

# ANTECEDENTS OF E-SATISFACTION IN ONLINE RETAILING: AN EMPIRICAL STUDY

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## ABSTRACT

**Purpose:** the main purpose of the study was to examine the factors that affect customer satisfaction in online retailing in Indian context and identify the relative influence of factors. A theoretical model was derived in accordance with the literature and was tested empirically.

**Methodology/Approach:** the data was collected convenience through a structured questionnaire administered through both personal and online mode. Exploratory Factor Analysis was done to measure the latent constructs and establish the structure of factors. The proposed model and impact of each factor on e-satisfaction was tested through Multiple Linear Regression.

**Findings:** it was found that the antecedents of e-satisfaction can be measured with five underlying factors instead of proposed four factor model. The factors that were found to have significant impact on e-satisfaction are merchandising, product information, perceived value and financial transaction. Interestingly, convenience was found to have an insignificant impact. The strongest impact was that of merchandising followed by perceived value.

**Practical implications:** firstly the study contributes to the literature by establishing that scales developed to measure factors affecting satisfaction in e-retailing elsewhere can also employed in Indian context also. From e-marketing point of view it was brought forward that merchandising and perceived value are the most important factors that affect e-sat therefore marketers should strengthen their merchandising activities and enhance value perception of the customers.

**Research limitations:** use of non-probabilistic sampling technique due to non availability of sampling frame was the major limitation that restricts the generalization of the results.

**Keywords:** *E-Satisfaction, Antecedents of e-sat, Factors affecting e-sat., E-retailing.*

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## 1. STUDY CONTEXT

India is witnessing enormous growth in e-commerce and this growth is fuelled by e-retailing industry in recent times. According to PwC research overall e-commerce in India grew from 3.8 billion USD in 2009 to 16.4 USD billion in 2014 and this growth is mainly fuelled by phenomenal growth in e-retailing industry with CAGR of about 35% in the last five years that has grown from under half a billion USD industry to 3.5 billion USD market in the same period. This 700% growth rests on increasing internet penetration and changing lifestyles, primarily driven by books, electronics and apparel. The growth momentum of e-commerce in India will continue in short to medium term and the industry may witness a strong CAGR of about 50% expect IAMA and CRISIL. This trend will also be reflected in the online retailing in India and the share of e-retailing is all set to grow from 0.5% to about 1% in coming years (CRISIL research). This has become possible due to wide internet access through computers and various hand held devices like smart phones and tabs, IT literacy and acceptance of online channels by modern customers along with increased trust, benefits and services provided by online retailers. This growth is backed by the huge potential of the Indian markets and digitalization program of the government. The vast potential of Indian market is exploited by various homegrown startups like Flipkart and Snapdeal and at the same time it has attracted the global giants like Amazon and E-bay. The presence of such behemoths in the market induced a very tight competition in the market. Competition is one of most immediate challenges faced by e-retailing industry in India. And this competition is with not only the other online retailers but also with traditional physical stores. Siddiqui and Khan (2014) have described the completion in Indian context, take in Table I.

**Table I:** Competition in Indian Retailing Industry

	<b>Brick-n-mortar</b>	<b>E-tailers</b>
<b>National Competitors</b>	Big Bazaar, Reliance Retail, Pantaloon, Shoppers Stop, Spencer's, Birla More, Bharti's Easy day, Food Bazaar, Tata's Trent etc.	Flipkart, Snapdeal, Jabong, Yebhi, Infibeam, Junglee, IndiatimesShopping, Home Shop 18 etc.
<b>International Players</b>	All Single Brand Retailers of Apparels, Consumer Durables, Mobiles Computers etc. Like Marks & Spencer, Levi's, Nike Samsung, HP, Sony etc.	e-Bay, Amazon, Shopclues

The intense competition leads to decreased sales, low margins and low profits. Due to this it becomes imperative for E-Retailers to satisfy their customers to the extent of customer delight and maintain a strong customer relationship so that they can make loyal customers. Anderson, Fornell, & Lehmann (1994) showed that there is a strong positive relationship between customer satisfaction and firm profits. Bolton & Lemon (as cited in Yang & Peterson, 2004) stated that satisfied customers tend to have a higher usage of service and in contrast to the ones who are not satisfied. And according to Zeithaml et al. (1996) satisfied consumers are more likely to have greater repurchase intent and to recommend products and/or services to their acquaintances Winer (2001), while developing an extensive framework for customer relationship management in e-commerce space granted crucial

attention to customer satisfaction, recommended regular measurement and monitoring of customer satisfaction so that appropriate programs could be developed from time to time for delivering value that exceeds customer expectation. Bhattacharjee (2001) stated that customer centric approach is very important in e-commerce B2C space where completion is just a click away and emphasized customer satisfaction as a part this approach because satisfied customers may advertise via positive word-of-mouth which less expensive (than print or any mass media) and more efficient channel due to more trust associated with WoM. Therefore the vital role of satisfaction for better customer relationship and loyalty appears to remain intact even in E-commerce settings. This generates the need to identify the factors affecting customer satisfaction in e-retailing settings specifically in India. Though a lot of research is being done in this domain around the world but there is a dearth of studies in Indian context. This study tries to analyse the factors that affect customer satisfaction and loyalty in Indian context.

## 2. LITERATURE REVIEW AND THEORETICAL DEVELOPMENT

According to expectation-confirmation theory (ECT) customer satisfaction is defined as the affective reaction of the customer which is the result of disconfirmation between the customer expectations and actual experience of the customer (Oliver, 1981). This affective reaction is either positive (satisfaction), negative (dissatisfaction) or indifferent depending upon the results of disconfirmation process. This concept is extensively used for the purpose of defining and measuring satisfaction from tangible goods and intangible services. As retailing is conceived more of a service this concept of satisfaction is equally applicable to it. Satisfaction in conventional retailing is comprehensively discussed by Anderson, Fornell, & Lehmann 1994, Oliver 1981; Oliver 1997; Oliver 1999, Parasuraman, Zeithaml, & Berry 1988, Zeithaml, Berry, & Parasuraman 1996. Typically satisfaction is conceived to be a function of quality of services, purchasing process, pricing policy and most importantly service environment. According to Oliver (1981) satisfaction is the “**consumer's fulfillment response**” and hence according to him a satisfaction judgment, involves at the minimum two stimuli—an outcome and a comparison referent.” Improvising on this concept Szymanski and Hise (2000) conceptualized satisfaction in online context as **E-Satisfaction** (henceforth e-sat) as the consumers' judgment of their Internet retail experience as compared to their experiences with traditional retail stores. In e-retailing also this concept is not very different other than the symbol. They defined e-satisfaction in the online context as an overall construct reflecting the cumulative effect of a set of discrete experiences with the service provider as compared to traditional retail over a period of time.

Al though this definition is quite acceptable it takes into account comparison with traditional retailing. A more acceptable and widely used definition of e-sat is given by Anderson and Srinivasan (2003) as “the contentment of the customer with respect to his or her prior purchasing experience with a given e-commerce firm”. This concept exclusively takes into account the customer experience with an e-commerce firm hence is more practical to use for defining and measuring e-sat. This study accepts this definition adopts the instruments from Anderson and Srinivasan (2003) for measuring e-sat.

This concept of e-sat may also be employed further to identify the factors affecting it. Since e-sat is defined as the contentment of consumers with the prior purchasing experience therefore various characteristics or aspects of this purchasing environment that creates the experience may well be thought of factors that create e-sat. The purchase environment in context of services is developed by Bitner (1992) as Servicescape is made of complex mix of e-surroundings components consisting functional physical space, ambience and signs/symbols. These aspects affect the consumer behavior in traditional services similarly in e-services specifically in e-retailing the environment consists of

features like technological environment consisting of website and its different features (Kim et al. 2007). The features of website include quality of the website (e-service quality) ease of use that is convenience, merchandising - information about products and variety and offerings, product price/discounts and quality, financial transaction features like ease and security, customization and website aesthetics (Kim et al. 2011).

The service quality of any website or e-service quality (e-SQ) in itself is the most important determinant of e-sat and an entire separate domain of study in online retailing. Plethora of studies exists in this domain, Yoo and Donthu (2001) developed SITEQUAL model to describe the e-service quality, e-TailQ model was developed by Wolfinbarger and Gilly (2003) whereas Parasuraman et al. (2005) proposed E-SQ model. Since e-SQ is established and most accepted determinant of e-sat this study considers other factors consisting of convenience, product and price related factors, and financial transactions.

## 2.1 Convenience

Convenience is the ease that customers get while purchasing online and includes the overall convenience of time and place along with the ease in handling of the website to browse for product and information search or to make purchases. Szymanski and Hise (2000) in their seminal research proposed and established that convenience is the significant factor affecting e-sat. Similar results were also obtained by Burke (2002) in different geographical context. Srinivasan and Anderson (2002) also found a significant and positive relationship between convenience and e-sat. Evanschitzky et al. (2004) replicated the Szymanski and Hise (2000) model and significant effect of convenience. Yang et al. (2004) and Ribbink et al. (2004) emphasized that ease of use is an important component in creating e-sat. Kim et al. (2007) and (2011) also indicate direct positive effect of convenience and e-sat. Based on the literature the proposed hypothesis is:

H1: Perception of convenience has a significant and positive effect on e-satisfaction, all else being constant.

## 2.2 Merchandising

Merchandising includes product information regarding its features and functioning, product offerings and variety of the products being offered. This component specifically becomes important in online purchasing since there is no human interaction to satiate any query generated by the prospect. Any query and doubt should be self explanatory through the information present on the website. Similarly through a sufficiently large product assortment consumer get choices to select the product and chances of selling increases. Szymanski and Hise (2000), Burke (2002) and Evanschitzky et al. (2004) found significant impact of product information and assortment on e-sat. Schaupp and Bélanger (2005) also found that convenience and merchandising influence e-sat positively and significantly. Liu et al. (2008) also found out that assortment of products and information availability is important factors for long term consumer relationship. In context of e-servicescape, Kim et al. (2011) found to have a direct and positive impact of information and variety on customer satisfaction. Therefore the following hypothesis is being extended:

H2: Perception of merchandising has a significant and positive effect on e-satisfaction, all else being constant.

## 2.3 Perceived Value

Online shopping in India is still at nascent stage and customers generally seek value deals through online shopping. Customer perceived value is the total benefits that customers receive in relation to the total cost incurred. Total benefits include the utility, features and any other benefit that customers seek whereas the total cost involves both monetary and non monetary cost in form of money, time and efforts invested to purchase a product. In accessing the value received consumers involve themselves in a trade-off between prices and quality of the products. Hence proper and fair price - right price against the quality offered becomes important to attract and retain customers in Indian context. Burke (2002) stated that competitive prices attract the customer to shop online; Shwu-Ing (2003) argues that customers always compare prices before they buy online. Chang et al. (2011) found that perceived value has a significant impact on e-sat and it also has a significant moderating affect also. According to Carlson et al. (2015) the perceived value of online channel has a significant impact on satisfaction and loyalty intentions. This study conceives perceived value in relation to the prices charged against the quality offered. Accordingly the proposed hypothesis is:

H3: Perception of value has a significant and positive effect on e-satisfaction, all else being constant.

## 2.4 Financial Transactions

Online shopping involves digital gateways of payment through debit/credit cards, internet banking and some other options. For Indian customers online payment through use of their debit or credit cards is still very unsecure. Even in global context this insecurity is prevalent, according to Bruskin/Goldberg Research (as cited in Szymanski and Hise, 2000) 75% of the online shoppers are worried about the security of their credit cards. Most of the customers are apprehensive about disclosing their financial details online. For this reason a major chunk of the deliveries in India are on Cash on Delivery basis. According to Ernst and Young (2011) 30% of the online sales in India are on COD basis. The two aspects in the online financial transactions are the complexity involved in the payment and the security of the financial information. The first issue could be overcome by acquaintance with the online mode but the issue of security is always there and even prevalent round world. Szymanski and Hise (2000), Burke (2002) and Evanschitzky et al. (2004) found a significant and positive relationship between the perception of security or trust on the website and e-sat. Based on literature the hypothesis proposed is:

H4: Perception of website financial transaction environment has a significant and positive effect on e-satisfaction, all else being constant.

# 3. RESEARCH METHODOLOGY

## 3.1 Data Collection

A structured questionnaire was employed to collect the empirical data. It comprised two sections, first section comprised the questions regarding demographics of the consumers and the second section contained the instruments to measure different constructs of interest. The questionnaire was administered both personally and was also hosted on Google forms and the URL link was sent to the customers via e-mail or messaging. The e-mail or messages were sent conveniently and purposively to the customers engaged in online purchasing. Wherever possible, snowballing technique was also used to get the responses. More than 400 e-mails or messages were sent. Continuous follow up yielded 178

responses, consisting of 125 online and 53 offline responses. Out of these responses only 167 were found to be valid. Since factor analysis was to be employed to measure the constructs, recommendation of Nunnally (1978) was followed in having 10 participants per variable or instruments present in the analysis. A total of 15 instruments were used in the questionnaire therefore a sample size of 167 would stand sufficient to obtain valid results. The sample is also in accordance with Kass and Tinsley (1979) recommendation of having 5-10 respondents per instrument.

### **3.2 Measurement and Instruments**

The demographic details recorded in section I were measure either on the nominal scale (gender and employment status) or on ordinal scale that consists of age group, income group, education level. To measure the constructs of interest section II contained a 15-item Likert type scale. Consumer perception related to different constructs was recorded through a response on each item on a 5-point rating scale with responses ranging from '1 for strongly disagree to '5 for strongly agree. The mid-point '3' specified the state of indifference with the item through the response of 'neither disagree nor agree'.

Five construct were measured in the study: convenience, merchandising, value, financial security and e-satisfaction. Wherever possible, scale items were adapted from previously validated measures available in literature. Convenience was measured with the 3-item scale adopted from Szymanski and Hise (2000). The first two items represents convenience of time and place with respect to traditional stores while the third item was regarding ease of browsing. Merchandising was measured with 4-item scale adapted again from Szymanski and Hise (2000), the first two items represents the number and variety of the products offered and the last two items were about the information about the products. To measure perceived value 3-item scale was adopted and developed from Sweeney and Soutar (2001) and Carsol et al. (2015) on the basis of its definition representing price and quality of the products. Financial transaction was measured with 2-item scale also developed according to its definition, the two items represents ease of payments and financial security. E-satisfaction scale consisted of 3 items adapted from Anderson and Srinivasan (2003). Exploratory Factor Analysis was done to validate the constructs and to the reliability of the scales was assessed with Cronbach's alpha.

## **4. DATA ANALYSES AND RESULTS**

### **4.1 Descriptive Analysis - Sample Characteristics**

First of all a descriptive analysis was done to comprehend the demographic profile of the respondents. The collected sample represents a mix of various demographic factors such as age, gender, education and income level, take in Table II. The sample comprises 61.8% of male respondents which consistent to common norm of male dominance in online shopping (Flipkart, n.d.). With respect to age young generation from age 18 to 36 years forms majority of the sample with about 86% of the respondents. This is also in conformance with the market norm indicating that the largest purchasing age group is between 25-36 years. In terms of the education level majority were either PG or more totaling to about 80%. This is due to the reason that mostly the educated group with internet access is engaged in online shopping. The largest occupation group of the sample was salaried with 62% respondents, while only 7% were self employed and around 28% were either students or unemployed. The sample may be conceived a mix of employed and unemployed groups. As far as income of the respondents is concerned most of the categories are more or less equally represented with the largest two groups having income from 20k-30k (23%) or more than 40k (23.6%). Overall the sample is representative of typical online consumers.

**Table II:** Demographic Characteristic of Sample

No.	Variable	Categories	Freq.	Percent	No.	Variable	Categories	Freq.	Percent
1	Gender	Male	110	61.80	4	Occupation	Self employed	13	7.30
		Female	63	35.39			Salaried	111	62.36
		Missing	5	2.81			Student or Unemployed	51	28.65
			Missing	3			1.69		
2	Age Group	18-25	51	28.65	5	Income Group	no income	6	3.37
		26-30	62	34.83			<10000	21	11.80
		31-36	40	22.47			10-20k	26	14.61
		>36	22	12.36			20-30k	41	23.03
		Missing	3	1.69			30-40k	32	17.98
3	Education Level	UG	32	17.98			>40k	42	23.60
		PG	71	39.89			Missing	10	5.62
		Scholar/Phd	72	40.45					
		Missing	3	1.69					

## 4.2 Exploratory Factor Analysis

An exploratory factor analysis (henceforth EFA) was performed on the 15-item scale to access the validity of the priori defined constructs and get definite structure of the factors considered in the context of study. Prior to proceeding for EFA the reliability of the scale used was accessed with Cronbach's alpha measure both at total scale and individual constructs level. The overall alpha was found to be .876. The alpha for individual factors are .788 for convenience, .829 for merchandising, .852 for perceived value, .798 for financial security and 0.724 for e-satisfaction. The value of Cronbach's alpha lies between 0 to 1, with values from 0.7 - 0.8 considered to be acceptable for scale reliability (Field, 2009). All the values of Cronbach's alphas are greater than .7 and close to .8 that is the acceptable range for the scales to be reliable. Once the reliability of the scales was established Keiser-Meyer-Olkin (KMO - Test for sample size adequacy) and Bartlett's (Test of Sphericity) statistic were checked for the given sample, take in Table III.

**Table III:** KMO and Bartlett's Test

<b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b>		0.851
<b>Bartlett's Test of Sphericity</b>	Approx. Chi-Square	1176.187
	Df	105
	Sig.	0

The KMO test is conducted to assess the sample adequacy in terms of size. The value of KMO statistic lies between 0 and 1. Keiser (1974) recommends that a value greater than 0.5 is merely acceptable, from 0.5 - 0.7 it is mediocre, values between 0.7 - 0.8 as good where as values between 0.8 - 0.9 are great and value greater than 0.9 as superb. The KMO statistic was .851, this value can be considered great according to Keiser's (1974) recommendation to perform EFA. Bartlett's Test of Sphericity examines whether the population correlation matrix is an identity matrix (no correlation between variables). The null hypothesis is that there is no correlation between the variables in the population. Whereas the alternate hypothesis is that there exists a significant correlation between the variables in the population. The Bartlett's test was found to be significant with high Chi Square value of 1176.187 with 105 degrees of freedom and p-value .000, the significant value means null hypothesis is rejected in favor of alternate and it may be concluded that the population correlation matrix is not identity matrix hence there is sufficient correlation between the items to perform EFA. The significance of Bartlett's test necessitates assessing of high multicollinearity or singularity in the population. Field (2009) recommends that highly correlated variables create problems in determining the unique contribution of the variables on to the factors. To assess the multicollinearity in the sample determinant of the R-matrix is analyzed and its value should be more than .00001. This value for the given sample was found to be .001. This means that multicollinearity would not create any problem in performing EFA.

Once the reliability and basics for EFA were found satisfactory an initial round of EFA was done without any rotation and keeping the cut off eigenvalue of 1. This analysis yielded a three factor solution with 60.89% of the variability in the variables being explained. To interpret the factors better first varimax rotation was applied again giving a three factor solution with redistribution of the explained variance. The results of the varimax rotation are satisfactory only if obtained transformation matrix is symmetric (all off-diagonal elements are same). It was found that component transformation matrix was not a symmetric one, implying that the orthogonal rotation is not appropriate. Since the factors considered in the study are part of the e-environment they may correlate among themselves. Therefore oblique rotation was used with Direct Oblimin as recommended by (Field, 2009). At the outset Keiser (1960) criteria of eigenvalue more than 1 was used to extract the factors that yielded a three factor solution that was unsatisfactory according to the study.

Keiser's criterion is acceptable when there is either less than 30 variables and all extracted communalities are all greater than 0.7 or in the case where the sample size exceeds 250 and the average communality after extraction is more than 0.6. The communalities after extraction for the sample collected are not greater than 0.7 and average communality was 0.609. In this case both the above mentioned conditions are not met, take in appendices. The criterion of scree plot was also not very much informative as there was no sharp point of inflexion. Since the factors did not converge satisfactorily, Jolliffe's (1972, 1986) criterion of retaining all factors having eigenvalues greater than 0.7 was used. According to Jolliffe (1972, 1986) all factors having eigenvalues greater than 0.7 should be retained since Kaiser's criterion is very strict and may miss out on certain important factors. When Jolliffe's criterion was used with Direct Oblimin method of Oblique rotation, SPSS extracted six factors explaining 77.49% of variance in the model, take in Table IV.

**Table IV: Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.936	39.572	39.572	5.936	39.572	39.572
2	2.149	14.326	53.898	2.149	14.326	53.898
3	1.050	6.998	60.896	1.050	6.998	60.896
4	.921	6.137	67.033	.921	6.137	67.033
5	.821	5.470	72.503	.821	5.470	72.503
6	.748	4.988	77.491	.748	4.988	77.491
7	.613	4.085	81.576			
...	...	...	...			
...	...	...	...			
...	...	...	...			
15	.182	1.215	100.000			

Although five factors model was proposed as a priori, EFA with oblique rotation and Joliffe's criterion for extraction of factors with interpreting factors loadings of more than .512 (in sample size of below 200 - Steven, 1992), suggested a six factors model as more appropriate, take in Table IV and V.

Hence six factors solution was accepted for the given sample since the variance explained was almost 78% which is quite considerable and all the extracted communalities were close to 0.7 with an average of .775 signifying explanation of considerable amount of variance in the variables. The factor loadings of different variables on to six extracted factors are shown, take in Table V. It is evident from EFA that merchandising should be measured by two separate factors instead of one factor. And out of three instruments used to measure e-sat only two loaded meaningfully to the construct while the third one cross loaded on to a wrong construct with loading of .432. But when the Steven's cut off of .512 was applied it did not load to any factor, leading to its drop in the analysis.

**Table V: Factor Loadings - Rotated Component Pattern Matrix**

Variables	Component/Factors					
	1 Per. Value	2 Conv.	3 Mer. -1	4 Fin. Tran.	5 e-Sat	6 Mer. -2
Reasonable prices w.r.t. quality	.928					
Value for money	.846					
Better value than competitors	.802					
Ease of browsing		.862				
Convenience		.837				
Convenience of time		.753				
Variety of offerings			-.871			
Quality of information			-.860			
Number of offerings			-.542			
Financial Security				-.924		
Ease of Payment				-.791		
eSatisfaction3					.939	
eSatisfaction2					.518	
eSatisfaction1					-	
Quantity of information						.760
<i>Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization. Rotation converged in 16 iterations.</i>						

### 4.3 Hypotheses Testing - Results of MLR

Multiple Linear Regression was used to test the hypotheses regarding the impact of convenience, merchandising-1, merchandising-2, perceived value and financial transaction on e-satisfaction proposed in the study. The proposed regression model is as follows:

E-satisfaction =  $b_0 + b_1 \cdot \text{Convenience} + b_2 \cdot \text{Merchandising-1} + b_3 \cdot \text{Merchandising-2} + b_4 \cdot \text{Perceived Value} + b_5 \cdot \text{Financial Transaction} + \epsilon$ .

Where  $b_0$  and  $b_1, b_2, b_3, b_4$  and  $b_5$  are the intercept and regression coefficient associated with each variable respectively, and  $\epsilon$  is the error term associated with the model. All five independent variables were entered into the regression analyses using enter method with e-satisfaction as dependent variable in SPSS 20, take in Table VI.

The F statistic obtained is 25.895 and it was found to be significant at .000 p-value. Hence overall the proposed model is a good fit of data indicating significant impact of independent variables on dependent variable. The value of R (multiple correlation coefficient) was .668 where as the R<sup>2</sup> for the model was .446, this means that 44.6% variability in e-satisfaction can be explained by five independent predictors in the model. The adjusted R<sup>2</sup> is 42.9% which is not very different from R<sup>2</sup>. It implies that if the model is estimated from population there would be small reduction of only about 2.3% of variance explained in the outcome variable. The standardized beta coefficients, t value and significance associated with each beta are also shown in table. The analyses brought forward some interesting results. It was found that out of five factors analyzed only four factors were found to have significant impact. The impact of convenience was not found to be significant in this study.

The largest standardized coefficients was that of merchandising-1 (.368) followed by perceived value (.366), merchandising-2 (- 0.255) and financial transaction (.217). It implies that merchandising-1 (variety and quality of information) has the strongest influence on e-sat whereas perceived value (price in relation to quality) has the second strongest influence on e-sat though its value is very close to merchandising-1. Another interesting finding suggest negative influence of merchandising-2 (quantity of information) on e-sat.

**Table VI: Regression Coefficients, ANOVA and Model Summary**

Variables	Proposed Effect	Standardized Beta	t	Sig.
(Constant)		2.380	4.120	.000
Perceived Value	+	.366	3.834	.000
Merchandising1	+	.368	4.623	.000
Convenience	+	-.088	-1.399	.164
Merchandising2	+	-.255	-3.026	.003
Perceived Value	+	.217	2.589	.011
<b>ANOVA - F<sub>model</sub> (p-value)</b>		<b>25.895 (.000)</b>		
<b>R, R<sup>2</sup> (Adj. R<sup>2</sup>)</b>		<b>.668, .446 (.429)</b>		

## 5. DISCUSSIONS AND IMPLICATIONS

This study intends to identify and examine the antecedents of e-satisfaction in e-retailing settings in Indian context. The study draws its basis on the previous studies like Szymanski and Hise (2000), Burke (2002), Srinivasan and Anderson (2002), Evanschitzky et al. (2004), Yang et al. (2004), Ribbink et al. (2004), Kim et al. (2007) and (2011). The study examined the impact of e-retail environment characteristics like convenience, merchandising, financial security and that of perceived value on e-satisfaction in accordance to the proper theory derived from literature review. Towards the goal this study finds three important findings. Firstly, the study is successful in converging the factors that affect e-satisfaction in accordance to the empirical findings of the earlier studies in this domain. Convenience can be measured with 3-item scale and financial transaction with 2-item scale. The merchandising split into two factors with 3-items and 1-item scale. From literature point of view this study contributes that in Indian context the characteristics of e-environment like convenience, merchandising and financial transaction can be measured with the scale developed earlier in different context.

Secondly it provides the empirical evidence that the four factors including merchandising, product information, financial security and perceived value have significant impact on e-satisfaction. One of the important findings of the study is that the impact of convenience that includes convenience of time and place along with ease of browsing was found to be insignificant. This finding is contrary to several studies like Szymanski and Hise (2000), Burke (2002), Srinivasan and Anderson (2002), Evanschitzky et al. (2004), Yang et al. (2004) and Ribbink et al. (2004) and Kim et al. (2007) and (2011). This may be

due to the fact that Indian customers give less importance to the convenience while purchasing online. Nevertheless this finding needs to be confirmed in different geographical contexts before drawing any further conclusions. This study supports the findings of studies that found significant impact of merchandising, product information, financial security and perceived value. Another important finding of the study is that the perceived value has a strong influence on e-satisfaction especially in Indian context. This is in accordance with Chang et al. (2011) and Carlson et al (2015). Perceived value of online purchasing becomes a very important factor in Indian context since India is still an immature e-market primarily on three accounts, first Indian customers are still apprehensive about the quality or originality and delivery of the products, secondly the insecurity about the online payments and finally Indian e-retail market is still at the expected-product level competition. Attributed to these reasons perceived value becomes an important factor to look upon from both academic and professional marketing point of view.

As predicted, merchandising had a significant impact on e-satisfaction. Originally it was conceived as single factor but EFA suggested two factors model is more appropriate as far as the consumer underlying mental model is concerned. The significance of merchandising-1 supports the most basic rule of making merchandising a tool to differentiate from the competition. Therefore marketers should pay attention to the variety, assortment and quality of information present on the website and it should be presented in innovative ways so as to avoid cluttering. Although merchandising-2 (quantity of information) has significant impact but its influence was found to be in reverse direction. That is to say that as the quantity of information increases the satisfaction level decreases. This is an interesting finding and may be due to the fact that customers don't like having excessive information which may perplex them. Therefore an optimum amount of quality information would suffice the need. Financial transaction (the ease of payments and financial security) was also found to be a significant predictor of e-sat. Since Indian consumers are still apprehensive of online payments the e-retail portals ought to devise payment procedures that are easy for the customers and an environment of trust shall be created so that customers feel secure in divulging their personal financial information to perform online transactions. Innovative payments options where customers are not required to divulge their sensitive information like credit/debit card numbers or secret pin may be employed to provide a feeling of security among customers. To this end payment options like e-wallets and swipe on delivery or other innovative and secure options may be developed and included.

## **6. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH**

One of the major limitations of the study is the use of convenience sampling leading to the limited validity of conclusions. Owing to the use of non probabilistic sampling technique the results are only valid for a specific geographic region where the study is conducted. The reason for use of non probabilistic technique is that the sampling frame is not easily and freely available in Indian context and not to mention the financial limitations of the researcher. The findings may not be valid and could not be generalized for customers pan India. Further limitation of the study was that only four factors were included in the model, other factors like trust, service quality, site design etc. are among the major predictors of e-sat. Further researches might be done in various Indian geographical locations to validate the findings of this study. Help from industry shall be sought for providing a proper sampling frame so that Random Probabilistic Sampling technique may be applied to generalize the findings to a wide cluster of consumers. Another important aspect is that of relationship between satisfaction and customer loyalty, which ought to be studied along with the interaction of different environmental characteristics.

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