value > tab value
Thus, NH$_A$

Hence, this is an average question to know the reason why people shop online.

**VARIABLE 17.**
P value = .254
P value > tab value
Thus, NH$_A$

Hence, not so important to know how much time people spend for online shopping but hypothesis is not rejected.

**VARIABLE 19.**
P value = .057
P value > tab value
Thus, NH$_A$

Hence, close to rejection of the hypothesis but as not rejected which makes this question not so important but it is fine that it is included in survey.

VI. CONCLUSION

At present the market place is flooded with several e-commerce options for shoppers to choose from. A variety of innovative products and services are being offered through innovative tactics to garner customers in maximum numbers. Customers found e-commerce options as friendly means, fulfilling their satisfaction constraint. Online shopping is now no more the privilege for the people living in U.S. U.K., but it is becoming a reality for developing countries like India. In the last couple of years, the growth of e-commerce industry in India has been phenomenal as more shoppers have started discovering the benefits of using this platform. There is enough scope for online businesses in the future if they understand the shopper’s mindset and psyche and cater to their needs. Also through one way anova test it is found that all the variable except 8th and 18th are not necessary.
REFERENCES


