

# An Exploratory Study to Identify Indian Consumers' Perceived Website Quality Dimensions of E-Tailers

Monami Dasgupta (Banerjee) \* and Kaushik Mandal

Department of Management Studies, National Institute of Technology, Durgapur 713209, India;  
monami.dasgupta.banerjee@gmail.com, kaushikmandal.nit@gmail.com

## Abstract

**Background/Objectives:** The internet has given rise to innovative ways of conducting business. The present study attempts to identify the quality dimensions of E-tailing websites based on the perception of Indian consumer and hence examination of its stability across the section of the same. **Methods/Statistical Analysis:** An empirical investigation is done by conducting a survey of 200 online consumers. For the purpose of survey a questionnaire has been developed where items have been identified with the help of relevant literatures. A part of the questionnaire is related to demographic information. Later developed model has been compared in terms of age, gender, occupation and internet usage to understand whether it varies across the said parameters or not. **Findings:** Five factors or dimensions are obtained and those are easy, secured and multiple payment options (Factor\_1), low risk oriented (Factor\_2), transparency in transaction (Factor\_3), attractive website design (Factor\_4), and quasi reality in place of touch and feel (Factor\_5). Also this study empirically validates that consumers engage in online shopping when they are ensured of payment security and perceive the transactions as transparent. Consumer prefers to deal with low risk situation. Albeit of less importance but attractiveness of the website is also important. Since touch and feel is not possible consumers are interested for quasi reality of the product usage and features and thus this dimension is named as 'Existence of quasi reality in place of touch and feel'. This particular dimension has not been portrayed in previous studies. This study has added value to the existing literature since there is an absence of a comprehensive study in Indian context. A few outcomes of this study are in accordance with the findings of some existing research. **Application/Improvements:** The result of this study shall help the E-tailers to understand what features are to be included in their websites to induce consumers to make purchases from their websites.

**Keywords:** E-tailer, Factor Analysis, India, Quality, Website

## 1. Introduction

The internet has emerged as a propulsive force of change in the international business domain<sup>1</sup>. Internet or online marketing has become a compelling part in the strategy for a company to promote, advertises and connect with customers<sup>2</sup>. To a great extent, it has replaced the conventional marketing activities<sup>3</sup>. Modern technologies are available to help the user in respect to easy-handling and friendly transaction systems<sup>4</sup>. More over that are leading to better customer services through customer relationship management systems<sup>4</sup>. A past study augured that internet is rapidly becoming an important domain for

marketers to conduct business transactions<sup>3</sup>. Internet provides significant economic value and benefits not only to businesses but also extend incentives to the consumers. Internet offers consumers a platform to explore and appraise products from numerous marketers with ease and also to place orders quickly<sup>6</sup> in an inexpensive manner and simultaneously saving time.

The rapid growth of internet adoption has caused extraordinary changes in the way people communicate, lives, and conduct business<sup>7</sup>. Consumers' increased access to the internet coupled with the unique benefits that internet offers to the consumers has resulted in the continual growth in numbers of consumers who are engaging

\*Author for correspondence

in online purchase across the globe. India is one of the countries where rapid diffusion of the internet has taken place over the years. In 2015, there are 277.4 million internet users in India and this figure is predicted to reach to 411.1 million in 2018<sup>8</sup>. Information from the same website reveals that sales of retailers with online presence in India have increased vigorously, from 2.3 billion U.S. dollars in 2012 to approximately 17.5 billion U.S. dollars at present, representing a growth of almost eight times. Based on these statistics it becomes evident that India is a huge market for E-tailers to conduct their businesses. The E-tailers operating in India need to understand what dimensions or characteristics they should coalesce in their websites to attract the consumers, engage them in online purchase and induce them for repurchase from the retailers' online stores. In this regard, through this exploratory research the authors intend to identify the quality dimensions of E-tailers' websites from the perspective of consumers in India.

In addition to research work highlighting the use of internet for marketing, a good number of works have been executed with the focus on understanding the characteristics or dimensions that enhances website quality. Website characteristics are the features that a website should preferably have for creating a positive web experience<sup>9</sup>. The contents for developing website are very useful for ecommerce site to generate interest among the engaged customers. It has been opined in a previous study that as customers interact with an automated interface instead of employees in an online store, so the design of the website is having crucial role in evoking customer satisfaction<sup>10</sup>. It is extremely significant for online retailers to identify the dimensions that are to be included in the designing of the websites.

It has been found website design features like graphical information, audio interaction and colour-coded information enhances the ease of website usage<sup>11</sup>. Prior studies have observed availability of extensive and quality information in websites leads to increased buying decisions and higher levels of consumer satisfaction<sup>12</sup>. One research study concluded that informational content in a website is the most appreciated website characteristic by consumers<sup>13</sup>. In case of internet marketing, product information can increase the prospect that consumer needs are contented<sup>14</sup>.

Security in transactions on the internet is a very sensitive issue for consumers<sup>15</sup>. Lack of security and privacy often results in consumers not indulging in online shop-

ping<sup>16</sup>. It has been observed that website dimensions security and privacy have an immense impact on the consumers' decision to engage in online purchasing<sup>17</sup>. It has been emphasized that e-commerce represents an exploration beyond the unknown into the uncharted terrain, and therefore trust is pivotal to establish relationships in the virtual world<sup>18</sup>. Trust can be build by ensuring transactional security and assuring consumers about protecting their privacy. One research study noted that internet users provide their personal information to E-tailers, at the time of transactions, but they continue to be sceptical about the probability that retailers may disregard their privacy by providing this information to others<sup>19</sup>. Consumers are hesitant to submit personal information to the E-tailers because they worry this sensitive information may be misused by some wrongful person. A past research studied consumer intentions to engage in online shopping and noted ease of use, privacy and security as important dimensions of websites<sup>20</sup>. Another study stated consumer concerns of privacy and security should be considered important for online shopping<sup>21</sup>.

A study established that page loading speed, business content, easy navigation, and security are the main attributes for successful web site design<sup>22</sup>. Past studies have revealed that ease of payment, and time savings in the transaction process, enhance ease of transactions with E-tailers<sup>23</sup>. Navigation through websites have also been considered important for the success of E-tailers. If there are navigational problems then users may view only the home page of a website without going through other pages of the website and may not engage in any purchase activity in that website<sup>24</sup>.

A past study explored the consumers' perceptions of website quality and found six quality dimensions as reliability, access, ease of use, personalization, security, and credibility<sup>25</sup>. Authors have observed that important issues of e-commerce service quality such as information content, customization, reliability, and response are quite significant on consumers<sup>26</sup>. Zeithmal et.al has identified seven dimensions for e-service quality<sup>27</sup>. Authors also developed a model for e-quality incorporating issues relevant for customer handling<sup>28</sup>. Elliot (2008) has proposed a framework including six dimensions which are related to information providing for better customer connect<sup>29</sup>. Authors have also identified five quality dimensions namely: 1. content, 2. accuracy, 3. format, 4. ease of use, and 5. timeliness vis-à-vis information systems for customer satisfaction<sup>30</sup>.

From the theoretical perspective it can be noted that there exist a lacuna in research focusing on e-tailing in Indian context despite E-tailers experiencing meteoric growth in their business in the country during the past decade and half. In continuation of the above research works, in this study, the authors attempt to identify the website quality dimensions or factors in case of E-tailers as perceived by online consumers in India.

## 2. Research Methodology

A questionnaire was prepared to conduct the study. The first five items were designed to study the sample demographics. Nine items were related to online purchase history and internet usage of the samples. Initially the authors started with twenty five items or variables related to website quality features of E-tailers and they were measured with the administration of Likert scale having five rating points where, one = strongly disagree and five = strongly agree. This study delves with the most salient set of website features of E-tailers. All the items considered in the present study were derived from the existing literature.

For the present study, the method of purposive sampling or judgmental sampling has been adopted. In case of purposive or judgmental sampling the samples are selected based on the knowledge of a population and the purpose of the study. The samples were chosen from a population of internet users of 18 years of age and above, who have engaged in online shopping at least once in the last six months, so that they can be considered as a fair source for the required data. In the survey 209 responses were obtained, where nine responses were not considered since these were partially filled. Examination and interpretation of the data have been done using SPSS 18.

To accomplish the objective of the study the authors conducted exploratory factor analysis. Five variables were discarded as they either did not load to any factor/dimension or their loading value to a factor was less than 0.55 which was chosen as the criterion. Two variables were also not considered as the factor to which they got loaded had a reliability score of less than 0.55. It has been indicated that reliability measures can be accepted with a Cronbach alpha value of 0.60, otherwise, 0.70 should be the threshold<sup>31</sup>. So for purification of the scale seven variables were discarded and the scale was developed on the basis of the eighteen variables which got loaded into five factors having Cronbach alpha values greater than 0.60.

## 3. Data Analysis and Findings

Table 1 incorporates information regarding age, income other relevant variables of the sample. The internet usage details of the samples are given in Table 2, and the online purchase details of the samples are given in Table 3.

**Table 1.** Demographic details

Gender		
	Frequency	Percent
Male	115	57.5
Female	85	42.5
<b>Total</b>	<b>200</b>	<b>100.0</b>
Age ( In Years)		
	Frequency	Percent
18-20	18	9.0
21-30	59	29.5
31-40	63	31.5
41-50	33	16.5
Above 50	27	13.5
<b>Total</b>	<b>200</b>	<b>100.0</b>
Education		
	Frequency	Percent
School	3	1.5
High School	17	8.5
Graduate	67	33.5
Post Graduate	93	46.5
Others	20	10.0
<b>Total</b>	<b>200</b>	<b>100.0</b>
Occupation		
	Frequency	Percent
Service	137	68.5
Business	6	3.0
Housewife	15	7.5
Retired	13	6.5
Student	29	14.5
<b>Total</b>	<b>200</b>	<b>100.0</b>
Monthly Family Income (In Indian Rupees)		
	Frequency	Percent
15000 or Below	10	5.0
15001-25000	20	10.0
25001-35000	18	9.0
35001-45000	32	16.0
45001-55000	46	23.0

55001 & Above	73	36.5
16.00	1	.5
<b>Total</b>	<b>200</b>	<b>100.0</b>

**Table 2.** Internet usage details

Frequency of Using Internet per Day		
	Frequency	Percent
Once A Day	85	42.5
2-3 Times A Day	61	30.5
More Than 3 Times A Day	54	27.0
<b>Total</b>	<b>200</b>	<b>100.0</b>
Total Amount Of Time Spend Per Online Session		
	Frequency	Percent
Less Than 30 Mns	24	12.0
30mns-1hr	96	48.0
More Than 1hr-2hrs	38	19.0
More Than 2 Hours	42	21.0
<b>Total</b>	<b>200</b>	<b>100.0</b>

**Table 3.** Online purchase details

Length of Time of using Internet for Purchase		
	Frequency	Percent
1-2 Years	67	33.5
3-5years	83	41.5
More Than 5 Years	50	25.0
<b>Total</b>	<b>200</b>	<b>100.0</b>
Total Amount of Money Spend (In Indian Rupees) on Online Purchasing Till Date		
	Frequency	Percent
Less Than 1000	1	.5
1001-5000	34	17.0
5001-10000	32	16.0
Above 10000	133	66.5
<b>Total</b>	<b>200</b>	<b>100.0</b>
Total Amount of Money Spend (In Indian Rupees) on Online Purchasing in the Last One Year		
	Frequency	Percent
Less Than 1000	19	9.5
1001-5000	81	40.5
5001-10000	39	19.5
Above 10000	61	30.5
<b>Total</b>	<b>200</b>	<b>100.0</b>

The top five items that had been purchased by the respondents are clothes, books, shoes, household items, and electronic products. The top three E-tailers from which the purchases had been made are Flipkart, Amazon, and Snap deal.

### 3.1 Factor Analysis

In this study factor analysis is implemented for model building. Factor analysis is applied to identify the unobserved latent variable/s from the correlation between each pairs of observed variables. The reliability statistic in the name of Cronbach's Alpha of the each latent factor is considered in this study is given in Table 4.

**Table 4.** Reliability statistic

Reliability Statistics	
Cronbach's Alpha	N of Items
0.843	18

As a prerequisite of the factor analysis the measures of the sampling adequacy should have a value atleast greater than 0.5<sup>32</sup>. In this study the said measure is 0.796. It is also observed that another prerequisite i.e. Barlett test statistics is less than 0.05 as exhibited in Table 5. Both of these indicate that variables considered are having sufficient inter-correlation. This satisfies the requirement of conducting orthogonal factor analysis.

**Table 5.** KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.796
Bartlett's Test of Sphericity	Approx. Chi-Square	1177.655
	df	153
	Sig.	.000

Table 6, reveals the communalities which indicate the amount of variance in each variable that has been accounted for by the extracted factors. All the eighteen variables have extracted moderately to the all latent factors.

Table 7, shows the total variance explained by all the factors. The percentage of total variance indicates how well the total factor solution accounts for what the variables

together represent. The total variance explained by all the factors is 61.9832% of the total variance.

**Table 6.** Communalities

Communalities		
	Initial	Extraction
Payment on the website can be done through internet banking	1.000	.697
Payment on the website can be done with debit card	1.000	.647
Online payment process involves easy steps	1.000	.681
Payment on the website can be done with credit card	1.000	.650
Online payment process secured	1.000	.648
Information about product feature as detailed as possible	1.000	.619
Website offers payment on delivery option	1.000	.555
The Website looks efficient and professional	1.000	.582
Privacy policy of the e-tailer stated in details on the website	1.000	.604
Information related to delivery of goods given in details on the website	1.000	.581
Information related to payment procedure given in details on the website	1.000	.565

Contact details of the e-tailer available on the website	1.000	.497
Ads on the website are not intrusive/disturbing	1.000	.594
Suggestions and reviews of other customers who have already purchased the product from the e-tailer available on the website	1.000	.685
Attractive layout & design of website generates interest	1.000	.506
Navigation through the website is easy	1.000	.605
Video showing the features of the product available on the website	1.000	.769
Video showing how to use the product available on the website	1.000	.673
Extraction Method: Principal Component Analysis.		

Table 8, shows the Rotated Component Matrix reveals the factor loadings for each variable. The intention of rotation is to curtail the number of dimensions or factors on which the investigating variables have high loadings. It has been noted that loadings of 0.55 are good<sup>33</sup>. In this study the criterion value has been selected as 0.55. Five factors or dimensions are obtained through factor analysis. They are - *easy, secured and multiple payment options (Factor\_1)*, *low risk oriented (Factor\_2)*, *transparency in transaction (Factor\_3)*, *attractive website design (Factor\_4)*, and *quasi reality in place of touch and feel (Factor\_5)*.

**Table 7.** Total variance explained

Total Variance Explained									
Component	Initial Eigen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.019	27.882	27.882	5.019	27.882	27.882	2.954	16.412	16.412
2	2.005	11.140	39.022	2.005	11.140	39.022	2.322	12.899	29.311
3	1.925	10.697	49.719	1.925	10.697	49.719	2.115	11.748	41.059
4	1.179	6.549	56.269	1.179	6.549	56.269	2.014	11.188	52.247
5	1.029	5.715	61.983	1.029	5.715	61.983	1.753	9.737	61.983
6	.953	5.295	67.278						
7	.806	4.478	71.756						
8	.682	3.791	75.547						
9	.644	3.580	79.127						
10	.596	3.312	82.439						
11	.544	3.020	85.459						

12	.501	2.784	88.243						
13	.446	2.479	90.723						
14	.398	2.213	92.936						
15	.381	2.117	95.053						
16	.373	2.073	97.126						
17	.263	1.458	98.584						
18	.255	1.416	100.000						
Extraction Method: Principal Component Analysis.									

**Table 8.** Rotated component matrix

Rotated Component Matrix <sup>a</sup>						
	Component					Reliability Statistics
	Easy, secured and multiple payment options	Low risk oriented	Transparency in transaction	Attractive web-site design	Quasi reality in place of touch and feel	Cronbach's Alpha
Payment on the website can be done through internet banking	0.788					0.825
Payment on the website can be done with debit card	0.766					
Online payment process involves easy steps	0.747					
Payment on the website can be done with credit card	0.726					
Online payment process secured	0.669					
Information about product feature as detailed as possible		0.758				0.675
Website offers payment on delivery option		0.731				
The Website looks efficient and professional		0.694				
Privacy policy of the e-tailer stated in details on the website			0.745			0.702
Information related to delivery of goods given in details on the website			0.645			
Information related to payment procedure given in details on the website			0.603			
Contact details of the E-tailer available on the website			0.599			



Ads on the website are not intrusive/disturbing				0.695		0.684
Suggestions and reviews of other customers who have already purchased the product from the E-tailer available on the website				0.680		
Attractive layout & design of website generates interest				0.679		
Navigation through the website is easy				0.609		
Video showing the features of the product available on the website					0.820	0.748
Video showing how to use the product available on the website					0.778	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.						

In this study the factor mean has also been computed by calculating mean of the variables loaded to the said factor. The purpose to calculate factor mean is essentially for determining the importance of the five factors or dimensions. As evident from Table 9, the range of factor means is very less which points to the stability of the factors. It is also observed that Factor importance percentage values are close to each other. Thus it can be stated that all the five factors are equally important.

In order to determine the stability of the factors or dimensions as obtained from the analysis, independent samples t-test is conducted between genders, various age groups and occupation groups corresponding to the five factors extracted. Through regression the factor scores are obtained by considering their item scores as independent variables. The means between two independent groups are compared through independent-samples t-test while the differences between variances are compared through Levene's test.

### 3.2 Independent Samples T-Test for Gender

The result expresses virtually very little difference between opinion of male and female in relation to *easy, secured and multiple payment options* and thus found probability value of equality of mean is very high (see table). Similar results were found for *low risk oriented, transparency in transaction, attractive website design, and quasi reality in place of touch and feel*.

### 3.3 Independent Samples T-Test for Various Age Groups

The result unfolds practically a less difference between the opinion of age groups 18-20 and 21-30 in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design and quasi reality in place of touch and feel* and thus identified probability value for counting chances of equality of mean is high.

The study also reveals equality of mean of the opinion between the age groups 18-20 and 31-40 in relation to *easy, secured and multiple payment options, low risk oriented transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

It is also quite understandable from the result that difference between the age groups 18-20 and 41-50 in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design, and quasi reality in place of touch and feel* is insignificant in statistical senses.

There is equality of mean as per statistical logic between the age groups 18-20 and above 50 in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, Efficient attractive website design and quasi reality in place of touch and feel*.

There is no statistically significant difference between the age groups 21-30 and 31-40 in relation to *easy secured and multiple payment options, low risk oriented transpar-*

**Table 9.** Factor means and factor importance in percentage

Factor mean and its importance{(Factor mean/Sum of factor means)*100}				
Factors	Items	Item mean	Factor Mean	Factor importance in %
Easy, secured and multiple payment options	Payment on the website can be done through internet banking	4.240	4.277	19.92
	Payment on the website can be done with debit card	4.265		
	Online payment process involves easy steps	4.335		
	Payment on the website can be done with credit card	4.150		
	Online payment process secured	4.395		
Low risk oriented	Information about product feature as detailed as possible	4.385	4.417	20.58
	Website offers payment on delivery option	4.560		
	The Website looks efficient and professional	4.305		
Transparency in transaction	Privacy policy of the E-tailer stated in details on the website	4.480	4.492	20.92
	Information related to delivery of goods given in details on the website	4.555		
	Information related to payment procedure given in details on the website	4.540		
	Contact details of the E-tailer available on the website	4.395		
Attractive website design	Contact details of the E-tailer available on the website	3.950	4.160	19.37
	Ads on the website are not intrusive/disturbing	4.155		
	Suggestions and reviews of other customers who have already purchased the product from the E-tailer available on the website	4.155		
	Attractive layout & design of website generates interest	4.380		
Quasi reality in place of touch and feel	Video showing the features of the product available on the website	4.145	4.125	19.21
	Video showing how to use the product available on the website	4.105		



ency in transaction, attractive website design and quasi reality in place of touch and feel.

It is also quite understandable from the result that between the age groups 21-30 and 41-50 in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

There is equality of mean in the probability value of statistics between the age groups 21-30 and above 50 in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

Results also imply equality of mean statistically of the opinion between the age groups 31-40 and 41-50 in relation to *easy, secured and multiple payment options, low risk oriented, attractive website design and quasi reality in place of touch and feel*.

There is statistically significant difference between the age groups 31-40 and 41-50 in relation to *transparency in transaction*.

Results indicate that equality of mean between the age groups 31-40 and above 50 in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

Also we found minimal difference that is insignificant according to logic of statistics, between the age groups 41-50 and above 50 in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

### 3.4 Independent Samples T-Test for Various Occupation Groups

Statistically equality of means across the service group (*those who are employed*) and business group (*those who have their own business*) were found in relation to variables *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

It is also observed that equality of mean between the service group and housewife group in relation to variables *easy, secured and multiple payment options, low risk oriented transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

There is statistically insignificant difference between the service group and retired group (*those who are retired*

*from services*) in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction and quasi reality in place of touch and feel*.

There is statistically significant (within 5%) difference between the service group and retired group in relation to *attractive website design*.

Results indicate mean equality between the service group and student group in relation to *easy, secured and multiple payment options, low risk oriented transparency in transaction and quasi reality in place of touch and feel*.

Statistically no mean-equality between the service group and student group in relation to *attractive website design* has been found.

Again there is statistically significant mean-equality between the business group and housewife group in relation to *easy secured and multiple payment options, low risk oriented transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

Results point out that significant mean difference between the business group and retired group in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction and quasi reality in place of touch and feel*.

There is statistically significant difference between the business group and retired group in relation to *attractive website design*.

No difference as per statistical logic has been observed between the business group and student group in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

No difference as per statistical rule has been observed between the housewife group and retired group in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction and quasi reality in place of touch and feel*.

No mean equality has been identified between the business group and retired group in relation to *attractive website design (within 5% level of significance)*.

Based on the results it can be stated that equality of mean as per statistical logic between the housewife group and student group in relation to *easy, secured and multiple payment options, low risk oriented, transparency in transaction, attractive website design and quasi reality in place of touch and feel*.

It has also observed no difference that is statistically significant, between the retired group and student group in relation to *easy, secured and multiple payment options,*

low risk oriented, transparency in transaction and quasi reality in place of touch and feel.

There is no mean equality between the business group and retired group in relation to *attractive website design* (within 5 % significant level).

### 3.5 Independent Samples T-Test for Frequency of using Internet per Day

Equality of mean between the user of internet once a day and user of internet 2-3 times a day in relation to opinion namely *easy, secured and multiple payment options, transparency in transaction, attractive website design and quasi reality in place of touch and feel* has been observed in the results.

No equality of mean has been found between the user of internet once a day and user of internet 2-3 times a day in relation to *low risk orientation* (5% level of significance).

Results also indicate that equality of mean between the user of internet once a day and user of internet more than 3 times a day in relation to variables namely *easy, secured and multiple payment options, transparency in transaction, low risk oriented, attractive website design and quasi reality in place of touch and feel*.

No difference which is statistically significant has been found between the user of internet 2-3 times a day and user of internet more than 3 times a day in relation to variables namely *easy, secured and multiple payment options, transparency in transaction, low risk oriented, attractive website design and quasi reality in place of touch and feel*.

### 3.6 Independent Samples T-Test for Length of Time (in years) of using Internet

There is no statistically significant difference between the use of internet for 1-2 years and use of internet for 3-5 years in relation to *easy, secured and multiple payment options* ( $p=0.354$ ;  $p>0.05$ ), *low risk oriented* ( $p=0.623$ ;  $p>0.05$ ), *attractive website design* ( $p=0.485$ ;  $p>0.05$ ), and *quasi reality in place of touch and feel* ( $p=0.790$ ;  $p>0.05$ ).

There is statistically significant difference between the use of internet for 1-2 years and use of internet for 3-5 years in relation to *transparency in transaction* ( $p=0.048$ ;  $p<0.05$ ).

There is no statistically significant difference between the use of internet for 1-2 years and use of internet for more than 5 years in relation to *easy, secured and multiple payment options* ( $p=0.110$ ;  $p>0.05$ ), *low risk oriented*

( $p=0.237$ ;  $p>0.05$ ), *attractive website design* ( $p=0.521$ ;  $p>0.05$ ) and *quasi reality in place of touch and feel* ( $p=0.193$ ;  $p>0.05$ ).

There is statistically significant difference between the use of internet for 1-2 years and use of internet for 3-5 years in relation to *transparency in transaction* ( $p=0.034$ ;  $p<0.05$ ).

There is no statistically significant difference between the use of internet for 3-5 years and use of internet for more than 5 years in relation to *easy, secured and multiple payment options* ( $p=0.441$ ;  $p>0.05$ ), *transparency in transaction* ( $p=0.826$ ;  $p>0.05$ ), *low risk oriented* ( $p=0.976$ ;  $p>0.05$ ), *attractive website design* ( $p=0.855$ ;  $p>0.05$ ), and *quasi reality in place of touch and feel* ( $p=0.221$ ;  $p>0.05$ ).

### 3.7 Independent Samples T-Test for Time Spend per Internet Session

There is no statistically significant difference between the use of internet for less than 30 minutes per session and use of internet for 30 minutes to 1 hour per session in relation to *easy, secured and multiple payment options* ( $p=0.967$ ;  $p>0.05$ ), *low risk oriented* ( $p=0.566$ ;  $p>0.05$ ), *attractive website design* ( $p=0.317$ ;  $p>0.05$ ), and *quasi reality in place of touch and feel* ( $p=0.423$ ;  $p>0.05$ ).

There is statistically significant difference between the use of internet for less than 30 minutes per session and use of internet for 30 minutes to 1 hour per session in relation to *transparency in transaction* ( $p=0.001$ ;  $p<0.05$ ).

There is no statistically significant difference between the use of internet for less than 30 minutes per session and use of internet for 1 hour to 2 hours per session in relation to *easy, secured and multiple payment options* ( $p=0.225$ ;  $p>0.05$ ), *transparency in transaction* ( $p=0.075$ ;  $p>0.05$ ), *low risk oriented* ( $p=0.849$ ;  $p>0.05$ ), and *attractive website design* ( $p=0.143$ ;  $p>0.05$ ).

There is statistically significant difference between the use of internet for less than 30 minutes per session and use of internet for 1 hour to 2 hours per session in relation to *quasi reality in place of touch and feel* ( $p=0.024$ ;  $p<0.05$ ).

There is no statistically significant difference between the use of internet for less than 30 minutes per session and use of internet more than 2 hours per session in relation to *easy, secured and multiple payment options* ( $p=0.338$ ;  $p>0.05$ ), *low risk oriented* ( $p=0.279$ ;  $p>0.05$ ), *attractive website design* ( $p=0.337$ ;  $p>0.05$ ), and *quasi reality in place of touch and feel* ( $p=0.396$ ;  $p>0.05$ ).

There is statistically significant difference between the use of internet for less than 30 minutes per session and use of internet for more than 2 hours per session in relation to *transparency in transaction* ( $p=0.021$ ;  $p<0.05$ ).

There is no statistically significant difference between the use of internet for 30 minutes to 1 hour per session and use of internet for more than 1 hour to 2 hours per session in relation to *easy, secured and multiple payment options* ( $p=0.218$ ;  $p>0.05$ ), *transparency in transaction* ( $p=0.475$ ;  $p>0.05$ ), *low risk oriented* ( $p=0.667$ ;  $p>0.05$ ), and *attractive website design* ( $p=0.572$ ;  $p>0.05$ ).

There is statistically significant difference between the use internet for 30 minutes to 1 hour per session and use of internet for more than 1 hour to 2 hours per session in relation to *quasi reality in place of touch and feel* ( $p=0.023$ ;  $p<0.05$ ).

There is no statistically significant difference between the use of internet for 30 minutes to 1 hour per session and use of internet for more than 2 hours per session in relation to *easy, secured and multiple payment options* ( $p=0.441$ ;  $p>0.05$ ), *transparency in transaction* ( $p=0.826$ ;  $p>0.05$ ), *low risk oriented* ( $p=0.976$ ;  $p>0.05$ ), *attractive website design* ( $p=0.855$ ;  $p>0.05$ ), and *quasi reality in place of touch and feel* ( $p=0.221$ ;  $p>0.05$ ).

There is no statistically significant difference between the use of internet for 1 hour to 2 hours per session and use of internet for more than 2 hours per session in relation to *easy, secured and multiple payment options* ( $p=0.259$ ;  $p>0.05$ ), *transparency in transaction* ( $p=0.494$ ;  $p>0.05$ ), *low risk oriented* ( $p=0.478$ ;  $p>0.05$ ), *attractive website design* ( $p=0.993$ ;  $p>0.05$ ), and *quasi reality in place of touch and feel* ( $p=0.789$ ;  $p>0.05$ ).

The above results reveal that in majority of the cases there are no statistically significant differences among gender, the various age groups, occupation groups, frequency of using internet per day, time spend per internet session, and time spends per internet session in relation with the five dimensions. Thus these results also support the stability of the scale to a great extent.

The present study also explored if there is any significant correlations between ~ i) *monthly family income and total amount spend on online purchase till date*, and ii) *monthly family income and total amount spend on online purchase in the last one year*. The results as depicted in Table 10, and 11, demonstrate the existence of significant correlations in the two cases as mentioned above. Based on the findings it can be stated that income plays a piv-

otal role in determining how much a consumer spends on online purchase.

**Table 10.** Correlations between monthly family income and total amount spend on online purchase till date

Correlations			
		Monthly Family Income	Total Amount Spend on Online Purchase till Date
Monthly Family Income	Pearson Correlation	1	.366**
	Sig. (2-tailed)		.000
	N	200	200
Total Amount Spend on Online Purchase till Date	Pearson Correlation	.366**	1
	Sig. (2-tailed)	.000	
	N	200	200
**. Correlation is significant at the 0.01 level (2-tailed).			

**Table 11.** Correlations between monthly family income and total amount spend on online purchase in the last one year

Correlations			
		Monthly Family Income	Total Amount Spend On Online Purchase In The Last Year
Monthly Family Income	Pearson Correlation	1	.388**
	Sig. (2-tailed)		.000
	N	200	200
Total Amount Spend on Online Purchase in the Last Year	Pearson Correlation	.388**	1
	Sig. (2-tailed)	.000	
	N	200	200
**. Correlation is significant at the 0.01 level (2-tailed).			

## 4. Conclusion

The present study empirically validates that consumers engage in online shopping when they are ensured of payment security, perceive the transactions as transparent, risk to be low, website is attractively designed, and existence of quasi reality in place of touch and feel. Some of the outcomes of this study like consumers' concern for payment security, website design, availability of extensive information leading to transparency in transactions are in accordance with the findings of some existing research<sup>10,12,16,17,21</sup>. These outcomes suggest that Indian consumers have certain similar concerns as consumers elsewhere in the globe in relation to purchase from online retailers. This indicates that the E-tailers operating in India need to consider these features while designing the retail websites to attract and induce consumers to make purchases from their websites. Having these dimensions in the E-tailing websites shall reduce consumers' perceived risk about the E-tailer and generate a sense of comfort in the consumers to do transactions with the E-tailer. This study also establishes that Indian consumers consider the website attributes, video showing the features of the product available on the website, and video showing how to use the product available on the website, which are loaded to the dimension quasi reality in place of touch and feel are at par with the experience of touch and feel in the traditional market place. This particular dimension has not been portrayed in previous studies. This suggests that online retailers should not only try to disseminate information through videos but also try to replicate the experience of touch and feel for the consumers as closely as possible.

The present study is an important contribution to the existing literature since there is an absence of a comprehensive study in Indian context to the best of the authors' knowledge. The authors have ventured in this domain to fulfil that gap in the existing literature. The scale developed in the present study could be studied in the future with a specific product or service category, and brands in India or at global level to generalize the findings.

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