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Emergence of online shopping in India: shopping orientation segments

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Abstract

Purpose – This study aims to explore Indian online shopping via the concept of shopping orientations.

Design/methodology/approach – Surveys were collected from 536 consumer panel members. Online shopping segments were identified by using a two-step process that clustered respondents in terms of the similarity of their scores across four shopping orientations.

Findings – Three segments were identified: value singularity, quality at any price, and reputation/recreation. The quality at any price and reputation/recreation segments were the predominant online shoppers. Although their orientations toward shopping differed, their behaviour, web site attribute ratings, and demographics were very similar except for occupation (managerial versus clerical, respectively). The finding that the value singularity segment is not the pioneer online shopper in India contrasts with the early online shoppers in the USA, who were often motivated by price.

Research limitations/implications – This is the first empirical study to use shopping orientation research in the Indian marketplace. It is also among the first to link shopping orientations with a wide complement of correlates. Research should continue to track the development of this emerging market.

Practical implications – Besides revealing that the orientations of Indian consumers are not price-based, the relatively unfractionated factor analysis solutions for shopping orientations and web site dimensionality suggest that, in the emerging Indian economy, consumer conceptualizations of shopping have not yet undergone full elaboration. Thus, this cross-sectional study could be extended with longitudinal research to reveal how Indian consumers' perceptions of the marketplace change with market development and growing consumer sophistication.

Originality/value – Although online shopping in India is on the verge of rapid growth, relatively little is known about most aspects of Indian consumer behaviour. This study begins to build a foundation of knowledge of Indian online shopping.

Keywords Online shopping, Shopping orientation, Segmentation, Consumer behaviour, Cluster analysis India

Paper type Research paper

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Introduction

There are many factors that point toward the potential for rapid growth of online shopping in India. With a $1.29 trillion GDP growing at an annual rate of 8.4 percent, India is one of the fastest growing economies in the world and the world's fourth largest economy in purchasing power parity with a GDP of approximately $3.36 trillion (World Bank, 2010). These growth projections certainly hold true for the retail sector of the Indian economy (Srivastava, 2008). In terms of education, India annually produces 2 million college graduates including approximately 200,000 engineers and 300,000 technically qualified graduates. The government of India has been heavily promoting investment in the telecom sector in recent years with the number of telephones increasing from 55 million in 2003 to 621 million in 2010. During the same period, broadband subscribers grew from .2 million to 8.8 million. Penetration of the internet, however, is comparatively lower at 6.9 percent of the population in 2009 compared to the world average of 26.8 percent (Internet World Stats, 2010), pointing to growth potential in the Indian market. Electronic payment in India is also steadily increasing thanks to a large young population with growing disposable incomes. The growing popularity of e-payment in India is abetted by increasing adoption of financial cards. Although card payment and electronic transactions accounted for only 6 percent of total consumer payment transactions in India, the number of financial cards in circulation in India rose from 51 million in 2004 to 240 million in 2009 (Euromonitor International, 2010). This, too, points toward substantial growth potential. In terms of internet shopping, a study shows that 78 percent of the Indian respondents have made online purchases and 55 percent have made at least one online purchase in the past one month (Comiskey, 2006). There is evidence that the current economic crisis encourages online shopping as more and more Indian shoppers are motivated to compare prices among retailers (Ravichandran, 2009). Another factor leading to growth in online shopping is the joint initiative between a number of state owned banks and the Indian Railways to passengers to transact ticket purchases online. Online shopping growth also overcomes weaknesses in the country's retail supply chain (Nair, 2006). There is also evidence that online transactions are increasing in the smaller cities as a result of their less developed marketing and distribution infrastructure. Although the top six cities have 60 to 70 percent of Fabmall's business in 2001, today their share has shrunk to 20 percent (Nair, 2006). In order to tap the growing online market, sellers need to more fully understand Indian consumers. Shopping orientation research played a crucial role in helping to understand consumers and the emergence of US catalog retailing a generation ago (Gehrt and Carter, 1990) and online shopping more recently (Rohm and Swaminathan, 2004). It has also enhanced our understanding of the nature of online shopping orientations in different countries (Gehrt *et al.*, 2007).

Purpose of study

Although internet retailing in India is on the verge of rapid growth, relatively little is currently known about Indian non-store shopping behavior in general and Indian online shopping in particular. The purpose of this study is to fill that knowledge gap by exploring Indian shopping orientations and how they relate to online shopping. This is done by first identifying shopping orientation-defined segments in a two-step process. The study then moves beyond much of the shopping orientation research by profiling the shopping orientation segments in terms of web site characteristic

importance using a validated web site characteristic scale. The study also profiles the segments in terms of online shopping behavior and demographics. By examining this complement of correlates, the research provides a foundation of understanding of Indian shopping in general and online shopping in particular. The results of this study also provide an opportunity to compare the nature of shopping orientations in a less developed market to results from previous research in more highly developed markets.

Literature review

Indian consumer research

There is very limited empirical research focusing on Indian online shopping. One recent study showed that accurate information about product features, product warranties, avenues for customers' feedback complaints, and certification of the web sites are factors that affect online shopping confidence among Indian consumers (Kiran *et al.* 2008). Another study showed that a variety of demographic indicators were related to grocery store choice (Prasad and Aryasri, 2011). Indian consumers were found to be more willing to disclose personal information on the internet compared to US consumers (Gupta *et al.*, 2010). Web sites that adapt to Indian culture were shown to be more favorably perceived in a study conducted by Singh *et al.* (2006). Web sites that were more culturally congruent were rated more favorably on navigation, presentation, purchase intention, and attitude toward the site. From a larger perspective, researchers have asserted that it is possible that cognitive abilities differ in cultures like India where choice is constrained because the economies and marketplaces are still developing (Mahi and Eckhardt, 2007). Cognitive abilities are likely to expand and perceptions are likely to become more elaborated as the marketplace and concomitant choices expand.

Shopping orientation research

A consumer's approach to the act of shopping is referred to as shopping lifestyle or shopping orientation. The basic premise of shopping orientations is that people take many different approaches to the act of shopping. Thus, this type of analysis determines the variety of shopping styles that individuals adopt and how these styles relate to purchase intentions. Shopping orientations are usually studied by using factor analytic techniques to identify latent patterns among subjects' responses to AIO (activities, interests, and opinions) statements and are interpreted by summarizing the individual statements that load on each orientation. In addition to the powerful insight gained from interpreting shopping orientations, the use of correlational methods to characterize consumers with respect to factors in addition to shopping orientations can provide further insight. Studies have characterized shopping orientations with respect to demographics (Jayawardhena *et al.*, 2007; Sproles and Sproles, 1990), preferences for information sources (Moschis, 1976), preferences for retailer types (Shim and Drake, 1990), and retailer attribute importance (Lumpkin and Hawes, 1985). There is somewhat limited research involving shopping orientations outside of the USA except for studies such as those conducted in the UK (Jayawardhena *et al.*, 2007), France (Gehrt and Shim, 1998), Japan (Gehrt *et al.*, 2007), and Taiwan (To *et al.*, 2007).

Non-store shopping research

The early non-store research was aimed at developing a demographic profile of catalog shoppers (Gillett, 1970). Later, psychographic (Korgaonkar and Wolin, 1999) and motivational (Jasper and Ouellelte, 1994) profiles were investigated. Other studies examined attitudes toward non-store shopping (Bickle and Shim, 1993). Beginning in the mid 1990s, research concerned with online non-store shopping commenced. The research began to investigate demographic profiles of online shoppers. Weber and Roehl (1999) found that people who sought information by using the internet had higher educational, occupational, and income levels. Donthu and Garcia (1999) and Lian and Lin (2008) investigated online shoppers' demographics; the former went on to investigate online shopping orientations. In terms of shopping orientations, they found that online shoppers were likely to be convenience, impulse, and variety-seeking oriented. In another study of online shopping orientations, Rohm and Swaminathan (2004) found convenience, variety, balanced orientations, as well as a group that did not care for Internet shopping. Jayawardhena *et al.* (2007) found that orientations, including convenience, were not related to online shipping intentions in a study of UK subjects. To *et al.* (2007) found that utilitarian motives positively affected search and purchase behavior. Hedonic motives, while affecting search behavior, only indirectly affected purchase behavior. Several studies revealed that convenience was an important motivational factor behind online shopping (Meuter *et al.*, 2000). Studies have also demonstrated how the product affects online behavior. A study by Chiang and Dholakia (2003) showed that online shopping is more prevalent for search goods rather than experience goods and To *et al.* (2007) showed differences between specific product categories.

Web site design and attributes in online shopping

Wolfinbarger and Gilly (2001) introduced the concept of goal focused online shopping which views online shopping as convenient and accessible, providing rich information, offering extended selection and inventory without contact with others. In an empirical study they identified the dimensions of web site design (usability, information availability, product selection, and appropriate personalization), fulfillment/reliability, customer service, and privacy/security (Wolfinbarger and Gilly, 2003). These factors provide a competitive edge to retailers who are sensitive to goal-focused shoppers on their web sites. Wolfinbarger and Gilly's dimensions are consistent with the findings of other studies. Demangeot and Broderick (2010) provide corroborating evidence that web site design, in the form of usability and information availability, are key factors for online retailers. Likewise, in a study of online shoppers at over 1,000 e-tailers, Dholakia and Zhao (2010) identify the dominating effect of fulfillment on online satisfaction. Customer service, in the form of post-sales service, emerges in a study by Liang and Lai (2002). And web site privacy and security emerge in numerous studies as having impact on online patronage outcomes (Hahn and Kim, 2009; Kaul *et al.*, 2010; Zhou and Tian, 2010). Fulfillment emerged as an arguably singular web site determinant of online purchase intentions in India,

Methodology

Questionnaire development

The starting point for questionnaire development was past non-store shopping orientation research. Two focus group interviews, each conducted with ten Indian

citizens, were used to identify needs for item adaptation and item additions. A total of 39 shopping orientation statements resulted. They were measured on a six-point Likert scale ranging from "strongly disagree" to "strongly agree." An even number scale was employed since Indian respondents tend toward neutral opinions. To measure sensitivity to web site characteristics, Wolfinbarger and Gilly's 20-item scale was utilized, also using a six-point scale. Online purchase behavior in general and across nine merchandise categories was also measured as well as personal characteristics such as age, income, education, occupation, and gender. A total of 25 Indian subjects were used to pretest the questionnaire. Only minor modifications were necessary.

Data collection

Since online shopping is not yet widespread in India, a data collection procedure that tends to over-sample online shoppers and potential shoppers was selected (Gehrt *et al.*, 2007); thus, an online survey method was chosen. The high cost of computers and internet access relative to the purchasing power and the requirement of English language proficiency to understand and use majority of the online content has created this digital divide. As Keniston (2004) states, "Who are the 'connected' in India? Obviously, as a group, they are a small, rich, successful and English-speaking minority." Our sample reflects this digital divide with a preponderance of subjects more likely to have Internet access. A total of 2500 subjects were randomly contacted from a reputable research company's validated, opt-in panel of online respondents. 840 responded yielding 536 fully completed responses for a 21 percent response. The sample tended to be relatively young (49 percent $<$ 30; 33 percent 30-39), upscale (65 percent college degree), with ample Internet experience (85 percent $>$ 1 year Internet experience). The upscale nature of the sample is also confirmed by the fact that 99 percent of our sample fits into the three highest categories of the five-tier, Indian socio economic classification.

Data analysis

The analysis involved several procedures. Factor analysis was used to identify underlying shopping orientation themes. Cluster analysis was then used to identify segments of respondents who shared similar profiles across the shopping orientations. Factor analysis was also used to identify key web site dimension factors. Finally, appropriate statistical analyses were used to characterize the clusters in terms of web site attribute importance, online shopping behavior, and demographics.

Factor analysis: identifying shopping orientations

Responses to the 39 shopping orientation statements were factor analyzed. Measures examined to determine the number of factors to interpret were the percentage of variance explained and eigenvalues. Statement loadings on a factor that are greater than greater than 0.50 are considered moderately meaningful, and greater than 0.70 highly meaningful (Hair *et al.*, 2010). Varimax extraction was chosen due to its tendency to provide an easily interpretable factor matrix (Kim and Mueller, 1982). Orthogonal rotation was chosen because the factor matrix was to be subjected to subsequent data analysis (Hair *et al.*, 2010). Cronbach's alpha was computed to assess the reliability of each factor.

Factor analysis: identifying web site dimensions
Responses to the 20 web site attribute statements were factor analyzed. The procedure paralleled that of the shopping orientation factor analysis.

Cluster analysis: identifying shopping orientation-defined segments
Cluster analysis was used to identify Indian shopping orientation-defined segments. Cluster analysis is a procedure that is appropriate for grouping objects (respondents) into groups (segments) so that there is intra-group homogeneity and inter-group heterogeneity with respect to the criterion variables (factor/shopping orientation scores). Quick cluster, a non hierarchical cluster algorithm, overcomes the shortcoming of other non hierarchical algorithms by selecting initial cluster centers with well separated values, unlike algorithms that rely on random initial assignment. This results in greater cluster solution stability (Hair *et al.*, 2010). Cluster solution validity is enhanced by the fact that non hierarchical algorithms are not affected by outliers to the extent that hierarchical algorithms are (Hair *et al.*, 2010). The procedure is also suitable for large data sets.

Characterizing the segments
Depending on the nature of the dependent variables, various statistical tools were used to profile the shopping orientation-defined segments in terms of shopping behavior, online behavior, and demographics. The procedures were possible because the orthogonal rotation results in a factor solution in which shopping orientations are uncorrelated.

Results

Factor analysis: shopping orientations
Factor analysis of the 39 shopping orientation statements yielded four factors/shopping orientations with an eigenvalue > 1.00 on which three or more statements loaded at > 0.50. Twenty-three of the statements came into play as shown in Table I. The procedure yielded factors with Cronbach coefficient reliabilities ranging from 0.81 to 0.86 (above the minimum recommended 0.70 critical value) with 64 percent of variance explained (above the minimum recommended 60 percent critical value (Hair *et al.*, 2010). The solution's KMO measure of sampling adequacy was 0.939, with measures > 0.90 being considered at the highest standard. Bartlett's test of sphericity was 9643 ($df = 666$) which was significant at the 0.000 level, indicating that the assumption of multivariate normality was met (Norusis, 2004). Table I shows that interpretation of the shopping orientation factors was straightforward. They included price, quality with convenience, recreational, and reputation with convenience orientations.

Value orientation. Of the seven statements that load on the first factor, the first four suggest a "value orientation" relating to either value or price. These included "I look carefully to find the best value for the money", "I am able to find quality products at many different types of retailers", "Even for small items I check the prices", and "Spending excessive amounts of money on merchandise is ridiculous". The Cronbach reliability coefficient for the Value Orientation was .84 and the factor explained 18.6 percent of the variance.

Shopping orientation	Value	Quality/ Conven	Recreation	Reputation/ Conven
Reliability	0.835	0.859	0.809	0.827
Quality products at many different retailers	0.671			
Best value for the money	0.666			
Even for small items, I check the prices	0.658			
Spending excessive money is ridiculous	0.601			
I like products retailer's name	0.549			
I try to avoid hassles when I shop	0.548			
I plan my purchases carefully	0.518			
I usually buy products at the most convenient		0.664		
Expectations for products very high		0.664		
Attractive styling is important to me		0.656		
Enjoy trying different brands		0.618		
Shop at stores that simplify my shopping		0.557		
Good quality products, use them for long time		0.527		
Unique merchandise is important to me		0.501		
Shopping is favorite leisure time activities			0.767	
I enjoy shopping			0.652	
I shop around a lot to find bargains			0.581	
My intention is to browse, I sometimes purchase			0.504	
Retailers provide up-to-date merchandise			0.500	
Purchases from retailers that are conveniently designed				0.673
Buy products carrying well-known brands				0.668
Buy from an unfamiliar retailer if they carry well-known brand				0.648
I prefer retailers that allow me to shop anytime				0.540

Table I.
Shopping orientation factors

Quality with convenience orientation. The seven statements that load on the second factor suggest a "quality with convenience orientation". The orientation includes statements that clearly reflect a convenience theme (i.e. "I usually buy products at the most convenient shops" and "I shop at stores that allow me to simplify my shopping") as well as others that just as clearly suggest a quality theme (i.e. My expectations for the products I buy are very high" and "When I buy good quality products, I can use them for a long time"). Despite the presence of two themes, the Cronbach reliability coefficient for the quality with convenience orientation was 0.86 and the factor explained 14.4 percent of the variance.

Recreational orientation. Five statements loaded on the "recreational orientation" including "Shopping is one of my favorite leisure time activities", "I enjoy shopping", and "When my intention is to merely browse, I sometimes end up making a purchase". The recreational orientation had a Cronbach reliability coefficient of 0.81 and the factor explained 12.6 percent of the variance..

Reputation with convenience orientation. There were four statements that loaded on the "reputation with convenience orientation". These included "I make purchases from retailers that are conveniently designed" and "I prefer retailers that allow me to shop anytime", reflecting a theme of convenience. The other two statements included "It is important for me to buy products carrying well-known brands" and "I may be willing

to buy products from an unfamiliar retailer if they carry well-known brands". This reflects reputation via brand name in the first case and store name in the second. Again, despite the presence of two themes, the Cronbach reliability coefficient for the reputation with convenience orientation was 0.83 and the factor explained 9.6 percent of the variance.

Factor analysis: web site dimensions

Factor analysis of the 20 web site statements yielded two factors/web site dimensions with an eigenvalue > 1.00 on which three or more statements loaded at > 0.50. Of the 20 statements, 15 came into play as shown in Table II. The solution's KMO measure of sampling adequacy was 0.958, above the highest standard. Bartlett's test of sphericity was 8050.296 (df = 105) which was significant at the 0.000 level, indicating that the assumption of multivariate normality was met (Norusis, 2004). Table II shows that interpretation of the web site dimensions was straightforward. They included web site responsiveness and security and web site design and product assortment. Similar to two of the shopping orientations, despite two themes emerging for each web site dimension, the dimensions had high Cronbach reliability coefficients (0.95 and 0.93, respectively) with 74 percent of variance explained. For web site responsiveness (38.2 percent of variance explained), the three highest loading statements relate to the efficiency and effectiveness of response to the consumer. Four of the remaining five statements relate to security issues. For web site design and products (35.8 percent of variance explained), the three highest loading statements relate to web site design (atmospherics, user friendliness, informativeness) while the remaining four relate to product assortment.

Cluster analysis: shopping orientation-defined segments

Cluster solutions of two through five segments were generated. The solutions were evaluated on the basis of:

Web site dimension Reliability	Security, responsiveness 0.95	Design, assortment 0.93
The web site responds well to customer needs	0.815	
Inquiries are handled promptly	0.813	
The web site is committed to solving customer problems	0.812	
The web site has adequate security measures	0.788	
I feel safe using my credit card on the web site	0.781	
Inquiries are handled in a satisfactory manner by the web site	0.729	
The web site protects my privacy	0.705	
I must feel safe making purchases on the web site	0.686	
The web site has good atmospheric qualities		0.829
The web site is very user-friendly		0.819
The web site provides informative information		0.805
The web site provides unique products		0.765
The web site provides good product selection		0.760
The web site provides desirable brands		0.733
The web site provides high-quality products		0.720

Table II.
Web site attribute factors

- the significance of the multivariate F-ratios of the shopping orientation-defined cluster solutions;
- the significance of the four univariate F-ratios for each of the shopping orientations per cluster solution;
- the percentage of pairwise differences that were significant (all cluster pairs for each of the four factors/shopping orientations) (Scheffe's test); and
- interpretability of cluster centroids.

The two-, three-, four-, and five-cluster solutions all had multivariate F-rations significant at < 0.0001. They all also had significant univariate F-ratios for all four of the shopping orientation factors. The three- and four-cluster solutions were tied for the highest percentage of significant pairwise differences (83.3 percent). The three-cluster solution was finally selected due to the clear interpretability of the solution (Table III).

Value singularity segment. The first of the three segments had a positive cluster centroid on only one factor, the value orientation (0.28). The quality with convenience (− 0.32), recreational (− 0.62), and reputation with convenience (− 0.64) Orientations all had negative centroids for the value singularity segment (Table III). This suggests a segment of shoppers that is positively motivated by only issues related to value with little attention paid to other considerations. A total of 187 of 536 valid cases belonged to this segment.

Members of the value singularity segment have spent the least money online and are the least likely to make an online purchase next year. They tend to be older and have less experience using the Internet (Table IV). Like members of the other segments, they somewhat value web site security. Web site design and assortment, however, is uniquely less important to them (Table V). What is spent online is likely devoted to utility bills, travel, CDs/videos/DVDs, and books (Table VI). The profile of the value singularity segment suggests that, if pursued, a relatively large amount of development effort will need to be devoted.

Quality at any price segment. In contrast to the value singularity segment for which the value orientation was the only positive influencer, the quality at any price segment had the only negative centroid for the value orientation (− 0.64), indicating little regard for matters related to value. The segment also had the only positive centroid for the quality with convenience orientation (1.01). With low absolute values on the other two centroid scores, value and quality with convenience are the prevalent concerns for this segment of shoppers (Table III). The quality at any price segment was the smallest of the three with 130 of 536 valid cases assigned.

Members of the quality at any price segment tend to be young, experienced internet users. Almost two-thirds made four or more purchases online in the past year. The majority have been using the Internet for five or more years. Of the three segments, this

Table III.
Cluster centroids

	Value singularity	Quality at any price	Reputation/recreation
Value orientation	0.28	− 0.64	0.15
Quality orientation	− 0.32	1.01	− 0.33
Recreational	− 0.62	0.12	0.46
Reputation recreation	− 0.64	− 0.12	− 0.62

Group (percentage)	Value singularity	Quality at any price	Reputation/ recreation	Total	Chi-Square
Online spending (past year)					
Less than 20,000	41	34	35	37	12.2*[a]
20,000-40,000	40	35	31	35	(df = 4)
40,000 and above	19	31	34	28	
Online purchases (past year)					
Less than 4	45	36	41	41	3.8
4-6	33	34	31	32	(df = 4)
7 and above	22	29	29	26	
Likelihood of online purchase next year					
Low	7	8	6	7	17.5**[a]
Medium	61	40	47	50	(df = 4)
High	31	52	47	43	
Hours spent online (monthly)					
Less than 10	11	12	18	14	4.1
10-30	32	32	28	30	(df = 4)
30 and above	57	56	55	56	
Internet experience					
1 year or less	16	10	8	11	17.9**[a]
2-4 years	42	33	29	35	(df = 4)
5 or more years	42	57	63	54	
Age					
Under 30 years	38	53	49	46	14.2**[a]
30-39 years	36	32	37	35	(df = 4)
40 years and older	26	15	14	19	
Education					
High school or lower	4	3	5	4	8.2[b]
Vocational school and two-year college	61	54	48	54	(df = 4)
Four-year college and above	34	43	47	42	
Occupation					
Student/housewife	15	12	19	16	12.9*[c]
Clerical/factory/customer service	34	34	44	38	(df = 4)
Management/professional/self-employed	52	54	37	47	
Income (annual)					
Less than 3,500,000	17	12	10	13	3.7
3,500,000-6,500,000	68	73	73	71	(df = 4)
6,500,000 and above	16	14	16	16	

Notes: Significance level for Chi-Square test of any difference in means: * $p < 0.05$; ** $p < 0.01$; [a] The value singularity group differs from the other two groups at the 5 percent level; [b] The value singularity group differs from the reputation recreation group at the 5 percent level; [c] The reputation recreation group differs from the other two groups at the 5 percent level

Table IV.
Chi-Square analysis of internet usage and socioeconomic variables

Group (percentage)	Value singularity	Quality at any price	Reputation/recreation	Total	Chi-Square
Web site security and responsiveness					
Low	12	9	7	9	5.4
Medium	61	59	57	59	(df = 4)
High	27	32	36	32	
Web site design and assortment					
Low	36	18	11	22	39.1*[a]
Medium	42	51	54	49	(df = 4)
High	22	31	35	29	

Table V.
Chi-Square analysis of importance of web site attributes

Notes: Significance level for Chi-Square test of any difference in means: * $p < 0.001$; [a] The value singularity group differs from the other two groups at the 5 percent level

is the only one to have a majority of members less than 30 years old, also 43 percent have four years of college and most have management/professional positions or are self-employed (Table IV). Online purchases are likely to involve utility bills, travel, CDs/videos/DVDs, and consumer electronics (Table VI). Thus, the product categories that they purchase online are similar to the value singularity segment; this segment, however, has a higher propensity to purchase those products online.

Reputation/recreation segment. The third segment is noteworthy for having the only positive centroid for the reputation orientation (0.62). The segment also had a relatively high positive value for the recreation orientation (0.46) (Table III). These values suggest that the segment enjoys evaluating products via the extrinsic attributes of store and brand name. A negative coefficient on the quality orientation (−0.33) suggests that intrinsic attributes are not important. The segment was the largest of the three segments with 219 of 536 cases assigned.

The reputation recreation segment consists of consumers who spend as much money online as members of the quality at any price segment but who tend to come from a different segment of the workforce. Fewer members of the segment are in management positions. Rather, 44 percent are in clerical/factory/customer service positions. They tend to be somewhat young (86 percent are under 40) and well educated (47 percent have a four-year college degree) (Table IV). Members of the segment are much more likely than the members of the other segments to purchase computer hardware, software and peripherals online and to make purchases of clothing and accessories. They are also likely to make travel related purchases and pay their utility bills online (Table VI). Many of them also plan to purchase CDs/Videos/DVDs online.

Discussion and implications

Identification and description of online segments

This is the first study to empirically investigate online shopping orientations in the Indian marketplace. It is also the first study to examine the relationship between shopping orientations and a validated scale of web site attribute importance. The study identifies three shopping orientation segments and then goes on to profile each. The analyzes suggest that there are two segments ready to be tapped in the Indian online

Group (percentage)	Value singularity	Quality at any price	Reputation/recreation	Total	Chi-Square
Clothing/accessories					
Low	32	23	32	30	42.1***d
Medium	60	54	36	49	(df = 4)
High	8	23	32	22	
CDs/videos/DVDs					
Low	47	24	21	31	41.6***a
Medium	27	39	31	31	(df = 4)
High	25	37	48	38	
Books					
Low	25	15	17	20	22.6***a
Medium	54	48	40	47	(df = 4)
High	21	37	42	34	
Computer hardware, software, and peripherals					
Low	23	25	21	23	35.8***d
Medium	63	51	40	51	(df = 4)
High	14	24	39	27	
Home furnishings					
Low	38	36	32	35	11.2*b
Medium	53	49	47	50	(df = 4)
High	9	16	21	15	
Travel related					
Low	25	12	16	18	23.8***a
Medium	43	36	29	36	(df = 4)
High	32	52	55	46	
Fashion jewelry					
Low	39	37	36	37	17.9**a
Medium	51	38	39	43	(df = 4)
High	10	25	25	20	
Consumer electronics					
Low	28	18	25	24	12*a
Medium	52	47	42	47	(df = 4)
High	21	35	33	30	
Utility bill (make payment for)					
Low	15	13	22	18	11.2*b
Medium	39	32	25	32	(df = 4)
High	46	55	53	51	

Notes: Significance level for Chi-Square test of any difference in means: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$; [a] All pairs of groups differ at the 5 percent level; [b] The value singularity group differs from the other two groups at the 5 percent level; [c] The value singularity group differs from the reputation recreation group at the 5 percent level

Table VI.
Chi-Square analysis of likelihood of online purchases in the next year

shopping market; the quality at any price segment and the reputation/recreation segment. The segments' internet usage patterns and online shopping patterns are very similar. Where they differ is in the shopping orientation defined motivations and in some of the products that they are inclined to purchase.

For the quality at any price segment, price appears to be a relatively unimportant deterrent to acquiring quality. These young professionals tend to purchase travel, utilities, electronic media, and consumer electronics. The reputation/recreation segment is interested in acquiring name brands, conveniently, and derives enjoyment from the act of shopping. This young, blue collar/clerical/service industry segment is well educated. They tend to purchase a wide array of computer-related items, clothing and accessories, as well as the categories that cut across the three segments, travel, utilities, and electronic media.

These two segments represent India's pioneer online shoppers and contrast with US pioneer online shoppers who were substantially motivated by price issues (Maguire, 2005). Although the value singularity segment's online buying profile is low at this point, they certainly show some interest. Online sellers may rely on the diffusion of innovation process to bring these consumers on board. The results show that the motivational appeal that might be used to speed along their adoption process is the value appeal.

Marketplace conceptualization in an emergent economy

This is the first study to provide empirical evidence for Mahi and Eckhardt's (2007) assertion that the dimensionality of the shopping orientation phenomenon may be simpler in developing markets. The factor analytic shopping orientation solution for this sample of Indian consumers is decidedly simpler than similar analyzes in highly developed markets in terms of the number of shopping orientations as well as the nature of each shopping orientation. Likewise, the factor analytic solution of the web site attribute phenomenon was decidedly simpler in terms of the number and nature of attributes.

With respect to shopping orientations, Gehrt *et al.* (2007) used a virtually identical scale for an analysis of Japanese consumers and arrived at a solution of seven factors, each with very consistent themes. Thus, the Indian consumer's conceptualization of the marketplace, immersed in an emerging economy, has not yet fully expanded with respect to their marketplace experience and their perceptions have not yet become as fully elaborated as they are likely to once their marketplace experience deepens and marketplace choices expand. Not only did fewer factors emerge but the Indian shopping orientation factors did not have the consistency of theme seen in research conducted in more developed economies; thus, the nature of the Indian orientations is noteworthy. This might lead one to suspect a measurement issue; the reliability coefficients, however, for the four shopping orientation factors were quite high, ranging from 0.81 to 0.86.

With respect to web site attributes, the factor analytic solution is also much simpler. Wolfinbarger and Gilly's (2003) analysis of perceptions of important web site attributes yielded four dimensions; this study yielded only two:

(1) web site responsiveness; and

(2) web site design and products.

And, again, the factors for this study had very high reliabilities (0.95, 0.93) but did not have the singularity of theme seen in Wolfinbarger and Gilly's (2003) research which was conducted in the USA, a highly developed economy, adding additional empirical support for the assertion of Mahi and Eckhardt (2007).

Limitations and future research

This research relied on a subject pool that was relatively upscale. Although this is deemed appropriate in order to do a meaningful evaluation of consumer response to emerging innovations, future research should examine broader subject pools as online shopping is adopted by increasing numbers of Indian consumers in the years ahead.

It is also important to note that India currently lags in terms of credit cards held so there may be some limits to online shopping potential although evidence shows that those limits are abating. Online shopping trajectory will benefit in the years to come, however, due to government support for encouraging credit card availability (Manshu, 2010), projections for a 13 percent increase in credit card issued from 2011 to 2014 (RNCOS, 2010), and a stunning 31 percent increase in debit cards held from 2008 to 2009 (Schulz, 2011). Thus, at a minimum, there is tremendous potential for growing use of credit cards in India which will play an important role in the future of Indian online shopping.

Future research should also include comparative studies. Direct comparisons between emerging economies such as India and highly developed economies such as the USA will reveal the marked differences that exist and provide perspective both within one's domestic market as well as between markets. Even comparisons between similar, emerging markets such as India and China will be of benefit in the same way that comparisons between highly developed marketplaces can reveal important differences (Gehrt *et al.*, 2007). Rather than revealing the marked differences, knowledge here will accrue as a result of the subtle differences that are revealed.

The emerging Indian economy offers an excellent opportunity for longitudinal research. This was, of course, possible several years ago in the developed markets. But since scale development has proceeded considerably since the onslaught of online purchasing in many developed economies, the knowledge gained by administering these scales in developing economies could be very beneficial.

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