

SEGMENTING ONLINE SHOPPERS: A STUDY OF CONSUMERS' WEB PORTAL SELECTION MOTIVATIONS FOR E-SHOPPING

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ABSTRACT

As the internet permeates geographic boundaries and varied demographic strata, electronic commerce/online shopping is witnessing exponential growth. The objective of this research is to segment online shoppers based on attributes of web portals. A survey using a questionnaire was administered to 203 shoppers in India. Factor analysis is used to determine the factors that influence the selection of web portals. The robustness of the model developed using factor analysis was checked using Confirmatory Factor Analysis (CFA). Finally, cluster analysis was applied for identifying the clusters of respondents and profiling them. Based on cluster analysis, the study identified four segments: Traditional Shoppers, Benefit Seekers, Convenience and Assurance Seekers and Information and Price Seekers. Each of the four segments varies considerably in terms of their selection of website/portals for purchases, portraying the differences in their online shopping orientation. Against the general perception that shoppers prefer web portals that provide best user experience and attractive web atmospherics, this research shows that their inclination is towards brand image of the web portal and also being able to get value proposition through the website. Firms need to develop plans to consider the unique characteristics of the online market segments for an optimum allocation of marketing expenses. Findings of this research may be used as guidelines for the development of multi-dimensional strategic framework by online retailing firms.

Keywords: online shopping, online market segmentation, web aesthetics, transaction security, information, cluster analysis

INTRODUCTION

The newest way of commerce is the one that can be performed over the internet. Even before the dawn of the internet era, technological innovations have always had a deep impact on business transactions. Of late, internet has proved to be a game changer for the entire business community. There has been a steady growth of internet penetration and the number of people using internet for performing business transactions and digital/electronic commerce has turned into a

phenomenon across the globe (Joines, Scherer, & Scheufele, 2003; Jayawardhena, 2004).

The emergence of internet has changed the way consumers shop and purchase goods and services, and has progressed into a universal phenomenon in a very short span of time. It provides both the buyers and sellers a cybernetic stage where they can contact each other for purchase and sale of products and services. The buyer and seller can be geographically divided and culturally distant, but are able to connect with each other through e-commerce, which has become a limitless business medium in this era of globalisation. Firms are using e-commerce to reduce the marketing costs. Internet is also used to express, connect, communicate and spread information to the current and prospective consumers, and to receive feedback about products and services. For consumers, e-commerce has been a boon as they can comprehensively compare and purchase products online.

Online shopping provides multiple benefits to consumers including easy access to wide range of products, services and information. It is one of the most convenient methods of shopping and also provides functional as well as practical benefits (Donthu & Garcia, 1999; Chen & Chang, 2003). On the other side, there are consumers who shop online only for fun, pleasure and gratification, to fulfil their emotional and hedonic benefits (Menon & Kahn, 2002; Parsons, 2002). Lesser prices, which are due to lesser operational costs, are among the other benefits perceived by customers buying in online stores.

Online shopping all over the world has been growing substantially. Online retail sales in the US were expected to reach \$262 billion in 2014 and \$370 billion by 2017. In Europe, the revenues were expected to reach \$160 billion in 2014 and \$240 billion by 2017 (Mulpuru, 2013). Presence of vibrant youth and prosperous middle class in India has fuelled the rise in consumption levels, making online shopping one of the preferred ways to shop. The current online market size, which is estimated to be around \$4 billion, is estimated to grow at a compounded annual growth rate (CAGR) of 50% and touch \$45 billion by 2020 (Business Standard, 2014, 5 November). The huge growth potential in the Indian online retail market has led to spree of investments by all the big players currently operating in it. Amazon has announced an investment of \$2 billion to increase its presence in the Indian market. Flipkart, India's biggest online player, has also declared to raise \$1 billion to scale up its operations (Pasricha, 2014). Many other online companies like, Snapdeal, Jabong etc., have also raised millions of dollars, as investors have put their faith in the Indian online market.

This vastness of the Indian market along with the growth of e-commerce and the entry of multinational online retailers, has posed a very relevant need to study

and understand the factors that impact shoppers' choice of website. It is also essential to segment and profile the online shoppers with respect to their orientation towards website dimensions.

Therefore, the objective of this research is to study a broad list of website dimensions and decipher the factor structure concerning these dimensions. Besides confirming this factor structure, the paper endeavours to identify and profile the segments on the basis of website dimensions. This paper opens with discussion on relevant literature to understand the concept, factors underlining website dimensions. This is followed by literature on Indian consumer research. Later the research methodology explains the sample and data collection process. The description on data analysis using Factor Analysis, CFA and Cluster Analysis has been explained. The segments (based on clustering) were identified and profiled. The last part includes implications, limitations and future scope.

LITERATURE REVIEW

According to Wigand (1997), any form of commercial activity conducted through electronic connection or networks is e-commerce. In the words of Varadarajan and Yadav (2002), electronic commerce is:

A networked information system that serves as an enabling infrastructure for buyers and sellers to exchange information, transact, and perform other activities related to the transaction before, during, and after the transaction (p. 297).

E-commerce comprises of digitally enabled commercial transactions between and among organisations and individuals (Laudon & Traver, 2003). As per Liu and Arnett (2000, p. 23), online shopping is "a way of conducting business by companies and customers performing electronic transactions through computer networks."

E-commerce is thus a form of retailing, which relies on using an electronic medium that connects a retailer and consumer, enabling them to enter into a transaction, benefitting both.

Attributes of Online Shopping and Website Selection

Different models pertaining to technology adoption and behavioural intention have been widely used for understanding and examining consumer behaviour on the internet. It has been observed that most of the researchers and studies have over emphasised on online behavioural models from the theory of reasoned

action (TRA) family (Cheung, Chan, & Limayem, 2005). Besides TRA, the family includes the technology acceptance model (TAM) and the theory of planned behaviour (TPB). Apart from these theories, transaction cost theory and innovation diffusion theory have been directly or indirectly used to determine the antecedents of online consumer behaviour. TRA is basically a model to predict an individual's behavioural intentions. TPB hypothesises that a person's behaviour depends on and can be anticipated by his behavioural intention and perceived behavioural control. TAM model uses two new constructs namely: perceived ease of use and perceived usefulness, and does not consider the influence of norms.

The preference for online buying website over traditional stores has been attributed to the fact that many consumers are convenience oriented (Donthu & Garcia, 1999). It has become more significant because of prevalence of many constraints in going to a store (Morganosky & Cude, 2000). According to Gehrt, Yale and Lawson (1996), convenience has many forms, which may be based on time or space. The advantages of shopping from home also form an important factor along with convenience (Eastlick & Feinberg, 1999). In their study, Thomson and Laing (2003) identified three reasons of consumers opting for online shopping – drastic reduction in shopping time, freedom and flexibility to shop whenever they want, and need of very little physical exertion for shopping.

Other than convenience, competitive pricing has significant impact on online shoppers. Shoppers believe that online medium provides goods/services at very competitive price (Shergill & Chen, 2004). The buyers' intention of purchasing goods from a specific online store is determined by the perceived value he/she gets from that portal (Ching-Wen & Hsi-Peng, 2007).

Customers' perceived usefulness of an online store and the perceived ease-of-use of the online website were found to have significantly positive impact on repurchase intention at the same online store (Aren, Güzel, Kabadayi, & Alpan, 2013). Quite contrary to the above findings, Kim and Stoel (2004) had reported that ease-of-use did not have any significant impact in determining customer satisfaction. Their study posited that quality of content and transaction features of a website were more important for customer satisfaction, whereas design quality was found to be not significant. Against this, Wolfenbarger and Gilly (2003) found that frequent purchasers consider the website design as the most important aspect of judging the quality of the products at the online store. There exists a positive effect of website design on customer satisfaction. Kim and Stoel (2004) opined that the ability of the website to respond quickly had strong and positive impact on buyers' satisfaction. However, Xia, Mengqiao, Fang and Peihong (2008) did not find any impact of rapid response time on customers' satisfaction.

On-time and proper delivery of goods are also found to have a significantly influence customer satisfaction (Xia et al., 2008). This study also posited that convenience in conducting transaction and making payments have significant impact on customers' choice of an online web portal and satisfaction. Information provided by the online stores was found to be an important factor that determines the customers' loyalty towards any online store and their buying behaviour. Online shopping customers who felt that the information provided by the online store website is adequate for their task were found to be satisfied (Kim & Stoel, 2004).

To gain trust of the online shoppers, website portals use compatible terms and conditions, which is an important factor. The simplified process and easy return policy were found to be important factors in building trust in an online buying environment (Tan, 1999; Wang, Beatty, & Foxx, 2004). This research had identified that clear communication regarding the policies of return and compensation to customers does impact customers' selection of portals. A study by Constantinides (2004) found that guarantee extended on products do become a source of competitive advantage for a particular website over others. Disagreeing to this was the study by Martin and Camarero (2009), according to which the provision of warranty was found irrelevant and did not have any influence on the buyers' satisfaction or trust.

Thus, website selection is a complex choice influenced by gamut of factors ranging from web atmospherics, availability of information, transaction convenience to augmented factors like brand image. These factors have been identified by different researchers in different markets.

Indian Consumer Research

Not many empirical studies have focused on online shopping in India. Kiran, Sharma and Mittal (2008), in their study on identifying factors affecting Indian consumers' online shopping, found that correct information on product features, warranties, opportunity for shoppers' response and complaints, and certification of the websites had significant impact, on their e-shopping behaviour. In another study, Gupta, Iyer and Weisskirch (2010) reported that in comparison to the US consumers, Indian consumers were less apprehensive to divulge private information on the internet. Earlier, Singh, Fassott, Zhao and Boughton (2006) had concluded from their study that Indian consumers showed inclination towards those websites, which have adapted and portrayed Indian culture. The authors also found that e-commerce portals that are in accordance with cultural aspects are rated more positively on factors like ease of navigation, appearance, buying intention and attitude towards the portal.

RESEARCH METHODOLOGY

This study is exploratory and conclusive in nature. It initiated with in-depth investigation of relevant secondary data. Thorough extensive review of literature was aimed at identifying various antecedent factors in the consumers' selection of a particular website for online shopping. These variables were scrutinised and validated through interactions with experts from industry, academia and researchers. Finally, a list of 21 variables was prepared for the study (refer Table 1).

These research variables were measured using this questionnaire. Information related to demographic variables such as age, gender, income, educational qualification and occupation of the respondents was asked in the first part of this research instrument. This was followed by items that indicated 21 variables related to website selection for online shopping. Each statement measured the level of agreement about the significance of specific variable in the choice of a web portal. A five-point Likert's scale was used to record the responses, where '1' and '5' signified a least and most agreement with the statement respectively. The conjectural questionnaire was distributed offline to the respondents and the final instrument was prepared after minor modifications in the language.

With the assumption that the sample is representative of the entire population, cross-sectional design was used for the present study. Accordingly, respondents were drawn from the target population and information was obtained from this sample only once. Paper based offline questionnaires were distributed to the respondents. Population for present study comprised of people above eighteen years in India who buy products on internet. Since the objective of the study is to identify the factors that influence consumers in selecting a particular online shopping website and profile segments thereof, sample unit for the study included people who had experience of shopping online. Convenience sampling technique was used for data collection and the questionnaire was distributed to 300 respondents in the cities of Delhi and Mumbai. Sampling extent was defined as anyone who had the experience of minimum five online transactions. After discarding for unsuitable responses, 203 questionnaires were used for further analysis.

Table 1
Select variables used for the study

S. no.	Variables influencing website selection	References
1	Security of payment during transaction	Xia et al. (2008)
2	Delivery of quality products	Xia et al. (2008)
3	Time taken for delivering the product	Donthu and Garcia (1999);
4	Different payment options	Kim and Stoel (2004); Martin and Camarero (2009)
5	Ease of use of the website	Aren et al. (2013); Kim and Stoel (2004)
6	Portal with faster navigation	Aren et al. (2013)
7	Effectiveness of search process	Aren et al. (2013)
8	Easy access to the portal	Aren et al. (2013)
9	Privacy of personal information	Kim and Stoel (2004)
10	Quality of information	Kim and Stoel (2004)
11	Extent of information available	Kim and Stoel (2004)
12	Competitive pricing	Shergill and Chen (2004)
13	Vast portfolio of products and services	Wolfenbarger and Gilly (2003); Shergill and Chen (2004)
14	Terms and conditions of sales	Tan (1999); Wang et al. (2004)
15	Good brand image of the web site	Wolfenbarger and Gilly (2003)
16	Discounts and promotional offers	Shergill and Chen (2004); Wang et al. (2004); Martin and Camarero (2009)
17	Eye catching graphics	Wolfenbarger and Gilly (2003)
18	Website's design and layout	Wolfenbarger and Gilly (2003)
19	Physical display counter	Prashar, Vijay and Parsad (2015)
20	Online and offline interaction	Prashar et al. (2015)
21	Personalised features	Prashar et al. (2015)

DATA ANALYSIS

A number of techniques were used to analyse data. factor analysis was used to identify dimension having influence on the selection of web portal for online shopping,. The robustness of this model was then tested using Confirmatory Factor Analysis (CFA). Later, cluster analysis was applied to delineate segments of respondents who had similar profiles across the website dimension orientations.

Factor Analysis: Web Site Dimensions

In the first step of the measurement technique, 23 variables related to website attributes were evaluated through Exploratory Factor Analysis (EFA) using Principal Component Analysis with Varimax Rotation. This technique was used to identify the underlying factors of website attributes, which impact e-shoppers' choice of website. Eigen value of one was taken as the criterion for inclusion of factors (Hair, Black, Babin, & Anderson, 2010). The sample adequacy value under KMO is 0.845, which is higher than 0.5 and Bartlett's Test of Sphericity score is 1905.277 with 253 degrees of freedom at 5% level of significance. Both the outcomes confirm this case to be fit for factor analysis. The result of EFA was a six-factor solution accounting for 63.57% of variance explained (refer Table 2). Of the four items in factor five, two had factor loading less than 0.5 and hence both these items were removed from further analysis. All other factor loadings were significant, which indicated that the variables were adequately explained by derived factors. These six factors indicate antecedents influencing the selection of web portal among online shoppers.

Transaction Convenience: The first set of variables explained 12.95% of the total variance. This factor consisted of four items: Security of payment during transaction, delivery of quality products, time taken for delivering the product and different payment options. All these variables pivot around convenience concerns of shoppers during transaction. Hence, this factor is labelled as "Transaction Convenience."

User Experience: Explaining 12.91% of the total variance, second factor comprised of five items: Ease of use of the website, portal with faster navigation, effectiveness of search process, easy access to the web portal and privacy of personal information. Since all the constituting elements in this category directly relate with experiences of online users, it is named as "User Experience."

Cognitive Stimuli: Technically, this factor has same characteristics as of Factor 2 with respect to spread of factor loadings and average scores for constituent variables. Quality of information, extent of information available, competitive pricing and vast portfolio of products and services constituted the variables of the third factor. It explained 12.50% of the total variance.

Personalised Assurance: This fourth identified factor identified explained 9.89% of the total variance. Availability of physical display counters, facilities of online and offline interaction, availability of personalised features, and terms and conditions of sales constituted this factor. These variables contributed to personal assurance for the shoppers and hence labelled as "Personalised Assurance."

Table 2
Factor analysis results

Items	Factor loading (<i>n</i> = 203)	Cronbach Alpha (α)	% variance explained
Factor 1: Transaction Convenience			
• Security of payment during transaction	0.79	0.80	12.95
• Delivery of quality products	0.72		
• Different payment options	0.69		
• Time taken for delivering the product	0.55		
Factor 2: User Experience			
• Portal with faster navigation	0.77	0.80	12.91
• Ease of use of the website	0.76		
• Effectiveness of search process	0.67		
• Easy access to the portal	0.54		
• Privacy of personal information	0.52		
Factor 3: Cognitive Stimuli			
• Quality of information	0.77	0.81	12.50
• Extent of information available	0.75		
• Competitive pricing	0.73		
• Vast portfolio of products and services	0.58		
Factor 4: Personalised Assurance			
• Availability of physical display counters	0.75	0.64	9.89
• Facilities of online and offline interaction	0.69		
• Availability of personalised features	0.62		
• Terms and conditions of sales	0.55		
Factor 5: Augmented Benefits			
• Discounts and promotional offers	0.64	0.60	9.18
• Good brand image of the web site	0.60		
Factor 6: Web Atmospheric			
• Eye catching graphics	0.72	0.67	8.10
• Website's design and layout	0.64		

Augmented Benefits: The fifth factor comprised of two variables: Good brand image of the web site and discounts and promotional offers. These variables increase the core benefits of the product or offer. This factor explained 9.18% of the variance.

Web Atmospherics: Consist of just two items: Eye-catching graphics and website's design and layout. This factor explained 8.10% of the total variance. These items are related with the atmospherics of any website, hence may be termed as "web atmospherics".

Confirmation of Factor Structure using CFA

The structure comprising six elements characterises the model for factors influencing website selection. The robustness and validity of the factors was tested by subjecting the model to a CFA using Analysis of Moment Structures (AMOS). Evaluation was done to check adequacy of parameter estimates as well as the model as a whole.

The proposed model was found to be adequate as indicated by goodness-of-fit statistics. The ratio of minimum discrepancy to degree of freedom (CMIN/DF) was 2.591, which indicated adequate fit. Goodness-of-fit indices like Goodness-of-fit Index (GFI = 0.83), Adjusted Goodness-of-fit Index (AGFI = 0.774) and Incremental Fit Index (IFI = 0.826) had values closer to 0.85. Comparative Fit Index (CFI = 0.822), Normed Fit Index (0.70) and Tucker–Lewis Index (TLI = 0.785) had values close to 0.82. Root Mean Square Error of Approximation (RMSEA = 0.085) was less than 0.09. Since the fit indices values are moderately more than the indices used in a study by Bennett and Robinson (2000); GFI (0.80), CFI (0.75), NFI (0.60) and RMSR (0.07); the model can be said to be moderately fit and validated.

Statistical significance of parameter estimates was established as test-statistic t (Critical Ratio). These values for loadings indicate convergent validity, which were found to be high in each case as shown in Table 3. The standardised loadings and the measurement model along with t -values (Critical Ratios) are shown in Table 3.

Table 3
Measurement model (CFA)

Items		Standardised Factor Loadings	Critical Ratio (CR)
Factor 1: Transaction Convenience (SCR = 0.80)			
TC1	Security of payment during transaction	0.82	9.31
TC2	Delivery of quality products	0.76	8.88
TC3	Time taken for delivering the product	0.61	7.40
TC4	Different payment options	0.67	1.00
Factor 2: User Experience (SCR = 0.80)			
UE1	Ease of use of the website	0.77	6.63
UE2	Portal with faster navigation	0.72	6.43
UE3	Effectiveness of search process	0.73	6.49
UE4	Easy access to the portal	0.64	6.11
UE5	Privacy of personal information	0.50	1.00
Factor 3: Cognitive Stimuli (SCR = 0.81)			
CS1	Extent of information available	0.83	9.09
CS2	Quality of information	0.79	8.83
CS3	Competitive pricing	0.63	7.52
CS4	Vast portfolio of products and services	0.64	1.00
Factor 4: Personalised Assurance (SCR = 0.64)			
PA1	Facilities of online and offline interaction	0.67	5.20
PA2	Availability of physical display counters	0.56	4.77
PA3	Availability of personalised features	0.52	4.77
PA4	Terms and conditions of sales	0.50	1.00
Factor 5: Augmented Benefits (SCR = 0.60)			
AB1	Good brand image of the web site	0.61	5.65
AB2	Discounts and promotional offers	0.56	1.00
Factor 6: Web Atmospherics (SCR = 0.67)			
WA1	Eye catching graphics	0.64	6.61
WA2	Website's design and layout	0.79	1.00

Note: SCR = scale composite reliability

Cluster Analysis: Segments Defined

Multi-step cluster analysis was used to segment the respondents on the basis of their choice of website selection. Cluster analysis is a technique that is used for grouping subjects/ respondents into groups/segments so that the groups are as homogenous as possible within and are as heterogeneous as possible with other segments/groups (Hair et al., 2010). To identify the segments, previous research was emulated, as suggested by Hennig-Thurau, Gwinner, Walsh and Gremler (2004) and a Hierarchical Cluster Analysis was conducted, followed by a k-means analysis. Factor scores were calculated for each respondent for the six identified factors used for website selection, which then represented the input variables for cluster analysis. Based on these factor scores, clusters were formed using Ward's method in hierarchical clustering technique. After examining the output of three, four and five cluster solutions, based on the respective distances, a four-cluster solution was finalised. This four-cluster solution was selected due to clear interpretability of the solution. A non-hierarchical clustering technique (k-means) was used, where the solution (number of clusters) obtained earlier was taken as the input (k), to obtain the final cluster solution. Table 4 presents the solution of cluster analysis

Table 4
Results of the non-hierarchical (k-means) cluster analysis (N = 203)

Website selection motivations	Cluster Means				F-value	p
	Cluster 1	Cluster 2	Cluster 3	Cluster 4		
Transaction convenience	-1.69062	-.08179	.37761	.11302	13.400	< .000
User experience	-1.16871	.03179	.04121	.12018	4.605	< .004
Cognitive stimuli	-.98612	.29348	-1.12128	.77673	72.667	< .000
Personalised assurance	-1.58932	-.34462	.41878	.64978	29.307	< .000
Augmented benefits	-1.15455	.41306	.19085	-.92455	34.130	< .000
Web atmospheric	-1.65443	.39930	-.14410	-.41769	21.491	< .000
Cluster size	9	101	49	44		
Number of respondents (%)	4.43	49.75	24.14	21.67		

Notes: Cluster 1 (Traditional Shoppers); Cluster 2 (Benefit Seekers); Cluster 3 (Convenience and Assurance Seekers); Cluster 4 (Information and Price Seekers)

Interpretation and Description of Cluster Segments

The cluster based segments were explained based on the centroids of the website selection orientations within each cluster. A positive value of the centroid signifies the nature of the cluster, zero signifying the neutral position and a negative centroid conveys that the construct is not important to respondents within the cluster (Table 4).

Traditional Shoppers: This segment of market had negative centroid values on all the six factors. With about 5% of all respondents, this niche segment does not seem to get influenced by any of the factors associated with online portal selection. It would be relatively difficult for the online retailers to satisfy this segment of consumers, and marketers may treat this segment as 'zone of indifference.'

Benefit Seekers: The second cluster, with 50% of the respondents, had a positive centroid on four of the factors: Augmented benefits (.413), web atmospherics (.399), cognitive stimuli (.294) and user experience (.031). With the highest score in this category, augmented benefits had two antecedent items, amongst which brand image had the highest average score followed by discounts and promotional offers etc., as reflected in Table 2. This segment looks for good brand image of the portal, as brand plays an important role in conveying to the online shoppers value, trust and quality a particular website provides. Also, the shoppers in this segment look for value proposition through discounts, promotional offers, return and exchange policies, etc. It is pertinent for retailers to address this value motive to become competitive. Apart from augmented benefits, web atmospherics constituted of website's design and eye-catching graphics, is important factor for this segment. Other important factors include quality and extent of information, evidence of competitive pricing and the range of products and services. Though user experience as a factor also has a positive centroid, its value was closer to zero indicating insignificant impact.

Convenience and Assurance Seekers: With two factors: Personalised assurance (.42) and transaction convenience (.38), the third cluster had nearly one-fourth of the total responding population. Transaction convenience had two antecedent items namely, security of payment during transaction and delivery of quality products. Both these factors had very high factor loading reflecting the relative importance of these items. Besides seeking different payment options available, this segment is also concerned about time taken by the online retailers for delivering products. Availability of physical display counters and facilities of online-offline interactions were also important elements under motive for personalised assurance. This segment predominantly consisted of male respondents (71%) and married members (65%).

Information and Price Seekers: Nearly one-fifth of the total respondents comprised the fourth cluster. This segment had dominant motives of cognitive stimuli and personalised assurance. These online shoppers are completely driven by the extent and quality of information including product offers and price options and elements of personalised assurance, as mentioned in Table 2. This segment also had a majority of male respondents (61%) and almost an equal balance of married and unmarried people. Two third of the respondents were post-graduates.

The description of each segment in terms of demographic variables (age, gender, occupation, marital status, education and income) is reported in Table 5.

Table 5
Cluster composition (in percentage, %)

	Full sample	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Gender					
• Male	67	89	65	71	61
• Female	33	11	35	29	39
Age (years)					
• 18–24	27	44	27	29	23
• 24–30	45	45	47	39	47
• 30–36	19	11	16	22	23
• 36–42	8	–	9	8	7
• 42 and above	1	–	1	2	–
Marital status					
• Unmarried	50	78	55	35	52
• Married	50	22	45	65	48
Qualification					
• Schooling	3	–	3	6	–
• Graduation	28	22	30	25	30
• Post-graduation	59	56	56	57	65
• Professional qualification	10	22	11	12	5%
Occupation					
• Student	37	33	44	25	34
• Service	50	33	45	59	54
• Self employed	3	22	5	2	7

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Table 5 (continued)

	Full sample	Cluster 1	Cluster 2	Cluster 3	Cluster 4
• Business	6	11	4	8	5
• Housewife	2	–	2	2	–
• Others	2	–	–	4	–
Income (INR per month)					
• < 10,000	9	22	8	8	9
• 10,000–25,000	6	–	4	13	5
• 25,001–40,000	23	22	23	22	23
• Above 40,000	62	56	65	57	64

Notes: Cluster 1 (Traditional Shoppers); Cluster 2 (Benefit Seekers); Cluster 3 (Convenience & Assurance Seekers); Cluster 4 (Information & Price Seekers)

DISCUSSION AND MANAGERIAL IMPLICATIONS

As per Westbrook and Black (1985), studies should be carried out for recognising and examining consumers' motivations for shopping across different retail shopping set-ups and occurrences. Though the current study is not a multicultural comparative research, the results suggest that transaction convenience, user experience, cognitive stimuli, personalised assurance, augmented benefits and web atmospherics are antecedent factors in initiating consumers' selections of particular website for online shopping. Shoppers look for selecting an appropriate website which is perceived to be trustworthy, gives higher value and has ease-of-use attributes. Four clusters corresponding to web portal selection segments were identified and profiled. These four clusters are fairly diverse and so are important for marketers in a number of significant ways.

The results of this research are quite similar to the conclusions of many other studies that have posited that online buying behaviour is influenced by multitude of factors like consumers' perception about their experience, trust, assurance, ease of use etc. (Fenech & O'Casey, 2001; Ha & Stoel, 2009). Similarly, this study has cemented the earlier findings that shoppers' inclination towards specific portals depends upon information quality, functionality, responsiveness, usefulness, and website quality and features (Devaraj, Ming, & Kohli, 2002; Pires, Stanton, & Eckford, 2004; Ahn, Ryu, & Han, 2004; Trabold, Heim, & Field, 2006; Lee, Park, & Han, 2011). In the present study, "Information and Price Seeker" segment emerged as the largest cluster, similar to the results of Brown, Pope and Voges (2003) and Brynjolfsson and Smith (2000). Factors like significance of brand motivation and convenience have been cited by earlier studies like Laroche

and Manning (1984) and Devlin, Ennew and Mirza (1995) respectively. Cumulatively, these two factors have been reflected as "Convenience and Assurance Seekers" segment that forms the second largest cluster.

With congruence in findings with other studies, this research is of great significance for online retailers and marketers. They may base their marketing strategies considering the segments identified and position their web portal accordingly. For illustration, the web company targeting largest segment of "benefit seekers", must create its brand position around value, trust and quality. This value proposition must be planned around discounts, promotional offers, return and exchange policy, considering the promotional elasticity in the market. Online retailers must bring in various types of loyalty programmes for the online shoppers that can provide consumers' with instant value, choice and personalised relevance. Web atmospherics and aesthetics are the support factors and hence the portal must have eye catching graphics and design as integral elements.

Another segment named "Information and Price Seekers" credits lot of importance to cognitive inputs about products, price, availability of product display and terms and conditions of sales. These shoppers reflect their concerns for price of the product they are paying (Lichtenstein, Ridgway, & Netemeyer, 1993). Westbrook and Black (1985), have termed these shoppers as "functional or economic shoppers", who are high on information search and value proposition. The marketers must endeavour to make easy availability of information on the website and may highlight superlative value by giving comparative information.

Besides, the existence of three segments who are inclined towards shopping through online medium and can be tapped using appropriate marketing strategies, one segment of the study emerged to be in zone of indifference. None of the antecedent factors show positive association with online buying. This segment seems to be apprehensive in engaging with web portals. Apparently, they look for tangible aspects associated with shopping like display of physical product and moment-of-truth with sales personnel at physical shops. Online retailers must get into brick and mortar model of business, if they deem to venture into this segment.

Thus, the findings from this study are similar to the literature on traditional brick and mortar markets, hypothesizing the idea that consumers can basically divide into different and distinct groups (segments). From this study and also from previous studies, it emanates that as the segments of shopper differ significantly, it becomes pertinent for marketers to choose and ascertain a segment, which they would like to target. This helps them to prepare appropriate marketing strategies. Observing the different clusters, it can be said that attitudes towards online

shopping varies across different consumer segments. For some shoppers, availability of information on website is of utmost importance, whereas other segments may look for convenience and/or best deals. The members within the cluster also differ in their affinity towards factors like previous online experience, exchange and return policies, availability of personalised features etc. Hence, online retailers/marketers should carefully study these differences to be able to meet the e-shoppers' needs and wants and also to attract new prospective customers to shop at their sites.

CONCLUSION, LIMITATIONS AND FUTURE WORK

The foremost significant outcome of this study is the categorisation of four distinct segments of online shoppers, namely: Traditional Shoppers, Benefit Seekers, Convenience & Assurance Seekers and Information & Price Seekers. The paper also describes the unique profiles of each of the four segments based on their demographic characteristics. This can be of good use for distinctly positioning web portals and developing requisite marketing strategies. Based on the four cluster solution, useful management implications have been identified. The classification created provides the potential for a much closer fit between a company's offer and heterogeneous customer needs.

This study also notes that there is a lot of heterogeneity in the cyber-community. As a result, tailoring marketing activities to the needs and expectations of customers must take differences into consideration. For a global e-commerce player, this means that national websites should be designed with specific reference to the select market within those geographical units and should not necessarily provide an identical "look-and-feel" at all costs.

Future work should concentrate on direct comparative studies between developing and developed countries. As with all studies, the results shown have few limitations that limit the degree to which these results can be consistently generalised. Firstly, the data collection and analysis was limited to customer groups in India only. Future research could incorporate data from customer groups from different countries and regions to seek the extent to which these results are valid and generalisable. Secondly, the data was collected at one point in time, thus essentially from a fixed viewpoint. Future research should focus on conducting longitudinal studies of shopping motives to take into account the subtleties in consumer behavioural and attitudinal patterns. Another limitation of this study was that the associated cultural aspects was not taken into consideration; future research should include such aspects to examine the importance of such factors. Furthermore, future research may investigate how national factors such as internet penetration and infrastructure might affect online

users' attitude towards online shopping portals. Another limitation of the study is that potential biasness could have come up in the study, though care has been taken to avoid impact of any such biasness.

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