

## A Study to Determine the Influencing Factors of Customer Satisfaction of the E-Tailing Companies in Tirunelveli District

**R. Linnet**, Reg No 21111241012001, Research Scholar, Department of Commerce, Sarah Tucker College, Tirunelveli-627 007,  
Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627 012  
**Lt. Dr. E. Angel Saral Rose**, Assistant Professor, Department of Commerce, Sarah Tucker College, Tirunelveli-627 007,  
Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627 012

### Abstract

*Customer satisfaction is defined as a measurement that determines how happy customers are with a company's products, services, and capabilities. Customer satisfaction information, including surveys and ratings, can help a company determine how to improve or change its products and services. As a result customer satisfaction has become very important for each and every e-tailing company.*

Keywords : E-tailing, customer, satisfaction

### Introduction

E-tailing, also known as electronic retailing or e-commerce refers to the sale of goods and services through online platforms. It involves the process of conducting retail transactions over the internet, allowing consumers to purchase products directly from the comfort of their own homes. The concept of e-tailing emerged with the rise of the internet in the late 20th century. As technology advanced, businesses saw the potential of online platforms as a means to reach a larger audience and offer convenience to customers. With the advent of secure payment gateways and advanced logistics systems, e-tailing has become an integral part of the retail industry.

### Objectives of the study

1. To analyze customer satisfaction towards e-tailing and problems faced by the customers in e-tailing

## Scope of the study

The primary focus of the study is on the customer satisfaction towards e-tailing and problems faced by the customers in e-tailing. Customer satisfaction plays a major role in attracting customers towards e-tailing.

## Research Methodology

In the course of undertaking, the author would search relevant information on the customer satisfaction and problems faced by the customer in e-tailing. Primary data is collected through a survey which will be distributed to respondents residing in Tirunelveli. Secondary data on the other hand, would be sources from journals, articles, websites and books related to E-tailing and the successful E-tailing websites.

## Sampling Procedure

A sample of 100 respondents were selected randomly in Tirunelveli District. A simple random sampling method is used for choosing the respondents. The target audience was the existing e-tailing customers who have faced positive impact and negative impact on customer satisfaction.

## Review of Literature

Jennifer H. Gao (2019) investigated factors that might influence customer satisfaction towards e-tailing. A theoretical framework was established to explain causal relationships between perceived benefits, perceived risks, trust in e-tailing and customer satisfaction. Data was collected from 402 respondents who had experience in e-tailing in mainland China. Correlations and regression analyses were done to reveal that three factors of perceived benefits (i.e., shopping convenience, product selection, and hedonic enjoyment), product risk, and trust in e-tailing were significant predictors of customer satisfaction. Implications for e-marketers were discussed, and limitations and future research were presented.

Khedkar, Savitribai Phule and Patil (2015) attempted to find out the outlook of customers towards e-tailing and the factors that affect online purchases. The research adopted a survey method to understand customer perception towards e-tailing and the tool used for the survey is a

questionnaire. The survey was done across students as well as working professional groups to measure and understand their perception of e-tailing. The findings of this research will highlight the key issues that will primarily drive customer satisfaction. The study revealed that factors like website design, payment security; Ease of shopping, accurate product information; price and delivery services have an optimistic impact on purchaser satisfaction.

### Analysis and Interpretation of Data

Data analysis is an invariable tool in any research. The data collected from the respondents is examined critically to arrive at a conclusion. The data analysis process is as follows defining the question, collecting the data, analyzing the data and arriving at a conclusion.

### Determining the Influencing Factors of Customer Satisfaction

Initially, the study aimed to compose the influencing factors from the 20 variables related to the marketing activities of e-tailing companies which helps to assess customer satisfaction towards e-tailing for further analysis. To determine various factors from the 20 variables, factor analysis has been used. Before applying factor analysis, the sampling adequacy was checked through the Kaiser-Meyer-Olkin test (KMO) and Barlett test of sphericity. Kaiser – Meyer – Olkin (KMO) measure of Sampling Adequacy is a measure of whether or not the distribution of value is adequate for conducting Factor Analysis. As per the KMO measure, a measure of  $>0.9$  is marvellous,  $>0.8$  is meritorious,  $> 0.7$  is middling,  $>0.6$  is mediocre,  $>0.5$  is miserable and  $<0.5$  is unacceptable. A significance value  $<0.05$  indicates that the data do not produce an identity matrix and are thus appropriately multivariate normal and acceptable for Factor Analysis (George and Mallery, 2003). The details of sampling adequacy and the Sphericity of the data collected from the respondents are shown in table 4.13.

**Table 1 KMO and Bartlett's Test: Influencing Factors for Customer Satisfaction**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.697
Bartlett's Test of Sphericity	Approx. Chi-Square	2483.052
	df	190
	Sig.	.000**

\*\*Significant at .05 level of confidence

Before using the factor analysis, several initial tests were conducted to determine the suitability of our data for such an analysis. Here Bartlett's test of sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy (George and Mallery, 2003) were used. Both of these tests can be used to determine the factorability of the matrix as a whole. If Bartlett's test of sphericity is large and significant, and if the Kaiser- Meyer-Olkin measure is greater than .5, then factorability is assumed. The KMO statistic of 0.697 is mediocre (greater than 0.60). And a large value of Bartlett's test of sphericity (2483.052 and  $df = 190$ ) at a high level of significance ( $p < .05$ ) indicated that a principal component analysis would be useful. Hence Factor analysis was considered an appropriate technique for further analysis of the data.

The maximum likelihood estimation procedure was used to extract the factors from the variable data. The principal component analysis was employed primarily for extracting factors that have Eigenvalues greater than one as per Kaiser's rule. Eigenvalues are the variances of the factors which were fixed as greater than one for the study. Using this rule, seven factors were composed by combining the relevant variables and they are shown in table 1.2.

**Table 1.2**

**Principal Component Analysis (PCA) for Influencing Factors for Customer Satisfaction**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.119	20.596	20.596	4.119	20.596	20.596
2	1.961	9.806	30.402	1.961	9.806	30.402
3	1.887	9.436	39.838	1.887	9.436	39.838
4	1.644	8.218	48.056	1.644	8.218	48.056
5	1.298	6.489	54.545	1.298	6.489	54.545
6	1.220	6.098	60.644	1.220	6.098	60.644
7	1.088	5.440	66.083	1.088	5.440	66.083
8	.980	4.900	70.984			
9	.855	4.273	75.257			
10	.756	3.779	79.036			
11	.705	3.524	82.559			

12	.624	3.120	85.680			
13	.563	2.813	88.493			
14	.492	2.461	90.954			
15	.449	2.245	93.199			
16	.382	1.911	95.110			
17	.318	1.589	96.699			
18	.298	1.489	98.189			
19	.197	.985	99.174			
20	.165	.826	100.000			

Source: Primary data

Table 1.2 shows that seven factors, extracted by the Principal Component Analysis method accounting for 66.083 per cent of the variance emerged until the Eigenvalue of unity. Principal Component Analysis (PCA) revealed seven components that have Eigenvalues greater than one and which explained 20.596%, 9.806%, 9.436%, 8.218%, 6.489%, 6.098% and 5.440% of the total variance, respectively. These results indicate that the factor analysis solution was robust and 20 variables have been reduced to a set of only seven underlying factors. The incremental gains by adding factors with an Eigenvalue lower than unity are negligible and can be ignored for further analysis.

Further, the factors were rotated using Varimax rotation which is a popular method of orthogonal rotation. When the original 20 variables were analysed by the principal component factor analysis with varimax rotation a seven-factor emerged. The results of the rotated factor loadings are shown in the following Table 1.3.

**Table 1.3**

**Varimax Orthogonal Rotated Component Matrix: Determining the Influencing Factors for Customer Satisfaction**

Variables	Component						
	1	2	3	4	5	6	7
Afford round-the-clock staff	.788	.033	.070	.113	-.011	.076	-.034
After sales services	.696	-.147	.004	.145	.157	.083	.263

Customer Interactions	.658	.347	.143	-.126	-.014	.152	-.100
Quality of products	.140	.770	.032	-.109	.160	-.032	.166
Design and package	-.003	.687	.384	.133	.236	.043	-.018
Display of product images	-.022	.582	-.174	.461	.082	.068	.164
Reliability of web advertisements	.097	-.033	.777	.042	-.150	-.033	.056
Communication System	-.112	.074	.617	.153	.356	-.237	-.005
Easy accessibility of information	.036	.156	.523	-.085	.487	.268	.215
24 x 7 Customer Service	.337	.194	.511	.059	.222	.175	-.032
Anniversary Wishes with Offering	.158	.094	-.007	.801	-.041	.006	-.081
Offering Discounts and Freebies	.012	-.017	.448	.684	.159	.026	.014
Delivery process	.014	-.489	.021	.563	.324	.122	.148
Simplicity of online transactions	-.016	.115	.102	.067	.763	.084	.001
Using Local Language	.299	.292	.214	.090	.599	.015	-.408
Chatbots Facilities	.451	.044	-.264	.175	.524	-.271	.102
Security in payment process	.222	-.110	.098	.231	.066	.724	.115
Availability of more brands	.215	.329	-.081	.028	.054	.721	-.114
Returning and Replacing	.309	.247	.088	.350	.038	-.093	-.569
Showing concern for Customer's Mistakes	.096	.195	.108	.000	-.008	.040	.871

Note that the analysis has sorted the twenty variables belonging to the marketing activities of online commerce companies which influence customer satisfaction towards e-tailing into seven overlapping groups of variables, as shown by the blocked-up items in table 4.15. The items are sorted so that the variables that have the highest loading (not considering whether the

correlation is positive or negative) are in the factors. After the number of extracted factors was decided upon, the factors were interpreted by identifying the factors which were associated with the marketing activities of online commerce companies. The seven factors were named as per the available literature and their group characteristics. The name of the factors and their constituency of variables are mentioned in Table 1.4.

**Table 1.4**

**Influencing Factors of the Customer Satisfaction towards the E-Tailing**

Factors	Variables	Factors Loading	Factors Name
1	Afford round-the-clock staff	.788	Reliability and Services
	After sales services	.696	
	Customer Interactions	.658	
2	Quality of products	.770	Quality and Efficiency
	Design and package	.687	
	Display of product images	.582	
3	Reliability of web advertisements	.777	Accessibility
	Communication System	.617	
	Easy accessibility of information	.523	
	24 x 7 Customer Service	.511	
4	Anniversary Wishes with Offering	.801	Loyalty Programs
	Offering Discounts and Freebies	.684	
	Delivery process	.563	
5	Simplicity of online transactions	.763	Simplicity
	Using Local Language	.599	
	Chatbots Facilities	.524	
6	Security in payment process	.724	Convenience
	Availability of more brands	.721	
7	Returning and Replacing	-.569	Empathy
	Showing concern for Customer's Mistakes	.871	

The Factor Analysis has thus identified seven core factors that are related to the marketing activities of e-tailing companies which influence customer satisfaction towards online shopping. They can be categorized as under:-

1. Reliability and Services
2. Quality and Efficiency
3. Accessibility
4. Loyalty Programs
5. Simplicity
6. Convenience
7. Empathy

The above factors have been discussed in detail as under: -

Factor 1: This factor represents three variables, which were labelled as "Reliability and Services" was accounted for the amount of variance of 20.596 percent. This factor includes variables representing Afford round-the-clock staff, After-sales services and Customer interactions of e-tailing companies.

Factor 2: This factor represents three variables, which named "Quality and Efficiency" accounted for the amount of variance 9.806 percent. This factor includes variables such as Quality of products, Design and package and Delivery process of e-tailing companies

Factor 3: This factor includes four variables, which named "Accessibility" for the amount of variance of 9.436 percent. This factor includes variables such as Reliability of web advertisements, Communication System, Easy accessibility of information and 24 x 7 Customer Service of e-tailing companies

Factor 4: This factor represents three variables, which named "Loyalty Programs" accounting for the amount of variance 8.218 percent. This factor includes the variables



Anniversary Wishes with Offering, Offering Discounts and Freebies and Delivery process of e-tailing companies.

Factor 5: This factor represents three variables, which named "Simplicity" accounting for the amount of variance of 6.489 percent.. This factor includes the variables Simplicity of online transactions, Using local languages and Chatbots facilities of e-tailing companies.

Factor 6: This factor represents two variables, which named "Convenience" accounted for the amount of variance 6.098 percent. This factor includes the variables Security in the payment process and Availability of more brands of e-tailing companies.

Factor 7: This factor represents two variables, which named "Empathy" accounted for the amount of variance of 5.440 percent . This factor includes the variables returning and replacing and Showing concern for customer's mistakes of online commerce companies.

From a theoretical point of view, the twenty variables related to the marketing activities of online commerce companies which influence customer satisfaction towards e-tailing were compressed into seven factors and then named Reliability and Services, Quality and Efficiency, Accessibility, Loyalty Programs, Simplicity, Convenience and Empathy. These determining factors related to the marketing activities of online commerce companies which influence customer satisfaction towards e-tailing will be utilized for further analysis.

## Findings

- The research demonstrated that customers are generally satisfied with e-tailing and attribute this satisfaction to the marketing efforts of e-commerce companies, including loyalty programs, simplicity, convenience, and customer empathy. However, customers are less satisfied with e-tailing when it comes to e-commerce companies' marketing activities related to reliability and services, product quality and efficiency, and accessibility.

## Conclusion

E-commerce companies have the opportunity to utilize the significant variables and factors discovered in the research to reconsider and enhance their strategies and plans. Gaining a

deeper comprehension of customer attitudes towards e-tailing will not only aid e-commerce companies in attracting more customers and boosting their online revenue, but it will also enable them to serve their customers more effectively.

## **Reference**

1. Khedkar, SavitribaiPhule and Patil 2015, 'Analysis of Customer Satisfaction during Online Purchase', International Journal of Management Sciences and Business Research, Vol 4, Issue 5, pp. 19-23.
2. Jennifer H. Gao 2019, 'Analyzing Online Customer Satisfaction', International Journal of Risk and Contingency Management, volume 8, pages 1-12.