
IDENTIFYING FACTORS AFFECTING CONSUMERS' HESITATION TOWARDS ONLINE SHOPPING

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Keywords

Internet users,
Online Shopping Concerns,
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Abstract

In this fast changing and dynamic environment, everyone is having shortage of time. Everyone has lot many things to do. Due to this, people try to find out ways and means to save their time and justify lot many things to do at a time. Taking this into consideration and advantage of technology, companies are trying to give convenience to customers at their doorstep. Internet has played a revolutionary role in it. Most of the companies now try to sell their products online at the convenience of the customer. Some companies are successful also and are doing lucrative business. But still the BCG report says that Out of 30% rural population, only 15% use internet and out of 70% urban population, India has only been able to capture 10% population on internet. According to BCG report of June 2015 in Coming 5 years Indian e-commerce market will be 80 -100bn \$. Lots of initiatives have been taken by Government to educate the people. Even the concept of "Digital India" has been introduced by the Government of India to bring people online.

Low level of penetration on online shopping encouraged to undertake this project to know that what stops people to shop online. The objective of this study is to try to understand the reasons or concerns that stop people/hesitate people to shop online. A sample of 1000 internet users from the city of Ahmedabad, was undertaken and were asked whether they shop online or not. Out of 1,000 people, 300 people replied negatively. All these 300 people were given a structured questionnaire which contained 27 statements with Likert Scale apart from questions related to demographic information. 275 questionnaires were usable, indicating response rate of 92%. The data was analyzed by using Factor Analysis technique with the help of SPSS. The findings suggested that Technical Aspects, Lack of Authenticity, Lack of Tangible aspects, Procedural Aspects, Lack of Infrastructure and Lack of Security were found to be the six major factors creating hesitation of the customers towards online shopping.

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INTRODUCTION

In this fast changing and dynamic environment, everyone is having shortage of time. Everyone has lot many things to do. Due to this, people try to find out ways and means to save their time and justify lot many things to do at a time. Taking this into consideration and advantage of technology, companies are trying to give convenience to customers at their doorstep. Internet has played a revolutionary role in it. Most of the companies now try to sell their products online at the convenience of the customer. Some companies are successful also and are doing lucrative business. But still the BCG report of 2015 says that out of 30% rural population, only 15% use internet and out of 70% urban population, India has only been able to capture 10% population on internet. There is a lot of untapped market online due to several reasons. Reasons may be low level of education, low levels of income, unemployment, low resources at hand, superstitions, lack of knowledge etc. According to BCG report of June 2015 in coming five years Indian e-commerce market will be 80 -100bn \$. Lots of initiatives have been taken by Government to educate the people. Even the concept of "Digital India" has been introduced by the Government of India to bring people online. Smart phones were made available at very low rates. Low level of penetration on online shopping encouraged to undertake this project to know that what stops people to shop online.

This study is an attempt to identify the reasons towards hesitation of online shopping for the people of Ahmedabad city using descriptive measures, inferential measures and factor analysis.

LITRATURE REVIEW

Many studies have been undertaken to study the consumer behaviour of online shopping, consumer's motivation about online shopping, perceived risks and trust factor in online shopping. Very few studies have been undertaken to know why people don't shop online, their concerns, their difficulties, their hesitations and so on. Sin Leo and Alan Tse (2001) in their study "Profiling Internet Shoppers in Hong Kong", identified that in Hong Kong security and reliability are two critical concerns that may prevent consumers to shop online. Another study undertaken by Gurvinder S Shergill and Zhaobin Chen (2005) on "Web-Based Shopping: Consumers' Attitudes Towards Online Shopping In New Zealand", found that website design, website reliability/fulfilment, website customer service and website security/privacy are the four dominant factors which influence consumer perceptions of online purchasing.

Hoan Cho etal (2006), in their research paper "Online Shopping Hesitation", considered four groups of variables i.e., consumer characteristics, contextual factors, perceived uncertainty factors, and medium/channel innovation factors, that predicted three types of online shopping hesitation i.e., overall hesitation, shopping cart abandonment, and hesitation at the final payment stage.

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A study undertaken by Ceren Topaloglu (2012) on "Consumer Motivation and Concern Factors for Online Shopping in Turkey" found that people in Turkey avoid online shopping when they have personal security concerns. Consumers in Turkey enjoy the exploration activity and emphasize more on the searching process itself rather than what is acquired. The study by ADIL BASHIR (2013) on, "Consumer Behavior towards online shopping of electronics in Pakistan" revealed that the main barrier in the process of online shopping is the safety issue. People of Pakistan are afraid to share their personal information and financial information on internet. Credit cards are also not available to all in general as majority of the consumers are young generation. Sita Mishra, from Ghaziabad U.P.(2013), concluded that the respondents have expressed highest risk factors related to the delivery of products purchased online. The highest perceived risks regarding online shopping that Indian online users have are those related to security of credit card information, confidentiality of personal information and trust in e-retailers; in her study "Analyzing Perceived Risks and Website attributes in E-Retailing". A study by Tze-Hsien Liao, Ching-Jui Keng, on "Online shopping delivery delay: Finding a psychological recovery strategy by online consumer experiences" indicated that when consumers meet a delivery delay, proving them with OCEs could increase satisfaction and reduce complaint intention. Cognitive dissonance (CD) from inconsistency between online consumer experiences (OCEs) and direct experience also moderates online consumer experiences (OCEs) effects on satisfaction, repurchase intention, and complaint intention. Finally, desire for control (DC) and consumer susceptibility to interpersonal influence (CSII) moderate the online consumer experiences (OCEs) effects on satisfaction, repurchase intention, and complaint intention.

RESEARCH METHODOLOGY

Research Objectives

- To identify the factors affecting the hesitation of the people of Ahmedabad city towards online shopping.
- To screen out the major reasons behind hesitation towards online shopping.

Research Design

A Descriptive study was thought to be appropriate for knowing the reasons for not purchasing online based upon their responses on 27 statements relating to possible alternative reasons for hesitation towards online shopping.

Sampling Design and Data Collection

Initially 1000 internet users of the city of Ahmedabad were contacted on convenience base and asked whether they shop online. Out of them 300 people replied negatively. A structured questionnaire using Likert Scale statements was given to them to give the reasons for not shopping online. 275 usable questionnaires were received for data analysis indicating approximately 92% response rate. Initially the questionnaire was tested for its reliability on the

basis of the responses from 50 respondents using Cronbach's α which was found to be 0.876 which indicates a fair reliability of the questionnaire.

Statistical Tools

- Descriptive Measures
- Factor Analysis

ANALYSIS AND DISCUSSIONS

Table-1 below indicates the descriptive analysis of the scores obtained of 275 respondents on 27 variables under study:

Table-1 Descriptive Statistics

Items	Mean	Std. Deviation	Coefficient of Variation
1. Don't have computer at home	3.1022	1.49864	48.3089
2. Don't have credit card	2.7956	1.43549	51.3482
3. Personal information may be misused	2.4745	1.24082	50.1443
4. Difficult to cancel orders	2.4818	1.07316	43.2412
5. Want to have a feel of product	1.9015	1.01696	53.4820
6. Store shopping gives me pleasure & enjoyment	2.1277	1.12013	52.6451
7. Will not be able to get satisfaction of shopping	1.9635	.97145	49.4754
8. Like to shop in a group	2.3066	1.18019	51.1658
9. I need somebody's opinion while purchasing	2.4051	1.10945	46.1291
10. Does not get chance of outing	2.2336	1.03960	46.5437
11. Time consuming	2.8175	1.17495	41.7019
12. Not Tech Friendly	3.0985	1.22301	39.4710
13. Procedure is difficult	3.0000	1.12253	37.4177
14. Repairs and maint. becomes difficult	2.4197	1.05652	43.6633
15. Takes more delivery time	2.5401	1.03785	40.8586
16. Complaints are not resolved immediately	2.2409	1.05543	47.0985
17. Complaint procedures are lengthy	2.2737	1.00269	44.0995
18. Complaints are not even listened	2.3869	1.07074	44.8590
19. Whatever is promised is not fulfilled	2.2883	1.05216	45.9799
20. Products that are received are different than displayed	2.3723	1.08946	45.9242
21. If electricity fails, whole procedure again	2.3723	1.02000	42.9962
22. Transactions fail but money paid	2.5036	1.04215	41.6261
23. Returns procedures lengthy	2.2993	.98980	43.0479
24. Pay charges if want to return the product	2.5657	1.11486	43.4525
25. Don't want to share personal information	2.2518	1.04413	46.3687
26. Getting refund becomes difficult	2.3285	.98419	42.2671
27. Product testing is not possible	1.8613	1.00681	54.0918

The highest means score corresponds to variable no. 1 which indicates that majority of the people do not have computer and internet connectivity at home. The least mean score belongs to variable no. 27 which implies that very few people believe that product testing is not possible on online shopping. The Coefficient of Variation of variable 13 is the least one which indicates that the responses for variable no. 13 are most consistent. The Coefficient of Variation of variable 27 is the highest one which indicates that the responses for variable no. 27 are most inconsistent.

HYPOTHESIS TESTING

In order to test the above hypothesis chi-square statistics was calculated as:

$$\chi^2 = \sum_{i=1}^n \sum_{j=1}^n \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

Where $E_{ij} = \frac{R_i \times C_j}{G}$

Where O_{ij} = observed frequency in the i-jth cell

E_{ij} = expected frequency of the i-jth cell

R_i = Row Total of ith Row

C_j = Column Total of the jth Column

G = Grand Total

Table-2 below indicates the hypothesis testing:

Table-2 Results of Chi-Square Test

Sr. No.	Hypothesis	Calculated Value χ^2	Table Value χ^2	Decision
1	Ho: Gender does not affect the choice to shop online. H1: Gender affects the choice to shop online.	2.08	3.841	Accept the Null Hypothesis
2	Ho: Age does not affect the choice to shop online. H1: Age affects the choice to shop online.	8.544	9.488	Accept the Null Hypothesis
3	Ho: Marital status does not affect the choice to shop online. H1: Marital status affects the choice to shop online.	0.2375	3.841	Accept the Null Hypothesis
4	Ho: Income does not affect the choice to shop online. H1: Income affects the choice to shop online.	30.5252	9.488	Reject the Null Hypothesis
5	Ho: Education does not affect the choice to shop online. H1: Education affects the choice to shop online.	6.3347	9.488	Accept the Null Hypothesis
6	Ho: Occupation does not affect the choice to shop online.	36.78	9.488	Reject the Null Hypothesis

	H1: Occupation affects the choice to shop online.			
7	Ho: Family size does not affect the choice to shop online. H1: Family size affects the choice to shop online.	14.84	11.070	Reject the Null Hypothesis

The above results indicate that Income, Occupation and Family size significantly affects the preference towards online shopping.

Factor Analysis

Factor analysis was applied to identify the factors that refrain consumers from shopping online. In order to test the data appropriateness for factor analysis “KMO and Bartlett’s Test” was carried out. A high value of KMO between 0.5 and 1.0, (Field, 2009. p. 647) suggests that the data is adequate for factor analysis. In this case the value was 0.847 which is closer to 1.0 and hence the data is fit for Factor analysis.

H0: There is no significant relationship between the variables in the population.

H1: There is a significant relationship between the variables in the population.

In order to test the null hypothesis Bartlett’s Test of Sphericity was applied which showed that the significant value was 0.000 which is less than the 0.05 and hence the null hypothesis (H0) was rejected, approx chi-square value is 2417.376 which is also very large and hence it can be concluded that there is a significant relationship between the variables in the population or in other words the variables are highly correlated with each other. KMO value is 0.847 this testified that the sample was appropriate for factor analysis.

Table-3 KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.847
Approx. Chi-Square	2417.376
Bartlett's Test of Sphericity	df
	351
	Sig.
	0.000

Principal component method was applied because the primary concern of this analysis was to determine the minimum number of factors that will account for maximum variance in the data.

Extraction Method: Principal Component Analysis

Table-4 below helps explaining the extraction of Six major factors affecting customer’s hesitation towards online shopping along with their extracted cumulative percentage variances. As the table shows, all the six factors jointly explain 55.21% of the total variance in the responses towards the variables on hesitation of online shopping.



Table-4: Total Variance Explained:

Extraction Method: Principal Component Analysis

Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.866	25.430	25.430	6.866	25.430	25.430	3.435	12.723	12.723
2	2.427	8.988	34.418	2.427	8.988	34.418	3.084	11.423	24.146
3	1.881	6.967	41.385	1.881	6.967	41.385	2.640	9.777	33.923
4	1.304	4.831	46.216	1.304	4.831	46.216	2.078	7.698	41.621
5	1.240	4.594	50.810	1.240	4.594	50.810	1.919	7.109	48.730
6	1.190	4.406	55.216	1.190	4.406	55.216	1.751	6.486	55.216
7	.989	3.662	58.878						
8	.927	3.433	62.310						
9	.881	3.264	65.575						
10	.859	3.183	68.757						
11	.781	2.893	71.650						
12	.752	2.784	74.434						
13	.708	2.621	77.055						
14	.639	2.368	79.422						
15	.610	2.259	81.682						
16	.571	2.114	83.796						
17	.558	2.067	85.863						
18	.545	2.019	87.882						
19	.469	1.737	89.618						
20	.454	1.680	91.299						
21	.422	1.563	92.861						
22	.410	1.519	94.381						
23	.381	1.410	95.790						
24	.339	1.256	97.046						
25	.299	1.108	98.154						
26	.279	1.032	99.186						
27	.220	.814	100.000						

Extraction Method: Principal Component Analysis.

Varimax rotation was applied because the purpose was also to determine those factors which are uncorrelated with each other. The rotated component matrix is given in the Table-5 below:

Table-5 Rotated Component Matrix

Sr. No.	Variables	Component Matrix					
		1	2	3	4	5	6
1	Don't have computer at home	.359	.429	-.453	.085	.267	-.312
2	Don't have credit card	.330	.378	-.351	.231	.409	-.285
3	Personal information may be misused	.388	.212	.024	.583	.007	-.086
4	Difficult to cancel orders	.418	.233	-.096	-.021	-.111	-.327
5	Want to have a feel of product	.475	.101	.511	.210	-.087	-.160
6	Store shopping gives me pleasure & enjoyment	.357	.368	.501	.042	.032	-.046
7	Will not be able to get satisfaction of shopping	.379	.322	.544	-.062	-.017	-.068
8	Like to shop in a group	.333	.438	-.010	-.261	.422	.252
9	I need somebody's opinion while purchasing	.313	.539	.135	-.368	.172	.021
10	Does not get chance of outing	.360	.434	.360	-.085	-.246	.064
11	Time consuming	.416	.404	-.182	-.313	-.308	.170
12	Not Tech Friendly	.273	.440	-.461	.115	-.333	.174
13	Procedure is difficult	.544	.194	-.328	.021	-.206	.403
14	Repairs and maint. becomes difficult	.596	-.103	-.173	.157	-.207	.216
15	Takes more delivery time	.612	-.033	-.086	-.082	-.159	-.130
16	Complaints are not resolved immediately	.612	-.237	-.247	-.082	-.145	-.282
17	Complaint procedures are lengthy	.668	-.276	-.063	-.057	-.346	-.270
18	Complaints are not even listened	.656	-.177	-.068	-.150	-.021	-.192
19	Whatever is promised is not fulfilled	.615	-.277	-.018	-.171	.172	-.202
20	Products that are received are different than displayed	.617	-.273	.140	-.259	.095	-.152
21	If electricity fails, whole procedure again	.508	-.184	.033	.303	.045	.166
22	Transactions fail but money paid	.581	-.243	-.036	-.089	.097	.235
23	Returns procedures lengthy	.630	-.350	.037	.093	.244	.243
24	Pay charges if want to return the product	.578	-.205	-.040	-.240	.230	.258
25	Don't want to share personal information	.466	.089	.109	.435	.155	.195
26	Getting refund becomes difficult	.588	-.286	.007	.045	.198	.080
27	Product testing is not possible	.542	-.107	.297	.114	-.170	.058

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 9 iterations.

The Factor analysis resulted in a total of six (6) factors that affect the hesitation towards online shopping. The Factors were named according to the variables that correlated within them. The following Table-5 shows the various factors that affect the hesitation towards online shopping along with the variables that correlate high with them, their factor loadings and their eigen values including the % of variance covered by each factor.

Table-6: Factor Matrix

Factor Number	Factor Name	Items	Item loading	Total	% of Variance
1	Technical Aspects			3.435	12.723
		Transactions fail but money paid	.581		
		Returns procedures lengthy	.630		
		Pay charges if want to return the product	.578		
		Getting refund becomes difficult	.588		
2	Lack of Authenticity			3.084	11.423
		Difficult to cancel orders	.418		
		Takes more delivery time	.612		
		Complaints are not resolved immediately	.612		
		Complaint procedures are lengthy	.668		
		Complaints are not even listened	.656		
		Whatever is promised is not fulfilled	.615		
		Products that are received are different than displayed	.617		
3	Lack of Tangible Aspects			2.640	9.777
		Want to have a feel of product	.511		
		Store shopping gives me pleasure & enjoyment	.501		
		Will not be able to get satisfaction of shopping	.544		
		I need somebody's opinion while purchasing	.539		
		Does not get chance of outing	.434		
		Product testing is not possible	.542		
4	Procedural Aspects			2.078	7.698
		Time consuming	.416		
		Not Tech Friendly	.440		
		Procedure is difficult	.544		
		Repairs and maint. Becomes difficult	.596		
5	Lack of Infrastructure			1.919	7.109
		Don't have computer at home	.429		
		Don't have credit card	.409		
		Like to shop in a group	.438		
6	Lack of Security			1.751	6.486
		Personal information may be misused	.583		
		If electricity fails, whole procedure again	.508		
		Don't want to share personal information	.466		

Table-7 below indicates the Communalities obtained of 275 respondents on 27 variables under study:

Table-7 Communalities

Sr.No.	Variables	Initial	Extraction
1	Don't have computer at home	1.000	.695
2	Don't have credit card	1.000	.678
3	Personal information may be misused	1.000	.544
4	Difficult to cancel orders	1.000	.359
5	Want to have a feel of product	1.000	.575
6	Store shopping gives me pleasure & enjoyment	1.000	.519
7	Will not be able to get satisfaction of shopping	1.000	.552
8	Like to shop in a group	1.000	.613
9	I need somebody's opinion while purchasing	1.000	.573
10	Does not get chance of outing	1.000	.519
11	Time consuming	1.000	.592
12	Not Tech Friendly	1.000	.635
13	Procedure is difficult	1.000	.647
14	Repairs and maint. becomes difficult	1.000	.510
15	Takes more delivery time	1.000	.432
16	Complaints are not resolved immediately	1.000	.600
17	Complaint procedures are lengthy	1.000	.722
18	Complaints are not even listened	1.000	.526
19	Whatever is promised is not fulfilled	1.000	.555
20	Products that are received are different than displayed	1.000	.575
21	If electricity fails, whole procedure again	1.000	.414
22	Transactions fail but money paid	1.000	.470
23	Returns procedures lengthy	1.000	.649
24	Pay charges if want to return the product	1.000	.554
25	Don't want to share personal information	1.000	.489
26	Getting refund becomes difficult	1.000	.475
27	Product testing is not possible	1.000	.438

Communalities

The communalities indicate how much of each variable accounted for by the underline factors taken together. A relatively high communality shows that not much of the variable is left over after whatever the factors represent is taken into consideration.

Variable no. 17 has the highest communality of 0.722 which means that 72.2% of the variance or information content of this variable namely, "Complaint procedures are lengthy" is explained by the six factors taken together which is fairly good.

CONCLUSION

In India majority of the people do not have internet accessibility at their home which is the major constraint for online shopping. It was found that those who do not shop online are mostly middle aged and senior citizens or house wives. These people are not computer savvy that may be one of the reasons not to shop online. Income, Occupation and Family size significantly affect the preference towards online shopping. Technical Aspects, Lack of Authenticity, Lack of Tangible aspects, Procedural Aspects, Lack of Infrastructure and Lack of Security were found to be the six major factors creating hesitation of the customers towards online shopping. Hence in order to increase the rate of online shopping, the companies must improve in these areas and make the shopping procedures easier and comfortable. The companies need to make more transparent policies of assuring secured online payments and easy and assured return policies. The problems of Lack of infrastructure and complex procedural aspects also need to be addressed by the companies in order to reduce the hesitation of the customers towards online shopping.

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