



A study on effect of retail web site factors on customers' attitude

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Abstract

Retail web site effectiveness can be judged by examining attitude towards retail website. Researches show that it is positively related to attitude toward the brand and purchase intent (Brimer and Kumar 2000), increase shopping and loyalty towards website (Donthu 2001). Chen and Wells (1999) propose Ast as a general measure of attitude toward a web site. They validate Ast using various sites, including retail sites, and they suggest that Ast can serve a predictive purpose similar to A-ad (MacKenzie, Lutz, & Belch 1986; Brown & Stayman 1992). Attitude toward a retail web site is our dependent variable. We hypothesize that consumer attitude toward a retail web site is favorably strengthened by the six web site characteristics (e.g., ease of use, product information, entertainment, trust, customer support, and consistency). Present study uses sample of 350 respondents from NCR in order to study the effect of retail website factors on customers, attitude.

Key words: Web Aesthetics, Ease of Use, Product information, Trust, Customer Support, Consistency

Introduction

Web Site Factors

We consider four web site factors that have been widely researched ease of use, product information, entertainment, and trust and two that have received less attention but may still be important for retail web sites customer support and consistency of the site.

Web Aesthetics

In his study on atmospherics, Kotler (1973) stated it as a 'conscious designing of space to create specific effects on buyers'. Baker et. al (1994) found store aesthetics to be more persuasive than the marketing variables that are not available at the sales counter. Extending the concept of aesthetics to online shopping context, web aesthetics can be understood as 'conscious designing of web environments to create positive effects among users in order to increase favorable consumer

responses' (Dailey, 2004). According to Rayburn and Voss (2013), web aesthetics is similar to the conventional store aesthetics that offers vital data about the store and tends to affect shoppers' attitudes and outcomes. Hence, online retailers also must build an atmosphere through their website that can favorably influence consumers' perception of the online store and improve experience (Eroglu, Machleit, & Davis, 2003).

Reviewing the literature on online buying behaviour reveals that studies have used different features to describe the web aesthetics (Hausman & Siekpe, 2009; Ranganathan, 2012). Mummalaneni (2005) has included features such as the layout of website, display fonts (large or small), display quality (good or bad), display colors and color combinations, and so on.

Ho₁: There is no significant impact of Web Aesthetics on customers' attitude.

Ease of use means uncluttered screens, clear organization, logical flow, and simplicity of navigation, in short, a web design that encourages one's productive and effective use of the site. Ease of use should upgrade capacity to handle product and purchase information, reduce cost of enquiry, allow quicker search, increase probability of an effective search, and increase attitude toward the website. A few researches report a positive relationship between ease of use and attitude toward a web site (Chen and Wells 1999; Stevenson, Bruner, and Kumar 2000; Kwon, Kim, and Lee 2002; Bellman and Rossiter 2004). Ease of use additionally seems to build site credibility (Fogg et al. 2001), attitude to online shopping (Jarvenpaa and Todd 1997; Vijayasarathy and Jones 2000), intention to shop online (Limayem, Khalifa, and Frini 2000; Lynch, Kent, and Srinivasan 2001), level of online shopping (Winn and Beck 2002), and satisfaction with online shopping (Szymanski and Hise 2000; Yang, Peterson, and Huang 2001).

Ho₂: There is no significant impact of Ease of use of website on customers' attitude

Product information incorporates the amount, exactness, and form of information about the products/ items and services offered on a web site. Since e-buyers cannot look at an item, they rely on information to identify, compare, and finalize items. Online information includes content, tables, diagrams, photographs, sound, and video. Better product information should enable online customers to settle on better choices, feel more certain about their choices, increase satisfaction with the shopping experience, and enhance attitude toward a website. A few researches report a positive association between product information and attitude toward a web site (Chen and Wells 1999; Donthu 2001; Kwon, Kim and Lee 2002). Product information also contribute to increase attitude to online shopping (Vijayasarathy and Jones 2000), amount of online shopping (Kwak, Fox and Zinkhan 2002), online spending (Bellman, Lohse, and Johnson 1999; Korgaonkar and Wolin 1999), and sense of fulfillment with online purchases (Szymanski and Hise 2000).

Ho₃: There is no significant impact of product information on website on customers' attitude.

Entertainment covers all web site components that increase delight and enjoyment while using a site. These include tangible and hedonic boosts, similar to shading, music, activity, and

interactivity. Site designs that promote dream or tension can likewise provide entertainment, as might games, puzzles, streaming video, and virtual visits. Like traditional customers, e-buyers ought to favor encounter that create positive sentiments. Previous researches propose that entertainment-related components (vividness, aesthetically pleasing design elements, and engaging material) are positively related to attitude to a web site (Chen and Wells 1999; Coyle and Thorson 2001; Donthu, 2001; Kwon, Kim, and Lee 2002; McMillan, Hwang and Lee 2003). Entertainment also appears to increase attitude to online shopping (Jarvenpaa and Todd 1997; Vijayasarathy and Jones 2000), intention to shop online (Lynch, Kent, and Srinivasan 2001), frequency of online purchases (Korgaonkar and Wolin 1999), and e-loyalty (Childers et al. 2001).

Ho₄: There is no significant impact of Entertainment on customers' attitude.

Trust is very crucial factor for financial transactions. Many e-shoppers have a state of fear that their individual information will be misused, that undesirable cookies will be planted, and that perpetual spam will descend upon them from internet. Seventy-one percent of US web users doubt online merchants (Pew Foundation 2003). According to Chen and Dhillon (2003), the site factors that drive trust most are likability, credibility, situational normality, and structural assurances. Likability and credibility are notable from the sales and advertising writing. Sites accomplish situational normality by embracing an "professional/expert look" (the web's version of a business suit). Structural assurances covers merchandise exchanges, security policies, privacy policies, and third party conformations. These arrangements and assurances suggest that a seller is reliable. If retailers neglect to provide them, customers will probably leave without completing a transaction. Zeithaml, Parasuraman, and Malhotra (2002) and Chen and Dhillon (2003) suggest that trust is an important dimension for retail web sites. Donthu (2001) reports that trust is related to attitude toward a web site. Trust also appears to increase attitude to online shopping (Jarvenpaa and Todd 1997), intention to shop online (Limayem, Khalifa, and Frini 2000; Vijayasarathy and Jones 2000), intent to purchase online (Lynch, Kent, and Srinivasan 2001), level of online shopping activity (Korgaonkar and Wolin 1999; Miyazaki and Fernandez 2001), e-service quality (Yang and Jun 2002), and e-customer satisfaction (Szymanski and Hise 2000).

Ho₅: There is no significant impact of Trust on website on customers' attitude

Customer support supplements ease of use. Both elements support the shopping procedure (search, examination, choice, decision, and following). But while ease of use includes design components that directly support the process, customer support has to do with unforeseen resources that are drawn upon only when ordinary shopping processes are not found adequate. Similarly, in-store customers search for assistance from salespeople or other customers when something blocks their shopping process. We propose that online customer support assumes a comparative part. It allows disrupted e-shoppers to continue shopping. This use of customer support is similar to the definition of "recovery service" proposed by Zeithaml, Parasuraman, and Malhotra (2002). It is uncertain if great client support would really improve attitude toward a site

or just reduce the probability dissatisfaction, disappointment and unfavorable attitudes. That may rely on whether the support provided just meets or surpasses one's expectation. In either case, customer support is associated with a stronger attitude to the site. Jarvenpaa and Todd (1997) reports that customer support positively affects intention to shop online. Srinivasan, Anderson, and Ponnnavolu (2002) finds that customer support positively effects online customer loyalty Although increased intention to shop online and increased customer loyalty imply a more favorable attitude toward a web site, no previous work specifically examines the relationship between customer support and attitude toward a retail web site.

Consistency implies that everything on a site is up-to-date and it is more than updated information. Consistency implies accuracy, an information dimension discussed by Yang, Peterson, and Huang (2001). It also helps to establish normality. That is, if a site looks up-to-date, it is assumed to be in proper order, a precondition for credibility and trust (Chen and Dhillon 2003). Consistency is more than refreshed information. It covers news, unique promotions, and declarations of coming events, anything that refreshes the content or appearance of the site. New page designs, new photographs and new features would all be able to flag a seller's sense of duty regarding remain updated. To remain effective, traditional retail establishments refresh their stocks and their shopping environments. Web content that affirms the updated status of the site should reinforce one's confidence in the site and reduce switching. Anything that raises doubt about site's consistency ought to reduce the vendor's perceived credibility and the shopper's attitude toward the site. Fogg et al. (2001) reports that consistency increases web site credibility, but no previous research expressly considers the effect of consistency on attitude toward a retail web site.

Based on our discussion of the relevant web site factors, we propose:

H₁ : Favorable consumer attitude toward a retail web site is strengthened by:

- a: Ease of use
- b: Product information
- c: Entertainment
- d: Trust
- e: Customer support
- f : Consistency

Objectives:

1. To identify the factors of retail website affecting the customer's attitude.

2. To study the impact of factors of retail website on the customers' attitude

Research Methodology

Research design:

Research design is an outline of what the researcher will do in his study. This study is based on empirical investigation. So the research design for the study is exploratory.

Sample design:

Census study is not possible because of limitation of time and financial resources. With these limitations, the sample has been drawn, so that it may represent entire population. Therefore, a sample of 350 respondents is taken from Delhi NCR (sonipat, panipat) who is involved into online shopping.

Data collection:

The data for this research was gathered from primary source. The primary data are derived from survey questionnaire. Survey questionnaire was used to obtain responses from participants.

Questionnaire design

The questionnaire for this research is divided into two parts – Section A and B. Section A of the questionnaire contains questions on the demographic profile such as respondents' age, gender, education level and monthly income. Section B of the questionnaire solicits responses on the key constructs of the research framework namely, Web Aesthetics, Ease of use, Trust, Product information, Customer Support, Consistency . The measurement items were adapted from previous studies and revalidated for this study. The measurement for 27 variables was based on a five-point Likert scale with scale anchors from “1” – strongly disagree to “5” – strongly agree.

Statistical tools used

For analyzing the data confirmatory factor analysis, stepwise regression and mean is used. Mean value of various factors and variables shows the importance of each factor and variable for measuring consumers' attitude.

Analysis and interpretation

Collected questionnaires are coded and entered in SPSS spreadsheet for analyzing the data. After entering the data confirmatory factor analysis and stepwise regression and mean are used for analyzing the data.

Factor analysis results: Factor analysis is a tool for reducing data. By applying factor analysis on the recorded responses following tables are prepared. Analysis of these tables is given below:

KMO and Bartlett's Test

| | |
|--|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .832 |
| Approx. Chi-Square | 5485.467 |
| Bartlett's Test of Sphericity Df | 351 |
| Sig. | .000 |

Source: Primary data

Value of KMO and Bartlett test tells the adequacy of sample size for factor analysis. Higher the value of KMO and Bartlett greater will be the reliability of factor analysis. The value of KMO should be greater than 0.5 for applying factor analysis. In this study value of KMO comes 0.832, considered as excellent. It means our sample size is adequate and factor analysis can be used for reducing data.

Table 3: Rotated Component Matrix^a

| Rotated Component Matrix ^a | | | | | | |
|---------------------------------------|-----------|------|------|------|------|------|
| | Component | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| S1 | | | | .620 | | |
| S2 | | | | .757 | | |
| S3 | | | | .773 | | |
| S4 | | | | .850 | | |
| S5 | | | | .817 | | |
| S6 | .756 | | | | | |
| S7 | .792 | | | | | |
| S8 | .797 | | | | | |
| S9 | .715 | | | | | |
| S10 | .778 | | | | | |
| S11 | .584 | | | | | |
| S12 | .704 | | | | | |
| S13 | | .762 | | | | |
| S14 | | .798 | | | | |
| S15 | | .865 | | | | |
| S16 | | .806 | | | | |
| S17 | | .754 | | | | |
| S18 | | | .824 | | | |
| S19 | | | .823 | | | |
| S20 | | | .826 | | | |
| S21 | | | .786 | | | |
| S22 | | | | | | .856 |
| S23 | | | | | | .770 |
| S24 | | | | | | .688 |
| S25 | | | | | .633 | |
| S26 | | | | | .763 | |
| S27 | | | | | .734 | |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 6 iterations.

Rotated component matrix is also called Rotated Factor matrix in factor analysis. We used varimax method of rotation. Table 3 depicts the factor loading for each variable into each factor. Factor loading less than 0.6 is not shown in the table because we neglected those loadings \.

Table 4 depicts that S6- S12 comes under first factor (Web Aesthetics). Factor 2 (Ease of Use) includes S13- S17 variables. Factor 3 (Trust) included S18- S21 variables. Factor 4 (Product Information) includes the variable S1-S5. Factor 5(Customer Support) includes S25-S27. Variable S22-S24 is included in Factor 6 (Consistency).

On the basis of rotated component matrix we can generate a new table by itself. This table shows the name of every factor and which variable come under which factor with their scores.

Table 4: Mean value of factors

| Constructs | Items | Loadings | Average | Construct Reliability |
|------------|--|----------|-------------------|-----------------------|
| F1 | Web Aesthetics | | | |
| WA1 | This site has fun, interactive features. | .756 | 5.126 /7=0.732 | |
| WA2 | This site contains entertaining audio clips | .792 | | |
| WA3 | This site is designed in a fun and entertaining manner | .797 | | |
| WA4 | This site makes good use of the video capability of the web | .715 | | |
| WA5 | This site has attractive background and color scheme | .778 | | |
| WA6 | This site has perfect font size | .584 | | |
| WA7 | This site has a virtual try room as well | .704 | | |
| F2 | Ease of use | | | |
| EASE 1 | This site is well organized to help me navigate better. | .762 | 3.985 /5=0.797 | |
| EASE 2 | This site is designed in a confusing manner (reversed). | .798 | | |
| EASE 3 | This site has a useful search engine that assists me in finding information. | .865 | | |
| EASE 4 | This site is free from cluttering. | .806 | | |
| EASE 5 | This site is easy to use because of shop by department link | .754 | | |
| F3 | Trust | | | |
| TRST 1 | I can trust this site with my credit card. | .824 | 3.259 /4=0.814 | |
| TRST 2 | I can trust this site to protect my security | .823 | | |
| TRST 3 | This site assures me about the security of my personal information | .826 | | |
| TRST 4 | I feel free from undesirable cookies while using this site | .786 | | |
| F4 | Product information | | | |
| P INF 1 | This site shows many visuals of its products or services. | .620 | 3.817 /5=0.763 | |
| P INF 2 | This site provides useful performance data on its products/services. | .757 | | |
| P INF 3 | This site clearly describes product features. | .773 | | |
| P INF 4 | This site clearly mention the sizes and weights | .850 | | |
| P INF 5 | This site discloses all the terms and conditions of services clearly. | .817 | | |
| F5 | Customer Support | | | |
| C SUP 1 | This site provides useful on-line technical support and help menus. | .633 | 2.13/ 3=0.71 | |
| C SUP 2 | This site has interesting testimonials/stories from satisfied consumers | .763 | | |
| C SUP 3 | This site's format allows on-line dialogue between me and other browsers | .734 | | |
| F6 | Consistency | | | |
| CURN 1 | This site has details about upcoming events. | .856 | 2.314 /3=0.771 | |
| CURN 2 | This site updates browsers with a "what's coming" section | .770 | | |
| CURN 3 | This site has up-to-date information about product availability | .688 | | |

Source: Primary data

Table 4 categorized various variables under six factors. These six factors are being assigned name on the basis of nature of variables. These six factors are as follows:

1. **Web Aesthetics:** It consist variables like fun, interactive features, audio clips and color schemes. The mean score of this factor is 0.732 that is fifth second last among the various factors. This factor is ranked at no. 5 on the basis of its mean
2. **Ease of Use:** It consist variables like ease of navigation through the website, free from cluttering and ease of finding the product. The mean score of this factor is 0.797 that is second among the various factors. This factor is ranked at no. 2 on the basis of its mean
3. **Trust:** Trust consist variables assuring customers about their credit card information, personal information and no cookies. The mean score of this factor is 0.814 that is highest among the various factors. This factor is ranked at no. 1 on the basis of its mean
4. **Product Information:** product information consist variables like availability of visuals of products, description of size and weights of the product. The mean score of this factor is 0.763. This factor is ranked at no. 4 on the basis of its mean
5. **Customer Support:** Customer Support consist variables like customer support, users' review and query handling process. The mean score of this factor is 0.710 that is last among the various factors. This factor is ranked at no. 6 (last) on the basis of its mean
6. **Consistency:** Consistency consist variables named what's new section, updating of new arrivals and up to date content. The mean score of this factor is 0.771. This factor is ranked at no. 3 on the basis of its mean..

Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) for all the factors was performed shown in tables at the end. The model fitness results for CFI and GFI show good fit of the model. Also, RMSEA indicate acceptable model fitness. Hence, no model improvement was required. For convergent reliability and validity, value of cronbach's alpha is highly acceptable in all the factors. The value of average variance explained (AVE) is greater than 0.5 and cronbach's alpha value for all the factors. So, CFA confirms the convergent reliability & validity for all the factors.

Regression Analysis

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations |
|--------------|-----------------------------|------------|---------------------------|--------|------|--------------|
| | B | Std. Error | Beta | | | Zero-order |
| 1 (Constant) | .546 | .211 | | 2.593 | .010 | |
| f1 | .156 | .033 | .245 | 4.745 | .000 | .250 |
| f3 | -.067 | .041 | -.097 | -1.628 | .104 | .019 |
| f2 | .130 | .039 | .200 | 3.359 | .001 | .218 |
| f4 | .030 | .032 | .058 | .936 | .350 | .143 |
| f5 | .041 | .043 | .055 | .969 | .333 | .108 |
| f6 | .033 | .034 | .061 | .961 | .337 | .129 |

Source: Primary data

To test the most important factors of retail website having effect on consumers' attitude a stepwise multiple regression analysis was performed as shown in the table. Retail website was taken as dependent variables while web aesthetics, ease of use, trust, product information, customer support and consistency were independent variables on which retail website was supposed to be dependent. The higher value of standardised coefficient beta depicts the most contributing factor on which retail website is dependent. Here in this case value of standardised coefficients beta are 0.245 for web aesthetics , 0.200 for ease of use, 0.061 for consistency, 0.058 for product information and 0.055 for customer support .

Conclusion

Retail web site effectiveness can be judged by examining attitude towards retail website. Researches show that it is positively related to attitude toward the brand and purchase intent (Brimer and Kumar 2000), increase shopping and loyalty towards website (Donthu 2001). Chen and Wells (1999) propose Ast as a general measure of attitude toward a web site. They validate Ast using various sites, including retail sites, and they suggest that Ast can serve a predictive purpose similar to A-ad (MacKenzie, Lutz, & Belch 1986; Brown & Stayman 1992). The above identified factors are the major concern area for the organizations if they want to create a distinct image in the mind of customers

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