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REVIEW ARTICLE

"EVALUATING RELATIONSHIPS AMONG PERCEIVED VALUE, SATISFACTION AND TRUST BASED CUSTOMER'S PERSPECTIVES OF ONLINE SHOPPING IN INDIA"

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"Evaluating Relationships among Perceived Value, Satisfaction and Trust Based Customer's Perspectives of Online Shopping in India"

M/s. Priyanka Singh[1] Prof. Yogesh Upadhyay[2]

[1]Ph.D. Research scholar, Faculty of Management, Jiwaji University, Gwalior

[2]Dean Faculty of Management, Jiwaji University, Gwalior

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INTRODUCTION

Customers are attracted to online shopping not only because of high levels of convenience, but also because of broader selections, competitive pricing, and greater access to information. Business organizations seek to offer online shopping not only because it is of much lower cost compared to bricks and mortar stores, but also because it offers access to a worldwide market, increases customer value, and builds sustainable capabilities.

Designers of online shops are concerned with the effects of information load. Information load is a product of the spatial and temporal arrangements of stimuli in the web store. Compared with conventional retail shopping, the information environment of virtual shopping is enhanced by providing additional product information such as comparative products and services, as well as various alternatives and attributes of each alternative, etc.

Two major dimensions of information load are complexity and novelty. Complexity refers to the number of different elements or features of a site, often the result of increased information diversity. Novelty involves the unexpected, suppressed, new, or unfamiliar aspects of the site. The novelty dimension may keep consumers exploring a shopping site, whereas the complexity dimension may induce impulse purchases.

A successful web store is not just a good looking website with dynamic technical features, listed in many search engines. In addition to disseminating information, it is also about building a relationship with customers and making money.

Businesses often attempt to adopt online shopping techniques without understanding them and/or without a sound business model. Often, businesses produce web stores that support the organizations' culture and brand name without satisfying consumer expectations. User-centered design is critical. Understanding the customer's wants and needs is essential. Living up to the company's promises gives customers a reason to come back and meeting their expectations gives them a reason to stay. It is important that the website communicates how much the company values its customers.

Customer needs and expectations are not the same for all customers. Age, gender, experience and culture are all important factors. For example, Japanese cultural norms may lead users there to feel privacy is especially critical on shopping sites and emotional involvement is highly important on financial pensions sites. Users with more online experience focus more on the variables that directly influence the task, while novice users focus on understanding the information.

To increase online purchases, businesses must use significant time and money to define, design, develop, test, implement, and maintain the web store. Truly said, it is easier to lose a customer than to gain one. Even a "top-rated" website will not succeed if the organization fails to practice common etiquette such as responding to e-mails in a timely fashion, notifying customers of problems, being honest, and being good stewards of the customers' data. Because it is so important to eliminate mistakes and be more appealing to online shoppers, many web shop designers study research on consumer expectations.

The most important factors determining whether customers return to a website are ease of use and the presence of user-friendly features. Usability testing is important for finding problems and improvements in a web site. Methods for evaluating usability include heuristic evaluation, cognitive walkthrough, and user testing. Each technique has its

own characteristics and emphasizes different aspects of the user experience.

METHODOLOGY:

The sample consisted of individuals that have used online retailing. The survey was carried out in four cities of Madhya Pradesh. Convenience sampling was used to select the respondents. Respondents were first screened to include only those who have used online retailing. Marketing of services research additionally underpins the utilization of convenience method of sampling (Davidow 2000; Spake et al 2003; Walsh and Mitchell 2005; Hocutt, Groves and Donavan 2006). The Data was collected from 1250 respondents who were students at Jiwaji University, Gwalior, LNIPE, Gwalior and IPS Group of Colleges, Gwalior. They were pursuing in various courses in the above institutions. The consent of each subject was taken before administering the questionnaire for the purpose of collection of data. This step includes characterizing the constructs that give premise to the determination and outlining of individual pointer items or indicators (Hair et al. 2006). The scale indicators can be operationalized in arrangement, for example, Likert scale or semantic differential scale. The indicators can be taken from the past researches or can develop new measures (Hair et al. 2006). Seven constructs were included in the model: perceived service quality: perceived product quality, perceived price fairness, perceived value, satisfaction, trust, and commitment. Constructs were measured using Likert scales ranging from "strongly disagree" (1) to "strongly agree" (7). To ensure content validity of the scales, items were selected to represent the concept about which generalizations were made. Therefore, items selected for the constructs were adapted from prior studies to ensure content validity. These scales, with their related literature, are presented in Table 1.

Table 1

Scale Items for Constructs

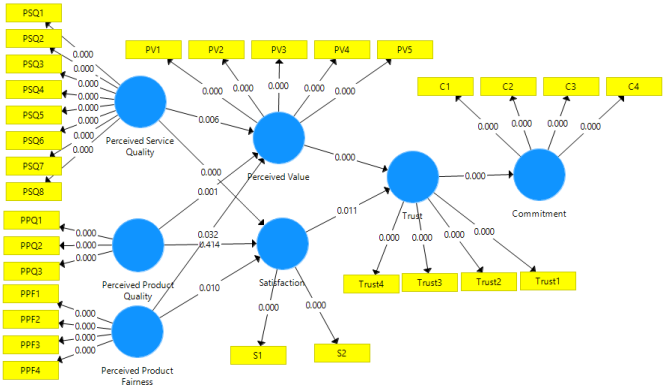
S. no.	Constructs	Related Studies
1.	Perceived Service Quality	Jarvenpaa & Todd (1997); Zeithaml et al (2000); Zhang Pvbutok (2005)
2.	Perceived Product Quality	Snoj, et al. (2004).; Petre, Minocha & Roberts (2006)
3.	Perceived Product Fairness	Athanassopoulos (2000)
4.	Perceived Value	Lassar et. al (1995); Mathwick et al (2002); Fanrel(2005)
5.	Satisfaction	Wang & Head (2007); Rai et al. (2002)
6.	Trust	Crosby et al (1990); Gefen (2000); Gefen et al. (2003)
7.	Commitment	Morgan and Hunt (1994); Geyskens et al. (1996); Wu & Cavusgil (2006)

Model particular alludes to the introductory theoretical model framed by the scientist on the premise of an audit of writing (Schumaker and Lomax 1996). Determination of the measurement model obliges putting forth formal and express expressions about the quantity of common factors variables; the quantity of indicator variables; the fluctuations and covariance among the shared components; the connections among observed variables and latent elements; the relationship among unique elements and indicator variables and the changes and covariance among the unique measures (Long 1983). The measurement model includes indicating which indicator variables characterize a construct and mirrors the degree to which the observed variables are defining the measure variables regarding validity and reliability (Schumacker and Lomax 1996). It characterizes relations between the indicator and their formed construct variables and gives connection between scores on a measuring instrument and the basic measures (Byrne 2001). A measurement model determines the placed relations of the observed variables to their hidden constructs and also with the other constructs (Anderson and Gerbing 1988). The improvement and detail of model obliges a few conditions which are examined beneath. Unobservable or latent variables should be measured by as many observed variables for high accuracy (Shah and Goldstein 2006). PLS SEM was used which does not pose any such type of constraint on data. PLS SEM method have several advantages over CB Based SEM which is include the normality of data distribution not assumed. Also, the data with nonnormal can be conducted in structural equation modeling since its application is performed via non parametric method. Besides, (items) with fewer than three indicators for each constructs could be carried out since the identification issues has been addressed (Mohamad 2013). Again there are no such constraints posed by PLS based SEM as compared to CB based SEM. This step involves designing an empirical study which will first test the measurement theory and if all goes well the same data will be used to test the structural relations. There are various issues which are to be dealt with before further analysis.

After defining the constructs, specifying the model and collecting data the next step is to assess whether the measurement model is valid (Hair et al. 2006). To test the validity of measurement model one should check for overall model fit and assessment of fit of the internal structure of the model. Not required in PLS SEM based studies as suggested by (Hair et.al, 2011) as they are prediction based and not model fit based. Every hidden/latent construct must now be tested for unidimensionality and reliability (Hair et al. 2006). The unidimesionality and reliability of structural model can be tested with individual item reliability, construct reliability and average variance extracted (Bagozzi and Yi 1988).

After the measurement model is proved reliable and valid, the next step involves specification of

the structural model to test the structural relations (Anderson and Gerbing 1988). It involves specification of a structural model by assigning relationships from one construct to another based on the proposed theoretical model and determining the appropriate unit of analysis (Hair et al. 2006). Following structural model was set for testing in the present study:



The final step involves the efforts to test validity of structural model and its corresponding hypothesized theoretical relationships (Hair et al. 2006). Testing hypothesized theoretical relationships involves examining the individual parameter estimates that represent each specific hypothesis. It also considers that the parameter estimates are statistically significant and are in the predicted direction (Hair et al. 2006).

A variance based structural equation modelling through Partial Least Square or PLS SEM is used instead of covariance based SEM. Smart PLS software is used as a software tool to apply variance based SEM. Several studies including Hair (2011) have argued that CB-SEM's statistical objective is to estimate a covariance matrix that matches that of the observed sample data as closely as possible. Hence, the focus is largely on achieving model "fit" assuming valid and reliable constructs. CB-SEM approaches largely ignore the prediction objective. Broadly speaking, empirical marketing research has two objectives: prediction and explanation. One can conclude that previous CB-SEM applications overlooked a major empirical marketing research objective, namely, prediction. The solution to this inherent weakness in previous structural modelling is the far less known PLS path modelling. In contrast to CB-SEM, PLS-SEM's overriding objective is predicting the dependent (endogenous) variables (constructs).

Mohamad, (2013) suggesst that compared to CB-SEM, PLS-SEM offers other advantages besides emphasizing prediction. Many empirical marketing researchers pay lip service to data characteristics such as heteroskedasticity and lack of normality, noting the robustness of the statistical techniques. In fact, most empirical marketing data is characterized by such inadequacies. In the present study the data was taken largely from college students and hence was skewed and it has been suggested by many authors that covariance based SEM assumes that data is normally distributed.

DATA ANALYSIS AND INTERPRETATION:

The Data was collected from 1250 respondents. Due to incomplete information 75 questionnaires were purged. The data from remaining 1175 respondents was analyzed. The demographic summary of sample is given in tables below:

Gender: The total sample consists of 630 (53.6%) males and 545 (46.4%) females.

Age: the Majority of sample are young. The total sample included 1087 (92.5%) respondents in the age group 18-24 years and 88 (7.5%) from the age group of 25-34 years.

Education: Out of the total sample, 57 (4.9%) respondents were educated upto Intermediate level, i.e. 976 (83.1%) were graduates, and 142 (12.1%) were post graduates.

Income: The sample consisted of 80 (6.9%) from Rs. 10 lakhs and above income bracket and others i.e. 38 (3.2%) were from Rs.5-10 lakhs, 87 (7.4%) were from Rs.2-5 lakhs, 229 (19.5%) were from Rs.90 thousand to 2lakhs and 740 (63%) were from Rs.90, 000 and below, income brackets respectively.

Table 1

Respondents' Demographic Characteristics

Age				
Age	Frequency	Percent	Valid Percent	Cumulative Percent
18-24	1087	92.5	92.5	92.5
25-34	88	7.5	7.5	100.0
Total	1175	100.0	100.0	

Gender				
	Frequency	Percent	Valid Percent	Cumulative Percent
Male	630	53.6	53.6	53.6
Female	545	46.4	46.4	100.0
Total	1175	100.0	100.0	

Education				
	Frequency	Percent	Valid Percent	Cumulative Percent
Upto Intermediate	57	4.9	4.9	4.9
Graduate	976	83.1	83.1	87.9
Post Graduate	142	12.1	12.1	100.0
Total	1175	100.0	100.0	

Income				
	Frequency	Percent	Valid Percent	Cumulative Percent
Above 10 lakhs	81	6.9	6.9	6.9
5-10 lakhs	38	3.2	3.2	10.1
2-5 lakhs	87	7.4	7.4	17.5
90000 to 2 lakhs	229	19.5	19.5	37.0
90000 and below	740	63.0	63.0	100.0
Total	1175	100.0	100.0	

Reliability is an assessment of the degree to which measures are free from errors and of consistency between multiple measurements of a variable (Peter 1979; Hair et al. 2003). In other words, we tend to get the same outcome when we repeat the measurement. To check the internal reliability of scale. The most common method which is being used is internal consistency (Hair et al. 1998). Methods to check external reliability are test-retest reliability, parallel forms reliability, inter-rater reliability and others. Internal consistency depicts the estimates of reliability based on the average correlation among items within a test (Nunnally and Bernstein1994). The internal consistency and quality of the scale is being checked by using the coefficient alpha (Churchill Jr. 1979; Nunnally and Bernstein 1994; Hayes 2008) and item-to-total correlation. Coefficient alpha measures the degree to which all the items in a construct are interrelated (Hayes 2008).

Coefficient alpha ranges between 0 and 1. A low alpha value or a value near zero indicates that scale items perform poorly in capturing the construct whereas a large alpha value or a value near one indicates that scale items correlates well with true scores (Churchill Jr. 1979). When the standardized item scores are summed to form a scale, then standardized alpha is considered appropriate to evaluate the internal consistency of the scale (Netemeyer, Bearden and Sharma 2003). The Table 2 below depicts that alpha values for all the constructs is high.

Table 2

Scale's Cronbach Alpha

Construct	Cronbach Alpha
Perceived Service Quality	0.88
Perceived Product Quality	0.77
Perceived Price Fairness	0.87
Perceived Value	0.83
Customer Satisfaction	0.81
Trust	0.86
Commitment	0.86

As suggested by Ruekert and Churchill Jr. (1984), first of all the correlation of each item with the total score of its hypothesized dimension was computed to know whether those items were actually related to their hypothesized dimension or not. If the item-to-total correlation of any item in a measure is low, it specifies that the item is ambiguous, difficult or it does not correspond to the domain or they are measuring some different things, thus producing error and affecting the reliability of the scale (Churchill Jr., Ford and Walker 1974; Nunnally and Bernstein 1994). Therefore, items with relatively low correlations with the dimension to which they are hypothesized were deleted (Churchill Jr., Ford and Walker 1974; Ruekret and Churchill 1984) and the items that correlated highly with the dimensions' total scores were considered as the best items for the test and were retained (Gerbing and Anderson 1988). Below Table depicts the correlation values of each item with their hypothesized constructs.

Table 3

Scale's Item to Total Correlation

Construct	Items	Correlation
Perceived Service Quality	I find it easy to find a needed product via online shopping	.675
	I find speediness of transaction in online shopping	.629
	I find delivering the booked product in online shopping speedy	.582
	I find delivering the booked product in online shopping accurate	.647
	I find understanding the booking process of online shopping easy	.639
	I find steps from searching to booking in online shopping convenient	.715
	I find entering and modifying the booking list in online shopping easy	.574
	I feel online transactions secure	.474
Perceived Product Quality	I feel products purchased online are superior	.680
	I find products purchased online are acceptable	.725
	I'm satisfied with products purchased online	.687
Perceived Price Fairness	Prices are acceptable to me in online shopping.	.715
	I'm satisfied with online shopping prices	.661
	Prices are rational in online shopping	.739
	Prices are fair in online shopping	.691
Perceived Value	I feel superiority of value received relative to money paid in online shopping	.630
	I find online shopping prices as economical	.669
	The product available in online buying are deemed worthy of purchase	.657
	Prices in online shopping are desirable	.625
	I get value in online shopping	.659
Satisfaction	Satisfaction with the experience when shopping online	.657
	I feel satisfaction with the purchasing process through the online shopping	.721
Trust	Online shopping is reliability when keeping promises and rules	.672
	Online shopping fulfills customer expectations	.710
	Online shopping is superior and reliable	.770
	Online shopping is trustworthy	.737
Commitment	I will continue to use online buying though friend recommendations are otherwise	.662
	I will continue purchase in the future online	.678
	I will recommend the online to others	.680
	I am satisfied with online shopping experience	.757

As seen above no item was found to have low correlation i.e. less than 0.5 so none of them was deleted.

Individual item reliability is the squared multiple correlation of the items that are affecting their latent variables (Bagozzi and Yi 1988; Lu, Lai and Cheng 2007). In measurement model, the variance in the items which is explained by the latent variable influencing them can be used to estimate the reliability of a particular item (Koufteros 1999). It refers to the R^2 value in the observed variables that are accounted for by the latent variables influencing them (Lu, Lai and Cheng 2007). The Values of R^2

above 0.5 proves the item reliability and less than 0.5 it proves that the variance explained by error terms will be more than item reliability (Hughes, Price and Marrs 1986; Bollen 1989).

The values of R^2 for the items leading to trust are depicted in Table 4 below. All the Items were equal to or above 0.5 and hence retained.

Table 4

Item Reliability

Items	Item Reliability (R Squared)
C1<-Commitment	0.71
C2<-Commitment	0.64
C3<-Commitment	0.76
C4<-Commitment	0.73
PPF1<-Perceived Product Fairness	0.76
PPF2<-Perceived Product Fairness	0.74
PPF3<-Perceived Product Fairness	0.65
PPF4<-Perceived Product Fairness	0.66
PPQ1<-Perceived Product Quality	0.67
PPQ2<-Perceived Product Quality	0.67
PPQ3<-Perceived Product Quality	0.58
PSQ1<-Perceived Service Quality	0.53
PSQ2<-Perceived Service Quality	0.58
PSQ3<-Perceived Service Quality	0.60
PSQ4<-Perceived Service Quality	0.47
PSQ5<-Perceived Service Quality	0.53
PSQ6<-Perceived Service Quality	0.63
PSQ7<-Perceived Service Quality	0.39
PSQ8<-Perceived Service Quality	0.38
PV1<-Perceived Value	0.67
PV2<-Perceived Value	0.58
PV3<-Perceived Value	0.73
PV4<-Perceived Value	0.72
PV5<-Perceived Value	0.57
S1<-Satisfaction	0.86
S2<-Satisfaction	0.89
Trust1<-Trust	0.63
Trust2<-Trust	0.59
Trust 3<-Trust	0.68

Cronbach Alpha offers minimum bounds of reliability. It works well when its assumptions are met viz., errors are not correlated and factor loadings are equal. Further, where within a scale in case of more than two factors exists, cronbach alpha tends to underestimate reliability. Composite reliability also means that a set of latent construct indicators are consistent in their measurement i.e. the degree to which indicators share in the measurement of their constructs (Koufteros 1999). For composite reliabilities, the values greater than 0.6 are acceptable (Bagozzi and Yi 1988). We can see from Tables 5 and 6 that the values of composite reliabilities for all the constructs measuring the model show evidence for the scale's reliability and composite reliability.

Table 5

Scale's Chronbach Alpla through Smart PLS

Construct	Cronbach Alpha	T Value	Sig.
Commitment	0.862	26.049	0.000
Perceived Product Fairness	0.859	27.579	0.000
Perceived Product Quality	0.72	10.491	0.000
Perceived Service Quality	0.862	27.527	0.000
Perceived Value	0.865	31.003	0.000
Satisfaction	0.852	26.135	0.000
Trust	0.811	16.537	0.000

Table 6

Scale's Composite Reliability

Construct	Composite Reliability	T Statistics	Sig.
Commitment	0.907	45.54	0.000
Perceived Product Fairness	0.905	47.347	0.000
Perceived Product Quality	0.843	25.469	0.000
Perceived Service Quality	0.893	40.561	0.000
Perceived Value	0.903	50.204	0.000
Satisfaction	0.931	65.581	0.000
Trust	0.876	31.191	0.000

Convergent validity and discriminate validity are two components of construct validity. Convergent validity attempts to examine whether two constructs that theoretically exhibit proximity also find support from the data collected. The present analysis attempted to examine convergent validity in two ways. First, factor loadings were used to assess the proximity of items and related constructs. A factor loading that ranges from 0.6 to 0.9 is considered as an evidence of convergent validity (Bagozzi and Yi, 1988). Second, in case of individual construct, average variance extracted by them was used as a barometer. An average variance extracted by them to the tune of 0.5 or more was considered as acceptable (Fornell and Larcker 1981).

The statistical significance has been assessed using t-values using bootstrapping procedure. Table for data analysis:

Table 7

Factor Loadings

Items	Loadings	T Statistics	Sig.
C1<-Commitment	0.843	26.263	0.000
C2<-Commitment	0.802	11.182	0.000
C3<-Commitment	0.87	24.774	0.000
C4<-Commitment	0.853	29.089	0.000
PPF1<-Perceived Product Fairness	0.87	25.877	0.000
PPF2<-Perceived Product Fairness	0.862	20.168	0.000
PPF3<-Perceived Product Fairness	0.809	17.975	0.000
PPF4<-Perceived Product Fairness	0.813	11.532	0.000
PPQ1<-Perceived Product Quality	0.819	14.096	0.000
PPQ2<-Perceived Product Quality	0.821	16.225	0.000
PPQ3<-Perceived Product Quality	0.759	8.873	0.000
PSQ1<-Perceived Service Quality	0.73	11.244	0.000
PSQ2<-Perceived Service Quality	0.759	15.317	0.000
PSQ3<-Perceived Service Quality	0.774	12.444	0.000
PSQ4<-Perceived Service Quality	0.689	8.726	0.000
PSQ5<-Perceived Service Quality	0.725	10.151	0.000
PSQ6<-Perceived Service Quality	0.795	11.428	0.000
PSQ7<-Perceived Service Quality	0.628	7.823	0.000
PSQ8<-Perceived Service Quality	0.617	5.961	0.000
PV1<-Perceived Value	0.817	18.232	0.000
PV2<-Perceived Value	0.762	13.993	0.000
PV3<-Perceived Value	0.853	24.73	0.000
PV4<-Perceived Value	0.85	26.196	0.000
PV5<-Perceived Value	0.752	14.456	0.000
S1<-Satisfaction	0.925	54.819	0.000
S2<-Satisfaction	0.942	85.415	0.000
Trust1<-Trust	0.791	15.216	0.000
Trust2<-Trust	0.767	11.028	0.000
Trust 3<-Trust	0.823	14.434	0.000

Table 8

Average Variance Extracted of Measures of Complainants

Construct	AVE	T Value	Sig.
Commitment	0.712	14.978	0.000
Perceived Product Fairness	0.706	15.636	0.000
Perceived Product Quality	0.645	11.706	0.000
Perceived Service Quality	0.52	9.502	0.000
Perceived Value	0.655	14.338	0.000
Satisfaction	0.871	35.286	0.000
Trust	0.644	11.164	0.000

Discriminant validity attempts to examine that theoretically the measures that are not expected to correlate, do not correlate empirically. In other words, it investigates the unique commitment of measures to a construct (Schwab 2005). Two approaches are available to assess discriminant validity viz., Fornell and Larcker (1981) vs. Henseler, Ringle and Sarstedt, (2015). assess the discriminant validity of the constructs the average variance extracted (AVE) of each construct is normally compared with their corresponding inter-construct squared correlations as recommended by the approach from Fornell and Larcker (1981) attempts to establish discriminant validity by comparing a construct's the average variance extracted (AVE) with their corresponding inter-construct squared correlations. Henseler, Ringle and Sarstedt, (2015) exhibited via Monte Carlo simulation the superiority of the approach that is based on the multitrait-multimethod matrix, to assess discriminant validity: the heterotrait-monotrait ratio of correlations (HTMT). If the HTMT value is below 0.90, discriminant validity has been established between two reflective constructs.

Table 9 - Heterotrait-Monotrait Ratio (HTMT)

Pair of Constructs	HTMT Ratio	T Value	Sig
Perceived Product Fairness-> Commitment	0.715	6.785	0.000
Perceived Product Quality-> Commitment	0.796	8.621	0.000
Perceived Product Quality->Perceived Product Fairness	0.798	7.684	0.000
Perceived Service Quality->Commitment	0.732	9.994	0.000
Perceived Service Quality->Perceived Product Fairness	0.618	5.23	0.000
Perceived Service Quality->Perceived Product Quality	0.947	14.355	0.000
Perceived Value->Commitment	0.89	16.077	0.000
Perceived Value->Perceived Product fairness	0.749	6.085	0.000
Perceived Value->Perceived Product Quality	0.902	15.893	0.000
Perceived Value-> Perceived Service Quality	0.799	13.858	0.000
Satisfaction->Commitment	0.835	8.888	0.000
Satisfaction->Perceived Product fairness	0.745	6.908	0.000
Satisfaction->Perceived Product Quality	0.874	8.101	0.000
Satisfaction-> Perceived Service Quality	0.871	15.914	0.000
Perceived Value->Perceived Product fairness	0.749	6.085	0.000
Perceived Value->Perceived Product Quality	0.902	15.893	0.000
Perceived Value->Perceived Service Quality	0.799	13.858	0.000
Satisfaction->Commitment	0.835	8.888	0.000
Satisfaction->Perceived Product fairness	0.745	6.908	0.000
Satisfaction->Perceived Product Quality	0.874	8.101	0.000
Satisfaction->Perceived Service Quality	0.871	15.914	0.000
Satisfaction->Perceived Value	0.847	13.156	0.000
Trust->Commitment	0.973	14.404	0.000
Trust->Perceived Product fairness	0.694	5.408	0.000
Trust->Perceived Product Quality	0.886	13.745	0.000
Trust->Perceived Service Quality	0.784	10.494	0.000
Trust->Perceived Value	0.929	14.658	0.000
Trust->Satisfaction	0.853	8.777	0.000

As suggested by Anderson and Gerbing (1988), after confirming the measurement model which provides an assessment of convergent and discriminant validity, the structural model was assessed to provide the nomological validity of the model. To test the hypothesized relations between the predictor and outcome variables, bootstrapping procedure of SmartPLS software was used. The PLS based method is said to be more suitable for marketing studies as we have discussed before.

All the direct and indirect effects were calculated with the help of Smart PLS software. The model with significance and t values of path coefficients are shown in figure 4 and 5. The values are also reported in different tables in the sections to come.

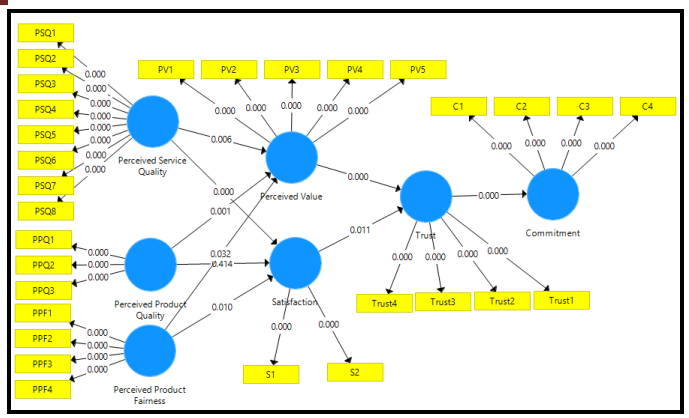


Figure 1 - Path Model with p Values

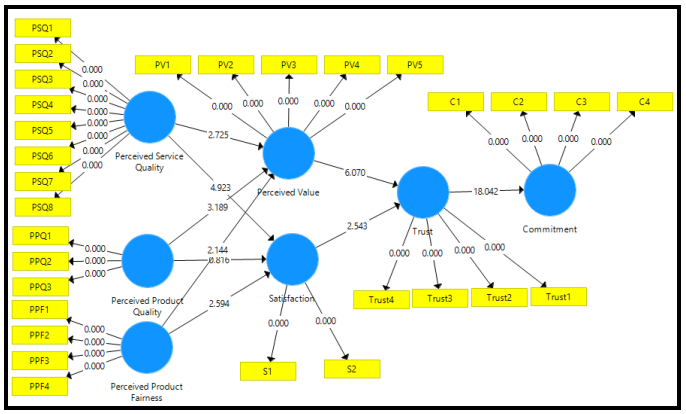


Figure 2 – Inner Model with t Values

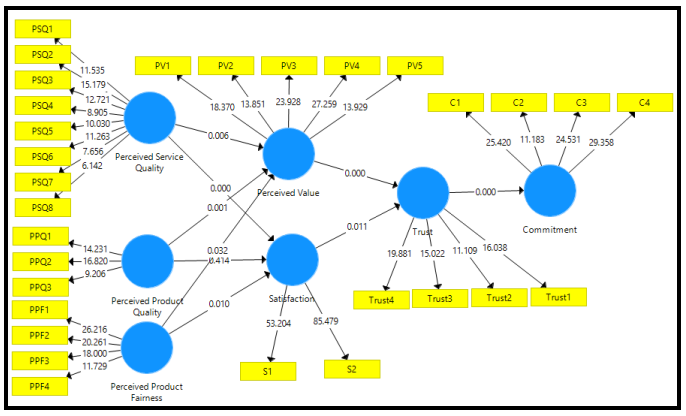


Figure 3 – Inner Model with t Values

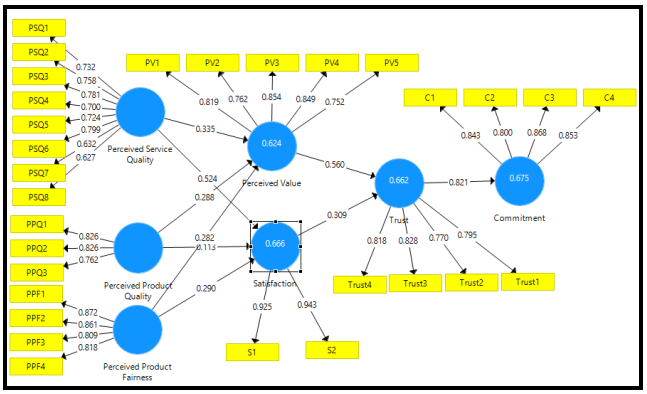


Figure 4 - Model with loadings, $R^2$and path coefficients

Table 10, 11 and 12 below respectively show the standardized parameter estimates of the proposed model, R square and adjusted R square values. The table 10 reports the direct effects. Refer to Figure 6 above

Table 10

Standardized Parameter Estimates of Hypothesized Relationships

Hypothesis	Relationship	Beta	SE	T Value	P Values	Result
H1	Perceived Product Fairness->Perceived Value	0.293	0.131	2.147	0.032*	Supported
H2	Perceived Product Fairness->Satisfaction	0.287	0.111	2.607	0.009*	Supported
H3	Perceived Product Quality->Perceived Value	0.291	0.091	3.171	0.002*	Supported
H4	Perceived Product Quality->Satisfaction	0.137	0.137	0.823	0.411	Not Supported
H5	Perceived Service Quality->Perceived Value	0.326	0.119	2.819	0.005*	Supported
H6	Perceived Service Quality->Satisfaction	0.508	0.104	5.06	0.000*	Supported
H7	Perceived Value->Trust	0.56	0.0091	6.121	0.000*	Supported
H8	Satisfaction->Trust	0.31	0.122	2.538	0.011*	Supported
H9	Trust->Commitment	0.827	0.045	18.17	0.000*	Supported

"t" denotes significance of p at< 0.05 level.

Table 11

R Square Values

	R Square	SE	T Value	P Values
Commitment	0.686	0.074	9.115	0.000
Perceived Value	0.648	0.067	9.288	0.000
Satisfaction	0.689	0.06	11.17	0.000
Trust	0.673	0.082	8.029	0.000

Table 12

Adjusted R Square Values

	R Square (Adjusted)	SE	T Value	P Values
Commitment	0.683	0.075	8.98	0.000
Perceived Value	0.637	0.069	8.841	0.000
Satisfaction	0.68	0.061	10.666	0.000
Trust	0.666	0.084	7.787	0.000

Hypothesis 1 states that perceived service quality positively affects perceived value. The results prove the relationship in the predicted direction with β = .293 (p < .05). Thus, H1 is not rejected.

Hypothesis 2 proposes that perceived product quality positively affects perceived value. The results suggested that perceived product quality positively and significantly affects perceived value with β = .287 (p < .05). Thus, H2 is not rejected.

Hypothesis 3 states that perceived product quality positively affects perceived value. The results proves the hypothesis significant and in predicted direction with β = .291 (p < .05) thus, not rejecting H3.

Hypothesis 4 suggests that perceived service quality positively affects satisfaction. The results proved that perceived service quality has positive influence on satisfaction with β = .137 (p > .05). Thus, H4 is not rejected.

Hypothesis 5 states that perceived product quality positively affects satisfaction. The results support that perceived product quality has positive influence on satisfaction with β = .326 (p < .05). Thus, H5 is not rejected.

Hypothesis 6 states that perceived price fairness positively affects satisfaction. The results prove the relationship in the predicted direction with β = .508 (p < .05). Thus, H6 is rejected.

Hypothesis 7 states that perceived value positively affects trust. The result show β = -.030 (p < .05), thus H7 is rejected.

Hypothesis 8 states that satisfaction positively affects trust. The result show β = .069 (p < .05), thus rejecting H8.

Hypothesis 9 states that trust positively affects commitment. The result show β = .827 (p < .05), thus rejecting H9.

Table 13

Summary of Hypothesis Testing Results

Relationship	Result
H1: Perceived service quality will positively affect perceived value.	**Not Rejected**
H2: Perceived product quality will positively affect perceived value.	**Not Rejected**
H3: Perceived price fairness will positively affect perceived value.	**Not Rejected**
H4: Perceived service quality will positively affect satisfaction.	**Rejected**
H5: Perceived product quality will positively affect satisfaction.	**Not Rejected**
H6: Perceived price fairness will positively affect satisfaction.	**Not Rejected**
H7: Perceived value will positively affect trust.	**Not Rejected**
H8: Satisfaction will positively affect trust.	**Not Rejected**
H9: Trust will positively affect commitment.	**Not Rejected**

SUMMARY & CONCLUSIONS:

The results presented in the preceding section indicate that the research model fits well. Collectively, the results both support and build on the extant literature. They also support the direct and indirect effects that perceived service quality, perceived product quality and perceived product fairness have on trust and commitment mediated by perceived value and satisfaction.

There has been a call for concurrently validating links between quality, trust, value and satisfaction (e.g., Mathwick et al., 2002; Szymanski & Hise, 2000; Zeithaml et al., 2002) in a framework. The present work's greatest strength is to offer an integrated framework that envelops all the referred variables. Our findings indicate that all the three viz., perceived service quality, perceived product quality and perceived product fairness(exception is perceived product quality's insignificant link with satisfaction), lead to perceived value and satisfaction (Baker, Parasuraman, Grewal, & Voss, 2002a; Bolton & Drew, 1991; Cronin, Brady, & Hult, 2000; Iacobucci, Ostrom, & Grayson, 1995; Kerin, Jain, & Howard, 1992; Parasuraman & Grewal, 2000; Spreng, Mackoy, & Spreng Robert D., 1996; Sweeney, Soutar, & Johnson, 1999). Value being more individualistic, is a higher level concept compared to quality (Zeithaml, 1998), involving a trade-off of give and get components. Cronin, Brady, & Hult, (2000) in their work suggest that the value of a service product is largely defined by perceptions of quality. Thus, service consumers seem to place

greater importance on the quality of a service than they do on the costs associated with its acquisition.

Further, study finds support in the work by Baker, Parasuraman, Grewal, & Voss (2002) who in their research examined empirically a comprehensive store patronage model. The paper tested empirically the effects of shopping experience costs (i.e., time/effort and psychic costs) on merchandise value and patronage intentions. The results also suggest that perceived monetary price, relative to merchandise quality, has a substantially stronger influence on perceived merchandise value. Sweeney, Soutar, & Johnson, (1999) examined an extended model of the antecedents and consequences of perceived value. The model was tested in a retail setting using a sample of consumers actively looking for an electrical appliance. Empirical results confirmed that not only do perceived product and service quality lead to perceived value for money in a service encounter but that these quality components reduce perceived risk. The perceived value for money was also found to be a significant mediator of perceived quality, price and risk and willingness-to-buy. The present outcome did not fall in line with the effort of Kerin, Jain, & Howard, (1992) who investigated the effect of price, product quality and shopping experience had on value perceptions of a retail store (rather than a product), concluding that the shopping experience had a greater effect on store value than did price or product quality. This variation in the outcome may be a result of selecting using value perceptions of retail store in place of a product. Delving further deep, though broadly in support of the present outcome, Bolton & Drew, (1991) argued that while price and service quality contributed to perceived service value, the components of quality (performance, expectation, and disconfirmation) were weighted differently when assessing value than when assessing quality. Further, the study also supports the link of perceived value and satisfaction with commitment, trust playing a role of mediating variable (Sirdeshmukh, Singh, & Sabol 2002). Sirdeshmukh, Singh, & Sabol (2002) argue in their study, conducted in retailing and airlines sectors, that the effect of trust on loyalty is conditional on its ability to enhance value. Without net increments in value, consumer trust is good to create but apparently does little good for the bottom line.

Secondly, our second contribution centres on our outcome that satisfaction and perceived value significantly impact commitment, mediated by trust. This relationship finds a strong support in extant literature (Anderson & Mittal, 2000; Chaudhuri & Holbrook, 2001; Eriksson & Vaghult, 2000; Lau & Lee, 1999; Richard L Oliver, 2015; Sirdeshmukh et al., 2002). Anderson & Mittal, 2000; Dabholkar et al., 2000; Oliver, 1997 Sirdeshmukh et al., (2002) in their revered work offer a strong support for the link between trust and loyalty. Lau & Lee, (1999) examined the link between consumers' trust in a brand and their brand loyalty and find a significant positive association. These insights are extended by Chaudhuri & Holbrook, (2001) who find strong evidence in support of a significant association between brand trust and both purchase and attitudinal loyalty.

The results of the current studies strongly support the view that trust is a key and central factor during exchange, after accounting for previously established antecedents, namely; perceived value, satisfaction, and service quality. In this sense, not only do these findings support a number of earlier studies that have argued that trust is central to exchange (e.g. Nooteboom, Berger, & Noorderhaven, 1997). The present work open vistas for future research in a significant number of directions. The proposed model can be tested under different conditions as has been suggested by Ostrom & Iacobucci, (1995) who found that price, quality, service friendliness, and service customization had a significant influence on perceived service value under different conditions. Further, the model tested can be further expanded to include the antecedents of service quality proposed by R L Oliver, (1993) in line with attempt made by Spreng, Mackoy, & Spreng Robert D., (1996). The proposed linkages in the model can be tested for the moderation effect of technology as initiated by Parasuraman & Grewal, (2000). Parasuraman & Grewal, (2000) developed a conceptual framework that integrates the quality-value-loyalty chain with the "pyramid model," which emphasizes the increasing importance of technology-customer, technology-employee, and technology-company linkages in serving customers. Given the advent and scope of online retailing, the present research can be taken forward in testing the proposed model in this sector. Results support the contentions of a number of theorists who argue that trust may be more important in online retail context (e.g. Rechheld & Schefter, 2000).

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