Abstract

Online consumer’s buying behavior consists of buying process of products and services through internet. Internet shopping is the process of buying goods and services from merchants who sell on the online. Online shopping allows buyers to buy sooner, more choices and can order products and services with comparative reasonable price. This study examines the factors affecting customer satisfaction towards online shopping in Kathmandu valley. The customer satisfaction is the dependent variable. Perceived service quality, perceived ease of use, perceived security and online payment process are the independent variables. The study is based on 408 respondents from the online shopping buyers of Kathmandu valley. Convenience sampling method were followed to select the respondents. To achieve the purpose of the study, structured questionnaire is prepared. Descriptive and explanatory research designs have been used. Correlation and regression analysis have been used to make analysis and draw the conclusion. The regression models are estimated to test the significance and importance of selected factors on customer satisfaction towards online shopping in Kathmandu valley. The result shows that there is positive relationship of perceived service quality and perceived ease of use with customer satisfaction. It is also found that online shopping has positive impact on customer’s satisfaction in Kathmandu valley. The findings of this study will be fruitful to researchers, policymakers, businesspeople and Government for academically as well as policy perspectives.

Keywords: Customer satisfaction, service quality, ease of use, security, online payment process.

Introduction

The online purchasing is gaining massive popularity day by day. There are many benefits of online purchasing like time saving, access from anywhere, convenience, availability 24 hours a day, variety of products, various options available to compare products and brands.

Online shopping is the process of buying goods and services from merchants who sell on the Internet. It is used as a medium for communication and electronic commerce, it is to increase or improve in value, quality and attractiveness of delivering customer benefits and better satisfaction, that is why online shopping is more convenience and day by day increasing its popularity. Through online shopping consumers can buy faster, more
alternatives and can order product and services with comparative lowest price (Cuneyt and Gautam, 2004).

Online shopping is definitely a great way to shop with everything available on the websites. E-Commerce has grown very fast because of many advantages associated with buying on internet because of lower transaction and search cost as compared to other types of shopping. The number of people preferring internet for their day to day activities also keeps on increasing. People today are doing most of their domestic works online. Internet and online shopping has been a boon to people to manage their shopping and work equally. Increased exposure to technology also increases the probability of developing favorable attitude towards new shopping channels. Online shopping environments are therefore playing an increasing role in the overall relationship between marketers and their consumers (Koo et al., 2008).

Online banking system had been launched before the era of online shopping. These online shopping provider needs to differentiate themselves from others and present it well to become one of the market leaders in online retails industry (Al-Debei, 2015). Online shopping is not only associated with benefits but also with the risk. Generally speaking internet users averts online shopping because of credit-card fraud, lack of privacy, non-delivery risk, lack of guarantee of quality of goods and services.

Essentially, the idea of online shopping is to lead customers to a convenient way of shopping. Customers will be able to save their time and money, plus retrieve all the product information with just few clicks in few minutes. In addition, purchasing can be done anywhere, anytime according to their preferences. Siu et al. (2001) found that the most important factors in classifying online shoppers are the economic benefits that derive from online shopping, the product availability, the security dangers, their monthly income, the product technology opinion leaders and their attitude towards technological development.

According to Nikhashemi et al. (2013), ease of use, security, payment processing and customer perceived quality have significant positive effect on enhancing customer satisfaction toward internet shopping.

Kim et al. (2007) investigated on a perceptual mapping of online travel agencies and preference attributes. The study revealed that each online agency had some different patterns based on travelers’ perceptions in terms of web features, user friendliness and security, and finding low fares. The results also found that perceived ease of use has an influential impact on a person’s online shopping channel preference and satisfaction.
According to Osman et al. (2010), found there is a significant difference in attitude towards online purchasing behaviour by gender and education background. The study concluded that gender, education background, purchase perception and website quality have directly influence on attitude towards online purchasing behavior.

Aluko (2003) analyzed multidimensional impact of culture on organizational performance. The study found a significant positive relationship between organizational culture and employee performance. The study also found that the selected firms were not performing well because of some peculiar problems. This include the problem of inadequacy of technology and social infrastructure most especially electricity and the incessant fuel crisis.

According to Dang (2016), showed the customer or people in Mohali region are motivated to buying online for the purpose of time saving and convenience along with lesser efforts is required in comparison to store purchase. Whether it is the traditional market or the online market, the marketer must understand the consumer and how he makes his decisions and purchasing choices because the consumer is under a constant flow of stimuli from the marketers and advertisements (Hollensen, 2004).

Jahanshahiet al. (2011) analyzed the effects of customer service and product quality on customer satisfaction and loyalty. The study found positive correlation between the customer service and product quality with customer satisfaction and loyalty. A study on consumer attitudes towards online shopping in Jordan found that higher levels of perceived web quality lead to higher levels of trust in an online shopping website (Al-Debei, 2015).

Sudhakar and Kumari (2016) investigated the customer satisfaction towards online shopping in Indian market. The study found that young customers are most recreational in their searching shopping.

Shergill et al. (2005) focused on factors which online buyers keep in mind while shopping online and also investigates how different types of online buyers perceive websites differently. The study found that website design, website reliability/fulfillment, website customer service and website security/privacy are the four dominant factors which influence consumer satisfaction towards online purchasing.

A study on cross-cultural examination of intention to use technology between Singaporean and Malaysian pre-service teachers revealed that security system as one of the biggest barriers that can avoid consumers from obtaining items online (Teo et al., 2008).

Chawla, Khan and Pandey (2016) have prepared an article on online buying behavior. The researchers mainly focused on the quantitative analysis of constructing model based on survey, limiting only to intention and adoption stages. The study explored demographics
influence on the buying intentions and adoption stages; there was no systematic interpretation about how the first time buyer was likely to continue with buying online or would like to intensify or pull more of existent products available offline.

Shahzad (2015) has conducted a research on online shopping behavior. The empirical data was collected through a questionnaire survey and it was distributed among 100 respondents by hand and online. The focus of this study was on the online factors such as financial risk, product performance risk, delivery risk, trust & security, and website design. The study found out that the product performance risk, and trust & security had a significant impact to consumer’s online shopping behavior while financial risk and delivery risk had no significant impact on consumer’s online shopping behavior.

Mittal (2013) has conducted a paper on E-commerce, its impact on consumer behavior. Quantitative data describing the actuality of internet shopping in the case of India has been obtained in order to explain the development of internet shopping and its impact on consumer behavior. The paper build on the relevant literature and at the same time examined consumer behavior by questionnaires. The paper supported the research questions including recent trends and various issues in internet shopping, and principle factors for consumer behavior. The result of the study showed that internet consumer trust and perceived risk have strong impacts on their purchasing decisions.

Sultan and Uddin (2011) examined a study on consumer’s attitude towards online shopping. The population selected for the research is Gotland, and narrowed down to 6 Gotland University students, university cafeteria and Gotland Public library. The sample size selected for this research was 100. Convenience sampling technique has been used. Website Design/Features, Convenience and Time saving are the factors indicated in the study along with pricing, discount, feedback from previous customers and quality of product. The study revealed that elderly people were not so keen to shop online, higher education made online shopping less attractive, and security concerns were very important while shopping online.

In the context of Nepal, Tamrakar (2016) revealed that convenience, web design, time saving and security have positive and significant impact on the customers’ satisfaction towards online shopping in Kathmandu valley. Many companies have been using ecommerce a decade ago, but the challenges are still the same. The actual sales have not been able to start due to lack of knowledge, awareness and online payment systems. Selling globally and inside the country is the same in years. Payment gateways are being developed but they have their limitation due to legal and security issues.

Vellido, Lisboa and Meehan (2000) summarized quite a few factors relating to consumers’ perception of online shopping. The factors of risk perception of users, convenience of online
shopping, control over, affordability of goods, ease of use of the shopping site, and customer service were included.

The above discussion reveals that there is no consistency in the findings of various studies concerning the studies on customer satisfaction towards online shopping.

Objective of the Study

The major objective of the study is to analyze the factors affecting customer satisfaction towards online shopping in Kathmandu valley. More specifically, it examines the impact of perceived service quality, perceived ease of use, perceived security and online payment process on customer satisfaction towards online shopping in Kathmandu valley.

Methodological Aspects

This study is based on primary data which were gathered from the 408 respondents, which mainly deals with the factors-affecting customer satisfaction towards online shopping in Kathmandu valley. Information were collected through Likert 5 point questionnaires followed by 1 denote strongly disagree to 5 denotes strongly agree. This study followed descriptive and explanatory research design. The study has described about customer satisfaction towards online shopping in Kathmandu Valley. It also highlighted on cause and effects between independent and dependent variable so this study has also followed explanatory research design. Inferential statistics (correlation regression and hypothesis test) were used to make analysis. The non-probability sampling technique was used for conducting the sampling process and the convenience sampling technique was used in this research.

The Model

As a first approximation, this study assumes that customer satisfaction depends on several dimensions (perceived service quality, perceived ease of use, perceived security and online payment process). Therefore, the regression model used in this study takes the following form:

Customer satisfaction = \( f(PSQ, PEO, PS and PP) \)

More specifically,

\[
CS=\beta_0 + \beta_1PE + \beta_2PSQ + \beta_3PS + \beta_4PP + e_i, \ldots \ldots \ldots \ (i)
\]

Where,

PE= Perceived ease of use, PSQ= Perceived service quality, PS = Perceived security, PP= Online payment process, \( e \) = error term and \( \beta_1, \beta_2, \beta_3, \beta_4 \) are the beta coefficient of the explanatory variables to be estimated.

Reliability Analysis
Table 1. Summary of Reliability Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha Based on Standardized Items</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived ease of use</td>
<td>0.75</td>
<td>0.75</td>
<td>4</td>
</tr>
<tr>
<td>Perceived service quality</td>
<td>0.79</td>
<td>0.79</td>
<td>4</td>
</tr>
<tr>
<td>Perceived security</td>
<td>0.89</td>
<td>0.89</td>
<td>4</td>
</tr>
<tr>
<td>Online payment process</td>
<td>0.76</td>
<td>0.76</td>
<td>4</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>0.78</td>
<td>0.78</td>
<td>4</td>
</tr>
</tbody>
</table>

According to Sekaran (2000) Cronbach’s Alpha coefficient less than 0.6 are considered poor. Higher than 0.6 are considered acceptable and greater than 0.8 are considered good. Table 1 shows the cronbach’s alpha coefficient of the questionnaires asked to respondents, which is above 0.6 that means the reliability of the instrument used is acceptable and good. Consistency of all variables (perceived ease of use, perceived service quality, perceived security, and online payment process and customer satisfaction) indicated that all items remained good with the internal consistency ranges from 0 to 1. Subsequently, all indicators were used for data collection.

**Perceived Service Quality**
Quality has been defined as the fitness for use, or to what extent it can meet the consumers' expectations or serves the purposes of the consumers. Nikhashemi et al. (2013) revealed that perceived service quality has positive impact on the customer satisfaction. Similarly, higher levels of perceived quality leads to higher levels of trust in an online shopping website. Based on it, this study develops following hypothesis:

*H1: There is positive relationship between perceived ease of use and customer satisfactions towards online shopping in Kathmandu valley.*

**Perceived Ease of Use**
Perceived ease-of-use is defined as the degree to which a person believes that using a particular system would be free from effort. Kim et al. (2007) found that perceived ease of use has an influential impact on a person’s online shopping channel preference and satisfaction. Similarly, Fukuyama (1995) argued that many online users like to enjoy convenience and more control through online transactions. According to Flavian et al. (2006), perceived usefulness and perceived ease of use jointly affect attitude toward usage, with perceived ease of use having a direct impact on customer satisfaction as well as online shopping.

*H2: There is positive relationship between perceived service quality and customer satisfactions towards online shopping in Kathmandu valley.*

**Perceived Security**
Security, in information technology, is the defense of digital information and IT assets against internal and external, malicious and accidental threats. Security system is one of the most important issues, and it is one of the biggest barriers that can avoid consumers from obtaining items online. Teo et al. (2008) revealed that security system has positive impact on customer satisfaction towards online shopping. Similarly, Haque (2009) found that security has positive influence on consumer attitude and perception toward internet shopping.

H3: There is positive relationship between perceived security and customer satisfaction towards online shopping in Kathmandu valley.

Online Payment Process

Online payment refers to money that is exchanged electronically. Typically, this involves use of computer networks, the internet and digital stored value systems. According to Nikhashemi et al. (2013), there is positive relationship between payment processing and customer satisfaction. Likewise, Shergill et al. (2005) revealed that easier and quicker payment processing system leads to enhance the customer satisfaction.

H4: There is positive relationship between online payment process and customer satisfaction towards online in Kathmandu valley.

Results and Discussion

Correlation Analysis

The Pearson’s correlation coefficients have been computed to analyze the strength of linear relationship between selected factors and customer satisfaction towards the online shopping in Kathmandu valley and the results are presented in Table 1.

Table 2. Pearson’s Correlation Matrix for the Customers’ Satisfaction towards Online Shopping in Kathmandu Valley. This table reveals the Pearson’s correlation coefficients between dependent and independent variables. Customer satisfaction (CS) is the dependent variable and perceived service quality (PSQ), perceived ease of use (PEO), perceived security (PS), and online payment process (PP) are the independent variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D</th>
<th>PSQ</th>
<th>PEO</th>
<th>PS</th>
<th>PP</th>
<th>CS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSQ</td>
<td>3.92</td>
<td>0.52</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEO</td>
<td>3.87</td>
<td>0.58</td>
<td>.523**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>3.64</td>
<td>0.74</td>
<td>.174</td>
<td>.434**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP</td>
<td>3.93</td>
<td>0.56</td>
<td>.350**</td>
<td>.478**</td>
<td>.547**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td>3.81</td>
<td>0.62</td>
<td>.320**</td>
<td>.385**</td>
<td>.524**</td>
<td>.632**</td>
<td>1</td>
</tr>
</tbody>
</table>
The table shows that the average value of perceived service quality is 3.92. Likewise, the average value of perceived ease of use is 3.87. Similarly, the average value of perceived security, online payment process and customer satisfaction are 3.64, 3.20, 3.93 and 3.81 respectively.

The result shows that perceived service quality is positively related to customers’ satisfaction. This means that increased in the perceived service quality leads to increase in the customer satisfaction towards online shopping. Similarly, perceived ease of use is positively correlated to customers’ satisfaction. This indicates that increase in perceived ease of use leads to increase in the level of customer satisfaction. Likewise, the result shows that perceived security is positively related to customer’s satisfaction. This indicates that betterment in the perceived security leads to increase in the customer’s satisfaction. Likewise, the result shows that online payment process is positively correlated to customer’s satisfaction. This means that betterment in the online payment process leads to increase in the customer’s satisfaction.

Regression Analysis

Having indicated the Pearson correlation coefficients, regression analysis has been conducted and the results are presented in Table 2.

Table 3: Regression Results of PSQ, PEO, PS and PP on Customer Satisfaction towards Online Shopping in Kathmandu Valley

The result are based on pooled cross sectional data and customer satisfaction of online shopping with 408 observations of 2019 survey using linear regression model. The model is \[ CS = \beta_0 + \beta_1PSQ + \beta_2PEO + \beta_3PS + \beta_4PP + e_t, \] where, dependent variable is \( CS \) (customer satisfaction) and independent variables are PSQ (perceived service quality), PEO (perceived ease of use), PS (perceived security) and PP (online payment process).

<table>
<thead>
<tr>
<th>Model</th>
<th>Intercept</th>
<th>PSQ</th>
<th>PEO</th>
<th>PS</th>
<th>PP</th>
<th>Adj. R²</th>
<th>SEE</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.33</td>
<td>0.38</td>
<td></td>
<td></td>
<td></td>
<td>0.09</td>
<td>0.59</td>
<td>11.33</td>
</tr>
<tr>
<td></td>
<td>(5.25)*</td>
<td>(3.37)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2.28</td>
<td></td>
<td>0.41</td>
<td></td>
<td></td>
<td>0.14</td>
<td>0.57</td>
<td>17.24</td>
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<tr>
<td></td>
<td>(5.78)*</td>
<td></td>
<td>(4.15)*</td>
<td></td>
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</tr>
<tr>
<td>3</td>
<td>2.21</td>
<td></td>
<td></td>
<td>0.44</td>
<td></td>
<td>0.27</td>
<td>0.53</td>
<td>37.01</td>
</tr>
<tr>
<td></td>
<td>(8.33)*</td>
<td></td>
<td></td>
<td>(6.08)*</td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td>1.09</td>
<td></td>
<td></td>
<td></td>
<td>0.69</td>
<td>0.39</td>
<td>0.48</td>
<td>65.74</td>
</tr>
<tr>
<td></td>
<td>(3.24)*</td>
<td></td>
<td></td>
<td>(8.11)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>0.87</td>
<td></td>
<td></td>
<td>0.2</td>
<td>0.56</td>
<td>0.44</td>
<td>0.46</td>
<td>40.74</td>
</tr>
<tr>
<td></td>
<td>(2.64)*</td>
<td></td>
<td></td>
<td>(2.74)*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>0.55</td>
<td>0.12</td>
<td></td>
<td>0.21</td>
<td>0.52</td>
<td>0.44</td>
<td>0.45</td>
<td>27.91</td>
</tr>
<tr>
<td></td>
<td>(1.34)</td>
<td>(1.3)</td>
<td></td>
<td>(2.78)*</td>
<td>(5.01)*</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>7</td>
<td>0.56</td>
<td>0.13</td>
<td></td>
<td>0.02</td>
<td>0.52</td>
<td>0.44</td>
<td>0.46</td>
<td>20.74</td>
</tr>
<tr>
<td></td>
<td>(1.35)</td>
<td>(1.25)</td>
<td></td>
<td>(0.22)</td>
<td>(4.93)*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notes:
1. * Results are significant at the 1% level.
2. Figures in parentheses are t-values.
3. Customer satisfaction is dependent variable.

The table shows that beta coefficient is positive and significant for perceived service quality. It indicates that higher the perceived service quality, higher would be the customer satisfaction towards online shopping. This finding is similar to the findings of Kim and Stoel (2004). Similarly, the beta coefficient is positive and significant for perceived ease of use. This means that higher the perceived ease of use, higher would be the customer satisfaction towards online shopping. This finding is consistent with the findings of Kim et al. (2007).

Likewise, the result shows that beta coefficient is positive and significant for perceived security. This means that higher the perceived security, higher would be the customer satisfaction towards online shopping. This finding is similar to the findings of Teo et al. (2008). Similarly, beta coefficient is positive and significant for online payment process. It indicates that better the online payment processes, higher would be the customer satisfaction towards online shopping. Thus finding is consistent with the findings of Nikhashemi et al. (2013).

**Result of Hypotheses**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>statements</th>
<th>Accepted/Rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>( H1: ) There is positive relationship between perceived ease of use and customer satisfaction towards online shopping in Kathmandu valley.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H2</td>
<td>( H2: ) There is positive relationship between perceived service quality and customer satisfaction towards online shopping in Kathmandu valley.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H3</td>
<td>( H3: ) There is positive relationship between perceived security and customer satisfaction towards online shopping in Kathmandu valley.</td>
<td>Accepted</td>
</tr>
<tr>
<td>H4</td>
<td>( H4: ) There is positive relationship between online payment process and customer satisfaction towards online in Kathmandu valley.</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

**Summary and Conclusion**

Online shopping has grown in popularity over the years, mainly because people find it convenient and easy to bargain shop from the comfort of their home or office from online stores. Shoppers can visit web stores from the comfort of their homes and shop as they sit in...
front of the computer (Jahanshahi et al., 2011). Internet is being widely used in daily life these days. The existence of the internet brought many advantages to individual's daily lives. With the help of the internet, individuals can communicate, learn, entertain, buy products and get services. The emergence of the internet has created opportunities for firms to stay competitive by providing customers with a convenient, faster and cheaper way to make purchases.

This study attempts at determining the factors affecting customer satisfaction towards online shopping in Kathmandu valley. This study is primarily based on primary sources of data collected from the 408 respondents. This study hypothesizes that the customer satisfaction depends on several factors such as perceived service quality, perceived ease of use, perceived security and online payment process.

The correlation analysis shows that perceived service quality, perceived ease of use, perceived security and online payment process are positively related to customer satisfaction. It reveals that higher the perceived service quality and perceived ease of use, higher would be customer satisfaction. This also indicates that higher the perceived security and online payment process, higher would be the customer satisfaction. The regression analysis shows that perceived service quality and perceived ease of use have positive impact on customer satisfaction. Similarly, perceived security and online payment process also have positive impact on customer satisfaction. This indicates that increase in the perceived service quality and perceived ease of use leads to increase in the customer satisfaction. It also reveals that increase in the perceived security and online payment process leads to increase in the customer satisfaction. As per the analysis all alternative hypotheses were accepted. It also provides guideline for future research to concentrate on the strengths and terminate the weaknesses. As this study was limited to only Kathmandu Valley, further research should be carried out to whole Nepal as well as some other high income countries to see if there is any differences in the results. This could be remarkable as it can provide retailers with information for their right marketing strategies. It can be suggested to future researchers to increase the sample size and variables to get more effective results.

References


