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# **Consumers' Perceptions of E-Service Quality**

on

# **Online Shopping in the Nepalese Metropolitan Cities**

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### Abstract

This paper attempts to examine the consumers' perceptions of e-service quality on online shopping in six metropolitan cities of Nepal. Descriptive and causal-comparative research design have used in this study. Data are collected from 525 respondents by using a questionnaire survey where 600 questionnaires (100 respondents from each metropolitan city) were distributed. Consumer satisfaction and purchase intention are the dependent variables. Similarly, website design, trust, reliability, responsiveness, and personalization are the independent variables. Descriptive statistics, correlation analysis and multiple regression models are used to analyse the data. It is observed that all independent variables have a positive and significant impact on consumer satisfaction and purchase intention. This study helps marketers to understand factors influencing consumer purchase intention on online shopping. The study is very relevant because it can give a clear picture of the future of online markets in Nepal and the emerging trends in this particular field. It is expected that this paper may contribute to fill an important gap in the literature and may add some values to the existing literature.

*Key Words*: consumer satisfaction, personalization, purchase intention, reliability, responsiveness, trust, website design.

### Introduction

Consumers' perception and purchase intention is becoming an area of emergent concern in the literature and the real world, therefore, it is a researchable issue for academicians and practitioners for the last few decades. Online purchasing is increasing day by day, especially after the outbreak of COVID-19. Consumers' perception and purchase intention is linked with different predictors among them e-service quality is an important aspect that affects the customers' satisfaction. In the era of globalization, electronic marketing is a great revolution and businesses are attempting to gain a competitive advantage by using e-commerce to interact with customers. Consumers prefer online selling in comparison with offline selling (Qalati *et al.*, 2021) and the e-learning of users is significant to the consumers' satisfaction (Li *et al.*, 2021). However, Zeithaml (2002) argued that website presence and prices are not only the major determinants for success but necessary to include e-service quality. The service quality area has been popular for more than two decades being recognized as a key factor in differentiating service products and building competitive advantage (Bitner *et al.*, 2000), but it has been applied to e-commerce environments very recently. Similarly, Van, Kappelman, and Prybutok (1997) found that service quality has been shown to promote user

3139

satisfaction in the literature of the IS field and customer satisfaction and loyalty in the marketing field (Collier & Bienstock, 2006).

Previous research studies (Shafiee and Bazargan, 2018; Wolfinbarger, & Gilly, 2003; Poel & Leunis, 1999) suggest that in creating satisfaction, the website design dimension is important because it is directly related to the user interface. Similarly, Luo et al (2006) had linked the website interface with the perceived trustworthiness of the system. The positive relationship between e-service quality and e-satisfaction is well examined in the previous eservice quality-related studies (Rawal & Bhatt, 2020; Dhingra et al., 2020; Khan et al., 2019; Zhang & Prybutok, 2005; Zeithaml, 2002). E-service quality contains multicomponents, which reflects two attributes in its measurement system attribute that stresses technological elements and service attribute. Likewise, e-service quality is not solely an evaluative outcome of a system, but the essence of service quality is customer service such as order delivery and after-sales service (Pavlou, 2003). According to Rita et al. (2019), overall e-service quality depends on three dimensions (website design, security/ privacy and fulfilment). Cho and Park (2001) observed that customer satisfaction is assessed using the quality of web site design and its factors are strong predictors of customer quality judgments, satisfaction, and loyalty for internet retailers (Wolfinbarger & Gilly, 2003). There is a positive relationship between website design and customer satisfaction (Pant, 2014; Chen & Wells, 1999) and has a significant impact on consumer purchase intention (Kim & Stoel, 2004). However, Mobile application was viewed to be a better and convenient option than websites and phone calls (KC & Timalsina, 2016). Likewise, Swaid and Wigand (2007) revealed that key dimensions of e-commerce service quality are website usability, information quality, reliability, responsiveness, assurance and personalization and found that customer satisfaction is affected by perception of reliability and loyalty of consumer is influenced by the perception of assurance. Similarly, Reichheld and Schefter (2000) found that trust is a significant antecedent of participation in commerce generally, and especially in online settings because of the increased ease with which online stores can behave opportunistically. Further, Trust is a powerful weapon to formal governance mechanisms that allow exchange relationships to be formed and that attempts to control opportunism (Puranam & Vanneste, 2009) and it has a significant impact on consumer satisfaction and purchase intention (Nayak et al., 2021; Bachmann & Inkpen, 2011). Also, it significantly mediates the relationship between perceived service quality, website quality reputation, and online purchase intention (Qalati et al., 2021). Likewise, Olaleyea et al. (2021) found trust and satisfaction as prominent mediators for online purchases. Further, Dhingra et al. (2020) stated that trust is the only e-service quality dimension that significantly affects overall service quality.

Zhu *et al.* (2002) argued that the reliability dimension has a direct positive effect on perceived service quality and customer satisfaction by electronic banking systems. Appropriate service and secured transaction of online shops can motivate the consumers. Customers expect online stores to respond to their inquiries promptly (Liao & Cheung, 2002). Likewise, San *et al.* (2010) stated that reliability/prompt responses, ease of use and access are significantly correlated with perceived online shopping service quality. However, they observed an opposite result that there is no relationship between attentiveness, security and perceived online shopping service quality. Maharjan (2014) also found reliability has a positive impact on customer satisfaction. Responsiveness has a significant impact on consumer purchase intention and their satisfaction. It means that the higher the responses

from the online sites it leads to the increase in purchase intention as well as satisfaction. It is related to services like customer inquiries, information retrieval and navigation speed that are important to customers (Parasuraman *et al.*, 1988; Yang et al., 2004; Kim & Lee, 2002). Personalization is an important component that affects consumers' perception and purchase intention and research showed that it has a positive impact on the internet shopping and customer satisfaction (Yulihasri & Daud, 2011; Lim, 2010; Li & Zhang, 2000; Rosen & Olshavsky, 1987). Many empirical studies have been conducted to examine factors influencing consumer purchase intention and consumer satisfaction on online shopping across the different countries over the different period, however, no more studies have been conducted on the analysis of factors influencing consumer purchase intention and satisfaction in the context of Nepal. Perhaps, this study may be the first attempt by covering the sample from all metropolitan cities of Nepal. Given the contradicting results of earlier studies on factors influencing consumer purchase intention and customer satisfaction on online shopping, it is motivated to conduct research work in the Nepalese context.

#### Objectives

The major objective of this paper is to examine the consumers' perception towards online shopping in different metropolitan cities of Nepal and the specific objectives are as follows:

a. To assess the consumers' perception toward website design, trust, reliability, responsiveness, and personalization.

- b. To analyse the relationship between website design, trust, reliability, responsiveness, and personalization with consumers' purchase intention and satisfaction.
- c. To examine the differences among the respondents regarding their perceptions on website design, reliability, responsiveness, trust and personalization services by different demographic factors.

#### **Research Hypotheses**

This research paper has set the following alternative hypotheses:

 $H_1$ : There is a positive relationship between web site design with customer satisfaction and purchase intention.

H<sub>2</sub>: There is a positive relationship of trust with customer satisfaction and purchase intention.

H<sub>3</sub>: There is a positive relationship of reliability with customer satisfaction and purchase intention.

 $H_4$ : There is a positive relationship between responsiveness with customer satisfaction and purchase intention.

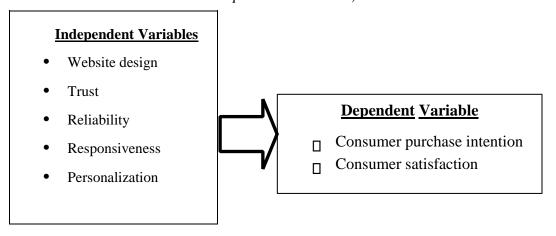
 $H_5$ : There is a positive relationship between personalization with customer satisfaction and purchase intention.

#### **Conceptual Framework**

The conceptual framework that describes the dependent and independent variables used in the study are shown in Figure 1.

### **Figure 1: Conceptual Framework**

(This figure presents the conceptual framework of the study. Consumer purchase intention and consumer satisfaction are taken as dependent variables and the independent variables are website design, trust, reliability, responsiveness and personalization. All these independent variables are expected to influence the dependent variables.)



### Methodology Used

Descriptive research design is a process of accumulating facts and describes the phenomenon as it exists. Such design involves the systematic collection and presentation of data to give a clear picture of a particular situation. Hence, this paper has used a descriptive research design to deal with the fact-finding and searching adequate information associated with consumer purchase intention as well as satisfaction with online shopping. Besides, causal-comparative research design has used to establish the direction, magnitude and form of observed relationships. A selfadministered structured questionnaire was distributed to 600 respondents (100 respondents from every six metropolitan cities) to collect the data, however, only 525 usable responses are collected (the response rate is 87.5 per cent). The questionnaire is divided into two sections, where the first section is related to demographic information of the respondents and the second section is designed to analyse the factors that influence consumer satisfaction and purchase intention on online shopping. Descriptive statistics and multi-step regression models have used to analyse the data. The following regression models are used in this study to examine the empirical relationship between factors that affect consumer purchase intention and satisfaction with online shopping.

Customer satisfaction = f (Website design, trust, reliability, responsiveness and personalization)

Purchase intention = f (Website design, trust, reliability, responsiveness and personalization)

More specifically, the given model has been segmented into the following models:

### Model 1:

 $CS = \alpha + \beta_1 WD + \beta_2 T + \beta_3 R + \beta_4 RES + \beta_5 P + \epsilon$ 

In regression model 1, the dependent variable is customer satisfaction. The impact of website design, trust, reliability, responsiveness and personalization on customer satisfaction is tested.

## Model 2:

 $PI=\alpha + \beta_1 WD + \beta_2 T + \beta_3 R + \beta_4 RES + \beta_5 P + \varepsilon$ 

In the above regression model, the dependent variable is the purchase intention. The impact of website design, trust, reliability, responsiveness and personalization on purchase intention is tested.

Where, CS= Customer satisfaction, PI= Purchase intention, WD= Website design, T= Trust, R= Reliability, RES= Responsiveness, P= Personalization,  $\alpha$  is the constant term,  $\mathcal{E} =$  error term,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$  and  $\beta_5$  are the beta coefficients of variables.

## Reliability

The reliability is measured and confirmed by testing both the consistency and truthfulness of the respondents' response in primary data. For reliability test through Cronbach's alpha, only Likert scale type questions are considered. Cronbach's alpha reliability test is used to identify the validity of items used in a survey. Table 1 shows the validity and reliability of the questions of the study by using SPSS.

Table 1

Coefficient of Cronbach	alpha

$( \cap )$		
Variable	Cronbach Alpha	No. of Items
Website design (WD)	0.742	5
Trust (T)	0.729	5
Reliability (R)	0.750	5
Responsiveness (RE)	0.765	5
Personalization (P)	0.722	5
Customer Satisfaction (CS)	0.758	5
Purchase Intention (PI)	0.723	5
Overall	0.759	35

The table shows that the calculated Cronbach's alpha for independent variables website design, trust, reliability, responsiveness, personalization, consumer satisfaction, and purchase intention are 0.742, 0.729, 0.750, 0.765, 0.722, 0.758, and 0.723 respectively. Since all the calculated values are above 0.7, it indicates that the data taken for the study are reliable.

## Limitations

This paper has prepared based on certain limitations. First, respondents' opinions are collected through a questionnaire survey, therefore, the reliability of conclusions of the study depended upon the accuracy of the information provided by the respondents. Second, it is limited only to metropolitan cities, hence, the study does not incorporate respondents from all over the country. Third, it is based on the assumption of the linear regression between the dependent and independent variables, hence, it excludes the non-linear regression assumption.

### **Results and Discussions**

## Respondents' profile

The respondents' profile reveals the personal characteristic of respondents combined based on different personal characteristics such as gender, age group, academic qualification, monthly income, occupation, customer's currently using online websites, and address. Table 2 shows the demographic characteristic of the respondents.

### Table 2

Demographic cl	haracteristics of	respondents
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Respondents details     responses     (%)       Gender		No of	Percentage
Male   252   48.00     Female   273   52.00     Total   525   100     Age   1   101     15-20   68   12.95     21-30 years   263   50.10     31-40 years   149   28.38     41-50 years   525   100     Academic Qualification   525   100     Bachelors   8   1.52     Above Masters   17   3.24     Total   525   100     Mosters   17   3.24     Total   525   100     Mosters   17   3.24     Total   525   100     Mosters   17   3.24     Total   525   100     Monthly income   2   149     Less than Rs. 30000   247   47.05     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   1.19     Total   189   36     Business Person <t< th=""><th>Respondents details</th><th>responses</th><th>(%)</th></t<>	Respondents details	responses	(%)
Female   273   52.00     Total   525   100     Age   1   19     15-20   68   12.95     21-30 years   263   50.10     31-40 years   45   8.57     Total   525   100     Academic Qualification   525   100     Bachelors   8   1.52     Above Masters   126   24.00     Total   525   100     Academic Qualification   185   35.24     Bachelors   187   3.24     Total   525   100     Mosters   17   3.24     Total   525   100     Monthly income   124   23.62     So,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   1.19     Total   525   10.04     Occupation   174   33.14     House Wife   55   10.48     Others   8   1.52     Total	Gender		
Total   525   100     Age   15   20   68   12.95     21-30 years   263   50.10     31-40 years   149   28.38     41-50 years   45   8.57     Total   525   100     Academic Qualification   8   1.52     Below +2   126   24.00     +2   8   1.52     Masters   189   36.00     Above Masters   525   100     Monthly income   17   3.24     Total   525   100     Monthly income   247   47.05     S0001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   225   100     Occupation   12   4.19     Total   525   100     Occupation   174   33.14     House Wife   55   10.48     Others   8   1.52     Total   525   100     Others   55   10.48	Male	252	48.00
Age     15 -20   68   12.95     21-30 years   263   50.10     31-40 years   149   28.38     41-50 years   45   8.57     Total   525   100     Academic Qualification     Below +2   8   1.52     +2   126   24.00     Bachelors   185   35.24     Masters   189   36.00     Above Masters   17   3.24     Total   525   100     Monthly income   2   25.14     Less than Rs. 30000   247   47.05     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   4.19     Total   525   100     Occupation   124   23.62     Sudent   189   36     Business Person   99   18.86     Salaried Person   174   33.14     House Wife   55   10.0     Which Online website you are currently using?	Female	273	52.00
15 -20   68   12.95     21-30 years   263   50.10     31-40 years   149   28.38     41-50 years   45   8.57     Total   525   100     Academic Qualification     Below +2   8   1.52     +2   126   24.00     Bachelors   185   35.24     Masters   17   3.24     Total   525   100     Mosters   17   3.24     Total   525   100     Monthly income   17   3.24     Less than Rs. 30000   247   47.05     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   4.19     Total   525   100     Occupation   124   23.62     Salaried Person   99   18.86     Salaried Person   174   33.14     House Wife   55   10.00     Which Online website you are currently using?   116   22.10 <td>Total</td> <td>525</td> <td>100</td>	Total	525	100
21-30 years   263   50.10     31-40 years   149   28.38     41-50 years   45   8.57     Total   525   100     Academic Qualification     Below +2   8   1.52     +2   126   24.00     Bachelors   185   35.24     Masters   189   36.00     Above Masters   17   3.24     Total   525   100     Monthly income   17   3.24     Less than Rs. 30000   247   47.05     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   4.19     Total   525   100     Occupation     Student   189     Business Person   99   18.86     Salaried Person   174   3.14     House Wife   55   10.48     Others   8   1.52     Total   525   100     Which Online website you are currently using? <td>Age</td> <td></td> <td></td>	Age		
31-40 years   149   28.38     41-50 years   45   8.57     Total   525   100     Academic Qualification   8   1.52     Below +2   126   24.00     185   35.24   185   35.24     Masters   189   36.00   17   3.24     Total   525   100   100   100     Mosters   17   3.24   100   100     Above Masters   525   100   100   100     Monthly income   124   23.62   100   100   100     Montol - 50,000   124   23.62   100 <t< td=""><td>15 -20</td><td>68</td><td>12.95</td></t<>	15 -20	68	12.95
41-50 years   45   8.57     Total   525   100     Academic Qualification   8   1.52     Below +2   126   24.00     +2   126   24.00     Bachelors   185   35.24     Masters   189   36.00     Above Masters   17   3.24     Total   525   100     Monthly income   17   3.24     Less than Rs. 30000   247   47.05     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   4.19     Total   525   100     Occupation   124   23.62     Student   189   36     Business Person   99   18.86     Salaried Person   174   33.14     House Wife   55   10.48     Others   8   1.52     Total   525   100     Witch Online website you are currently using?   116   22.10     Foodmandu.com   94	21-30 years	263	50.10
Total   525   100     Academic Qualification   8   1.52     Below +2   126   24.00     +2   126   24.00     Bachelors   185   35.24     Masters   189   36.00     Above Masters   17   3.24     Total   525   100     Monthly income   17   3.24     Less than Rs. 30000   247   47.05     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   4.19     Total   525   100     Occupation   124   23.62     Student   189   36     Business Person   29   18.86     Salaried Person   174   33.14     House Wife   55   10.48     Others   8   1.52     Total   525   100     Witch Online website you are currently using?   116   22.10     Foodmandu.com   116   22.10     Foodmandu.com   94 <td>31-40 years</td> <td>149</td> <td>28.38</td>	31-40 years	149	28.38
Academic Qualification   8   1.52     H2   126   24.00     Bachelors   185   35.24     Masters   36.00   17   3.24     Above Masters   17   3.24     Total   525   100     Monthly income   124   25.14     Less than Rs. 30000   132   25.14     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   4.19     Total   525   100     Occupation   124   23.62     Student   189   36     Business Person   99   18.86     Salaried Person   174   33.14     House Wife   55   10.48     Others   8   1.52     Total   525   100     Witch Online website you are currently using?   116     Hamrobazzar.com   152   28.95     Sastodeal.com   116   22.10     Foodmandu.com   94   17.90     Bhakari.com	41-50 years	45	8.57
Below +2   8   1.52     +2   126   24.00     Bachelors   185   35.24     Masters   189   36.00     Above Masters   17   3.24     Total   525   100     Monthly income   17   3.24     Less than Rs. 30000   247   47.05     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   4.19     Total   525   100     Occupation   124   23.62     Sudent   8   36     Business Person   99   18.86     Salaried Person   174   33.14     House Wife   55   10.48     Others   8   1.52     Total   525   100     Witch Online website you are currently using?   116   22.10     Hamrobazzar.com   152   28.95   5     Sastodeal.com   116   22.10     Foodmandu.com   94   17.90     Bhakari.com	Total	525	100
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Bachelors   185   35.24     Masters   189   36.00     Above Masters   17   3.24     Total   525   100     Monthly income   17   3.24     Less than Rs. 30000   247   47.05     30,001 - 40,000   132   25.14     40,001 - 50,000   124   23.62     50,001 and above   22   4.19     Total   525   100     Occupation   22   4.19     Total   525   100     Occupation   189   36     Business Person   99   18.86     Salaried Person   174   33.14     House Wife   55   10.48     Others   8   1.52     Total   525   100     Which Online website you are currently using?   116   22.10     Hamrobazzar.com   152   28.95     Sastodeal.com   116   22.10     Foodmandu.com   94   17.90     Bhakari.com   16   3.05	Below +2	8	1.52
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House Wife5510.48Others81.52Total525100 <i>Which Online website you are currently using?</i> Hamrobazzar.com15228.95Sastodeal.com11622.10Foodmandu.com9417.90Bhakari.com163.05	Business Person	99	18.86
Others   8   1.52     Total   525   100     Which Online website you are currently using?       Hamrobazzar.com   152   28.95     Sastodeal.com   116   22.10     Foodmandu.com   94   17.90     Bhakari.com   16   3.05	Salaried Person	174	33.14
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Which Online website you are currently using?Hamrobazzar.com15228.95Sastodeal.com11622.10Foodmandu.com9417.90Bhakari.com163.05	Others	8	1.52
Hamrobazzar.com15228.95Sastodeal.com11622.10Foodmandu.com9417.90Bhakari.com163.05	Total	525	100
Sastodeal.com     116     22.10       Foodmandu.com     94     17.90       Bhakari.com     16     3.05	Which Online website you are currently using?		
Foodmandu.com     94     17.90       Bhakari.com     16     3.05	Hamrobazzar.com	152	28.95
Bhakari.com 16 3.05	Sastodeal.com	116	22.10
	Foodmandu.com	94	17.90
Muncha.com 16 3.05	Bhakari.com	16	3.05
	Muncha.com	16	3.05

Nepbay.com	9	1.71
Others	122	23.24
Total	525	100
Place		
		10.5
Kathmandu Metropolitan City	98	18.67
Lalitpur Metropolitan City	95	18.10
Pokhara Metropolitan City	88	16.76
Bharatpur Metropolitan City	85	16.19
Birgunj Metropolitan City	94	17.90
Biratnagar Metropolitan City	65	12.38
Total	525	100

### Descriptive Analysis

The mean value of website design ranges from a minimum value of 3.41 to a maximum value of 3.98. Among them, the most significant observation is 'it is quick and easy to complete a transaction at the online shopping' with a mean value of 3.98 and the most insignificant observation is 'I feel easy to use website navigation. The weighted average value for website design is 3.79 which indicates that website design is the important factor while conducting online shopping that website design affect consumer purchase intention. Similarly, the mean value for reliability ranges from a minimum value of 3.25 to a maximum value of 3.71. Among them, the most significant observation is 'The online shopping delivers on its undertaking to do certain things by a certain time' with a mean value of 3.71 and the most insignificant observation is 'the online shopping shows sincere interest in solving customer problems.' The weighted average mean value for reliability is 3.57 which indicates that reliability is an influencing factor that affects consumer purchase intention and satisfaction on online shopping.

The mean value for responsiveness ranges from a minimum value of 3.54 to a maximum value of 3.71. Among them, the most significant observation is 'the online shopping is always willing to help customers' with a mean value of 3.71 and the most insignificant observation is 'the online shops provide the service about customer inquiries on the website.' The weighted average mean value for responsiveness is 3.65 which indicate that responsiveness is an important factor that affects consumer purchase intention and satisfaction on online shopping. Likewise, the mean values of trust range from a minimum value of 3.31 to a maximum value of 3.53. Among them, the most significant observation is 'The online shopping insists confidence in customers' with a mean value of 3.53 and the most insignificant observation is 'I believe that online shopping never misuses my personal information.' The weighted average mean value for trust is 3.42 which indicate that trust is also an influencing factor that affects consumer purchase intention and satisfaction on and satisfaction on online shopping.

The mean values of personalization range from a minimum value of 3.62 to a maximum value of 3.78. Among them, the most significant observation is 'I receive personal thank you note from via email or other media after I placed an order with a mean value of 3.78 and the most insignificant observation is 'the website gives me personal attention. The weighted average mean value for personalization is 3.71 which

3144

indicate that personalization is an important factor that affects consumer purchase intention and satisfaction with online shopping. Further, the mean values of purchase intention range from a minimum value of 3.68 to a maximum value of 3.94. Among them, the most significant observation is 'after reading online review/comment, it makes me desire to buy the product' with a mean value of 3.94 and the most insignificant observation is 'I strongly recommend that others use the online shopping'. The weighted average mean value for purchase intention is 3.79 which indicates that purchase intention is affected by different variable. Moreover, the mean value of 3.85. Among them, the most significant observation is 'I feel that it is time-saving and money-saving from online shopping' with a mean value of 3.85 and the most insignificant observation is 'I feel that online booking product gives better quality than other'. The weighted average mean value for customer satisfaction is 3.77 which indicate that customer satisfaction is affected by different variable.

#### **Correlation Analysis**

Pearson's correlation has used to analyse the relationship between website design, reliability, responsiveness, trust, and personalization with the consumer purchase intention of and satisfaction with online shopping in all metropolitan cities of Nepal. Table 3 shows the correlation coefficients among the variables.

Table 3

Pearson's Correlations Matrix

[This table presents Pearson's correlation coefficients between dependent variables and independent variables. PI (purchase intention) and CS (Customer satisfaction) is the dependent variable and WD (Website design), R (Reliability), RE (Responsiveness), T (Trust), P (Personalization) are the independent variables.]

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	independ	ieni variabi	es.j							
CS3.770.765.751**1WD3.790.711.628**.666**1R3.570.743.589**.647**.639**1RE3.650.722.674**.694**.699**.697**1T3.420.861.533**.569**.498**.627**.593**1		Mean	Std Dev	PI	CS	WD	R	RE	Т	Р
WD3.790.711.628**.666**1R3.570.743.589**.647**.639**1RE3.650.722.674**.694**.699**.697**1T3.420.861.533**.569**.498**.627**.593**1	PI	3.79	0.723	1						
R3.570.743.589**.647**.639**1RE3.650.722.674**.694**.699**.697**1T3.420.861.533**.569**.498**.627**.593**1	CS	3.77	0.765	.751**	1					
RE   3.65   0.722   .674**   .694**   .699**   .697**   1     T   3.42   0.861   .533**   .569**   .498**   .627**   .593**   1	WD	3.79	0.711	.628**	.666**	1				
T 3.42 0.861 .533 <sup>**</sup> .569 <sup>**</sup> .498 <sup>**</sup> .627 <sup>**</sup> .593 <sup>**</sup> 1	R	3.57	0.743	.589**	.647**	.639**	1			
	RE	3.65	0.722	.674**	.694**	.699**	.697**	1		
P 3.71 0.645 .739 <sup>**</sup> .711 <sup>**</sup> .611 <sup>**</sup> .621 <sup>**</sup> .659 <sup>**</sup> .597 <sup>**</sup> 1	Т	3.42	0.861	.533**	.569**	.498**	.627**	.593**	1	
	Р	3.71	0.645	.739**	.711**	.611**	.621**	.659**	.597**	1

*Note: the asterisk sign (\*\*) indicate that the coefficients are significant at a 5 per cent level of significance.* 

Table 3 shows that website design is positively correlated to consumer purchase intention and satisfaction that indicates that the higher the website quality design, the higher would be the consumer purchase intention and satisfaction with online shopping. Similarly, the result shows that reliability is positively related to consumer

purchase intention and satisfaction which states that the higher the level of reliability online, the higher would be the purchase intention and satisfaction. Likewise, the result reveals that responsiveness has a positive relationship with consumer purchase intention and satisfaction that indicates higher the responsiveness online, the higher would be the consumer purchase intention and satisfaction on online shopping. Further, trust has a positive relationship with consumer purchase intention and satisfaction. It states that the higher the trust online, the higher would be consumer purchase intention and satisfaction. The result also shows that personalization is also positively related to consumer purchase intention and satisfaction that exhibits higher the personalization, higher would be the consumer purchase intention and satisfaction on online shopping.

### **Regression Analysis**

Table 4

Estimated regression results of website design, reliability, responsiveness, trust and personalization on purchase intention

(The results are based on 525 numbers observations by using a linear regression model. The model is  $PI = \alpha + \beta_1 WD + \beta_2 T + \beta_3 R + \beta_4 RES + \beta_5 P + \varepsilon$ , where PI (purchase intention) is the dependent variable and WD (Website design), R (Reliability), RE (Responsiveness), T (Trust), P (Personalization) are the independent variables.)

	The regression coefficient of Purchase intention									
Models	Intercept	WD	R	RE	т	Р	$\mathbf{R}^2$	SEE	F	
1	1.475 (8.945**	0.763 (15.262)**		5	U		0.483	0.487	240.64	
	1.863		0.587							
2	(12.403)**		(14.235)**				0.432	0.501	199.097	
	1.391			0.742						
3	(9.271) **			(17.723)**			0.541	0.456	310.22	
	2.435				0.542					
4	(19.956)**				(12.324)**		0.393	0.521	147.41	
	1.283					0.786				
5	(9.546)**					(21.45)**	0.644	0.422	441.43	
	1.157	0.542	0.398							
6	(6.867)**	(8.687)**	(6.611)**				0556	0.460	154.03	
	0.936	0.332	0.197	0.465						
7	(5.564)**	(5.114)**	(3.002)**	(6.98)**			0.589	0.434	128.07	

	0.923	0.298	0.098	0.398	0.234				
8	(5.543)**	(4.589)**	(1.961)	(5.853)*	(2.987)**		0.621	0.432	99.41
	0.654	0.215	0.072	0.321	0.047	0.67			
9	(3.962)**	(3.541)**	(0.086)	(3.856)*	(0.511)	(9.997)*	0.705	0.382	120.45

Note: the asterisk signs (\*\*) and (\*) indicate that the coefficients are significant at 1 per cent and 5 per cent levels, respectively.

Table 4 exhibits that the beta coefficients for website design are positive and significant with consumer purchase intention that reveals the website design of online sites has a positive impact on consumer purchase intention. This result is consistent with the finding of Chen and Wells (1999) and Dash and Saji (2006). Similarly, the positive and significant beta for reliability and responsiveness with consumer purchase intention states that reliability and responsiveness have a positive impact on the purchase intention of consumers and these findings are consistent with the findings of San *et al.* (2010) and Wolfinbarger and Gilly (2003). Likewise, the result also presents that the beta coefficients for trust and personalization are positive and significant with consumer purchase intention which indicates that trust and personalization on online shopping have a positive impact on consumer purchase intention. This finding is similar to the finding of Yoon (2002) and Corritore *et al.* (2003).

### Table 5

Estimated regression results of website design, reliability, responsiveness, trust and personalization on customer satisfaction

(The results are based on 525 numbers observations by using a linear regression model. The model is
$CS = \alpha + \beta_1 WD + \beta_2 T + \beta_3 R + \beta_4 RES + \beta_5 P + \varepsilon$ , where, CS (Customer satisfaction) is the dependent
variable and WD (Website design), R (Reliability), RE (Responsiveness), T (Trust), P (Personalization)
are the independent variables.)

	The regression coefficient of customer satisfaction											
Models	Intercept	WD	R	RE	Т	Р	$\mathbb{R}^2$	SEE	F			
	1.145	0.896										
1	(6.532)**	(17.353)**					0.50	0.502	297.96			
	0.743		0.415									
2	(4.11)**		(8.243)**				0.583	0.461	207.432			
	0.67			0.532								
3	(3.544) **			(9.324)**			0.561	0.452	224.497			
	0.862				0.342							
4	(4.987)**				(7.815)**		0.575	0.464	201.75			
5	0.432					0.576	0.648	0.422	271.28			

3147

	(2.715)**					(11.889)**			
	0.721	0.524	0.421						
6	(4.123)**	(9.431)**	(8.243)**				0582	0.461	207.243
	0.524	0.43	0.435	0.345					
7	(2.802)**	(5.911)**	(6.727)**	(4.791)**			0.621	0.391	164.92
	0.497	0.376	0.432	0.213	0.225				
8	(2.743)**	(5.845)**	(5.445)	(3.453)*	(3.332)**		0.631	0.443	129.298
	0.231	0.342	0.432	0.434	0.354	0.74			
9	(1.342)	(4.645)**	(7.989)**	(4.143)*	(3.227)*	(9.998)*	0.689	0.411	159.65

*Note: the asterisk signs (\*\*) and (\*) indicate that the coefficients are significant at 1 per cent and 5 per cent levels, respectively.* 

Table 5 presents that the beta coefficients for website design are positive with consumer satisfaction which shows that website design of online sites has a positive impact on consumer satisfaction and it is a significant per cent level of significance. This result is similar to the finding of Chen and Wells (1999) and Dash and Saji (2006). Similarly, the positive and significant beta coefficients for reliability and responsiveness reveal that reliability and responsiveness of the online sites have a positive impact on consumer satisfaction and this finding consistent or similar to San *et.al* (2010) and Wolfinbarger and Gilly (2003). Further, the result also shows that the beta coefficients for trust and personalization are positive and significant with consumer satisfaction that indicates trust and personalization on online shopping have a positive impact on consumer satisfaction. This result is consistent with the finding of Yoon (2002) and Corritore *et al.* (2003).

### **Conclusion and Implications**

It is observed that website design, reliability, responsiveness, trust and personalization are positively related to the consumer purchase intention and satisfaction with online shopping. It indicates that the higher the website design, reliability, responsiveness, trust and personalization higher would be the consumer purchase intention and satisfaction with online shopping in urban areas of Nepal. Similarly, it is also found that website design, reliability, responsiveness, trust and personalization have a positive impact on consumer purchase intention and satisfaction with online shopping. After making the entire analysis of the data, all the hypothesis of this study has been accepted as all the factors included in this paper that strongly impact on the consumer purchase intention as well as satisfaction. Since all selected independent variables have a positive relationship with consumer satisfaction and purchase intention, online business sites of Nepal should focus more on website quality, reliability, trust, responsiveness, and personalization to satisfy their consumers. This paper has mainly considered only five independent variables, therefore, the future study can be conducted by considering other factors like culture, empathy, and so on. Similarly, this study has applied a linear regression model, however, further study can be done by

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