Can The Technical Features of Website and Company Brand in The Cyberspace Create The Customer Loyalty and Re-Purchase? (Case Study: Computer Goods Market)

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ABSTRACT

Today, the share of cyberspace is increasing in the world economy and companies have completely integrated with all the business elements of this space. Therefore, companies are encouraged to promote their brands through websites. With the aim of finding the relationships between the features of websites and companies' brand and its effect on the loyalty of online customers, using statistical methods, the present paper discusses the hypotheses test. Finally, the findings show that the technical factors of a website (security, trust seal, navigation, website color, etc) and companies brand image in the cyberspace have a positive and great effect on the loyalty and persuasion of customers to repurchase.

KEYWORDS: Electronic commerce (E-commerce); electronic marketing; customer value; brand image; loyalty

1. INTRODUCTION

E-commerce means doing the business through new communication technology tools which include all aspects of commerce such as commercial market, ordering, supply chain management and monetary transactions (Gunasekaran E.,2002). It is so important and annually over $ 500 billion of global trade turnover is done through it, and it has been able to become a widespread connecting bridge in the short time having the factors such as speed, accuracy and security (Mohammad ,2007).

After the creation of Internet and trading in it, the marketing was created in this space and tried to make a link between the customer and the organization using the management processes (Bakhtyari, & et al, 2006).

Brand is one of the most important assets of company and a strategic priority is brought for the business of company because of it (Martinez E & et al, 2003).

If the positive emotions could be developed and grown among the people, the trust would be created and strengthened (Garosi & et al, 2007). In today business environments, the users and natural environment naturally accept the systems which have high trust and reliability (Madhoshi &et al, 2005).

Loyalty is also obtained from a more favorable attitude towards a brand compared to other brands and a repeated purchase behavior (Palmer ,2001, p12). Maintaining a deep commitment to continuous re-purchasing or re-selecting the product or service in the present and future is due to the marketing efforts which potentially change the customer behavior (Oliver, 1997).

2. LITERATURE REVIEW

2.1. Factors affecting the online shopping

Websites and brand-putting in these spaces help to transfer the brand image and communicate with potential and actual customers of institutions (Rowley, 2004). According to conducted survey, two cases of factors affecting the Internet business include the technical features of website and characteristics of brand image which also play a major role in the customer loyalty. Technical characteristics have different elements which are:

Security: Security is the key factor in gaining customer's trust. Meanwhile, statements and expressions of a website indicate the policy of an organization in relation to the customers privacy policy and the use of trustworthy third party companies in decreasing customers' concerns. Customers are always concerned about offering their financial and private information on the Internet. To solve such a problem, organizations can increase the trust of customers by clarifying their policies and abilities (Bansal &et al, 2007, p869).

Trust Seal: Disregarding the concern for disclosure of information, people are concerned about loss of their financial information as well. Users need to be confident that their payment is effected through a reliable method and their money is not stolen or misused. Generally, they prefer to make contact with the websites which are more secure against fraud, virus attacks, and disclosure of the financial information. Nowadays,

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guarantee seals, such as Trust TM and VeriSign TM, are quite well-known among customers as the indices of security guarantee. Including trust seal on a website has a positive effect on the trust of the customer in the security of the website (Prashant Palvia, 2009, p215).

Navigation: Theoretically, there are many ways to design the structure of a website. The structure may vary for each user. In any case, a website should be designed in a way to be used easily by the fixed customers or the customers who are completely familiar with their pertinent goods and services (Griffith, 2005, p1394). If the customers could reach the desired page with the most convenient way and least number of clicks, we have developed a structure which increases their trust.

Color of website: Utmost attempts should be made to use bright colors together with the main colors, including red, orange, green, purple, blue, and pink with dazzling brightness. Studies showed that background color suspiciously affects brand recalling. However, so many well-known companies, such as McDonald's, have used dark colors for the themes and menus of their websites. Of course, for various products, services and customers, different colors should be taken into account. For example, a combination of dazzling colors is used for children's special products and services (Sijun,et al, 2009, p 611).

Advice: Giving advice to the potential and regular customers would affect their level of trust in a website. Researchers showed that presence of the virtual advisors could have positive effects on building trust to purchase on the Internet(Prashant Palvia, 2009, p 216).

To be error-free: The news published in the website is very important. In order to have an effective and dynamic relation with customers, an organization needs to ensure that the hot and latest news is released through the website. Customers expect a website to be free from incorrect information and inaccurate data processing. They need new information about the products and services to be encouraged to revisit the website. One method to increase the quality of information is using a series of criteria and standards such as Selberg, Hi ATK, etc to evaluate websites. Therefore, the less the errors are, the more is the trust of the customers (Bansal,et al, 2007, p294).

Order completion: Order completion is the fundamental part of every website with transaction services. The important features that are necessary in online retailing include a) Being confident about the method of order completion by the customer b) Ability to track the purchased goods.

Communities: Most of the websites enable communication among the member customers. Such a communication may be established through the membership in bulletins or forums and/or other means. Such advantages provide further exchange of information, knowledge sharing, and a supporting atmosphere for customers.

Layout and images combination: The general layout of a website can be used as an effective symbol and factor for customer's perceptions. In addition to the ease of access to the pertinent page based on the well-designed structure, the perceptible attractions of the website play a crucial role in attracting the trust of customers. Researches show that the form of images, graphics, buttons, menus, and compatibility of the letters pattern with the images affect customers's perception and such a layout can convey a general feeling to customers (Rowley, 2004, pp231-232).

And the elements forming the brand image also include the Company logo, graphic resolution, and the logo with the text and advertising, and these all can be effective on customers trust (Rowley, 2004) (Fathi far & et al, 2007) .

3. Research Questions

The main objective of this research is to evaluate the features of Brand in the Cyberspace and also the obvious features of website and their effect on the customers' trust and loyalty. In order to achieve this goal, first the main features of website and brand in the environment are studied and then the effects of these two factors on the buyers' trust and loyalty are evaluated and eventually we provide strategies for more selling.

In today world, companies need to pay more attention to the effect of brand image on the customers' loyalty and thus the corporate profitability. Companies have found that they should re-define their own making-brand strategies and marketing according to the unique features of Internet and their capacity in order to change the previous results (Ibeh & et al, 2005). Understanding the principles of electronic commerce, identifying its executive methods and procedures for all organizations and companies seem essential. But do the managers have the correct understanding of electronic commerce? Are they really seeking the specific goals in establishing their own website? What interests they are seeking and do they know the way to achieve those interests? (Madhoshi &et al, 2005) The mental image, which a brand creates, plays a very important role in attracting and retaining the employees and customers (Ronasi, 2007).

*3. Research Hypotheses

In this study, two main hypotheses and thirteen sub-hypothesis are used and their variables have been extracted from the research model, they are as follows:
1 - Website technical factors have a positive effect on the computer products buyers' positive attitude and trust.
1-1 - Website security has a positive effect on the computer products buyers' positive attitude and trust.

1-2 - Trust Seal has a positive effect on the computer products buyers' positive attitude and trust.

1-3 - Navigation (the way of presenting the menus) has a positive effect on the computer products buyers' positive attitude and trust.

1-4 – Website color has a positive effect on the computer products buyers' positive attitude and trust.

1-5 – Recommendation on website has a positive effect on the computer products buyers' positive attitude and trust.

1-6 - error-free being of website has a positive effect on the computer products buyers' positive attitude and trust.

1-7 – Order completion on the website has a positive effect on the computer products buyers' positive attitude and trust.

1-8 – Community on the website has a positive effect on the computer products buyers' positive attitude and trust.

1-9 - Page layout and composition of website images has a positive effect on the computer products buyers' positive attitude and trust.

1-10 - Background picture of website has a positive effect on the computer products buyers' positive attitude and trust.

2 - Features of brand image on the website have a positive effect on the computer products buyers' positive attitude and trust.

2-1 –Logo image on the website has a positive effect on the computer products buyers' positive attitude and trust.

2-2 - Graphic resolution of brand on the website has a positive effect on the computer products buyers' positive attitude and trust.

2-3 – Having the logo with the text on the website has a positive effect on the computer products buyers' positive attitude and trust.
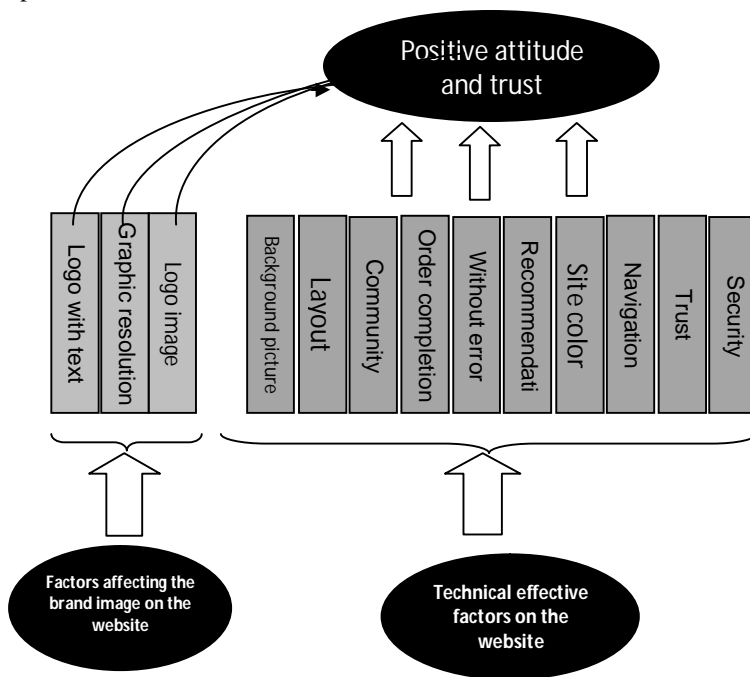

Figure 1: Conceptual model of research (Rowley, 2004, 231)

3. RESEARCH METHODOLOGY

4.1. Statistical Population, Sampling and data collection

If the studied population is too broad, selecting the sample appears to be difficult administratively (Azar, A & et al, 2004, p56). Statistical Population in this study includes all computer products consumers via the Internet in Iran. But since collecting date from all members of society was practically impossible, a sample of statistical population was selected. Sampling was performed through a stage method.

Since the studied population was assumed as an infinite population, Cochran's formula was used for estimating the sample.

$$n = \frac{(z_{\alpha/2})^2 \times pq}{\varepsilon^2} = \frac{(1.96)^2(.25)}{0.05^2} = 384$$

After identifying the number of studied sample, 384 questionnaires were distributed among the individuals in person and via the Internet and 291 questionnaires were returned. From these questionnaires, 283 ones were usable and applied as the basis for the analysis.

The questionnaire designed for this research included 13 questions from which the first 10 ones were related to the first hypothesis and the next 3 questions were related to the second hypothesis. Questions have been planned based on Likert-degree range for data extraction.

4.2. Research Validity and reliability

Validity of questionnaire, designed in this study, was approved by a number of academic and organizational experts familiar with e-commerce. Moreover, in order to ensure the lack of ambiguity in the questions as well as localizing the scales and adapting more with the statistical population, an initial study was conducted and the reliability of questionnaire was determined. Its reliability was obtained 84% for 13 questions through calculating the Cronbach's alpha and thus the reliability of study was also approved.

4.3. The relationship between the research variables and testing the hypotheses

In this study, the data are analyzed through two methods including the descriptive and inferential statistics. At the descriptive level, the statistical tables have been used in order to describe and analyze the demographic research. In addition, in the inferential statistical method, the statistical methods such as Chi-square test has been used for testing the fitness, the Binominal test has been used for proving the hypotheses and Friedman test for ranking the effective factors.

4.4. Demographic factors

The first part of questionnaire is related the demographic factors including the age, gender, and education level. Findings related to the demographic features are as follows:

Data showed that most of the respondents were male (91.5%) and lowest number of them were women with 8.5%. Based on the age, the sample people's age range was determined between less than 20 years to more than 40 years and the minimum age of sample size was more than 40 years and the maximum age of sample size was between 21 to 30 years. According to the data and based on the educational level, most of the respondents had associate degree and the least ones had zero-diploma degree.

4.5. Analyzing the research hypotheses

4.5.1. Analyzing the Main First hypothesis: Website technical factors have a positive effect on the computer products buyers' positive attitude and trust.

$H_{0 =} P \leq .6$
$H_1 = P > .6$

The reason for comparing towards 0.6 is that ratio of three options to five options is equivalent to 0.6. If this ratio becomes more than 0.6, the effectiveness of factors will be increased

H$_0$ = *the success ratio of technical factors affecting the customers' trust and loyalty in buying the online products is up to 60 percent*

H$_1$ = *the success ratio of technical factors affecting the customers' trust and loyalty in buying the online products is greater than 60 percent*

In order to prove this main hypothesis, 10 sub-hypotheses are designed and each of them has been tested. Total analysis can be concluded that whether the technical factors of website have a positive effect on customers' loyalty and trust or not?

In the first sub-hypothesis test (Security), at the significant level 0.05 and based on the Chi-square test, the target distribution is steady and according to Binominal test, since the Sig of this factor is less than 5%, H$_0$ is rejected and the claim, which states that the security of website has a positive effect on the computer products buyers' positive attitude and trust, is approved. Other variables (hypotheses) were also tested in this way and all variables were confirmed and considered as the positive factor in effecting the customers' loyalty and trust.

In general, the first main hypothesis or the effect of technical factors of website on the computer products buyers' positive attitude and trust is confirmed due to all the target technical elements are approved and the sig is smaller than the considered error amount in both Chi-square and binominal tests (I.e. Sig.<α); this hypothesis is presented in table 1:

Table 1: Statistical results of testing the first main hypothesis

Hypothesis	Independent variable	Dependent variable	Chi square	Binominal	Df	Sig	Result
First	Technical factors of website	Trust and loyalty	1444,638 a	./000	4	./000	Confirmed

4.5.2. **Analyzing the second main hypothesis:** Features of brand image on the website have a positive effect on the computer products buyers' positive attitude and trust.

Three sub-hypotheses have been designed in order to prove this hypothesis and the results of processing the sub-data are as follows like before:

Subsidiary hypotheses have been tested like before, the distribution of desired variables has been steady at the significant level 5% and according to the Chi-square test and since the sig of these factors is smaller than 5% according to the Binominal test, their H0 is rejected and it can be concluded that the image of logo, graphic resolution of brand and also the logo with the text on the websites have a positive significant effect on the computer products buyers' positive attitude and trust, and thus the second main hypothesis means the effect of brand image on the website on the computer products consumers' positive attitude and trust is approved . *(According to Table 2)*

Table 2: Statistical results of testing the second main hypothesis

Hypothesis	Independent variable	Dependent variable	Chi square	Binominal	Df	Sig	Result
Second	Features of brand image	Trust and loyalty	1,456 E2c	./000	4	./000	Confirmed

Components Prioritization: Friedman test has been used in order to prioritize the research components.

H_0= Priority of technical factors affecting the customers' trust and loyalty in purchasing the products via the Internet is the same.

H_1 = At least two priorities are different.

In order to prioritize the effective factors, first H_0 is tested and since the sig is less than 5 percent, H_0, means the equality of priorities is rejected and H_1 means the inequality of priorities is confirmed; the results of data processing are presented in Table 3.

Table 3: Results of testing the equality of effective factors impact

Number of data in each variable	Number of factors	Chi square	Df	Sig.	Result
283	13	416,605	12	0.000	Confirmed

According to the Chi-square statistic and its degrees of freedom and the significant level (sig = 0.000) and by considering $\alpha = 0.05$ the equality hypothesis of means is rejected, thus the factors can be prioritized and the results of prioritization are presented in Table 4.

Table 4: Ranking the effective factors with Friedman test

Effective Factors	Security	Trust Seal	Navigation	Color	Recommendation	Being error-free	Order completion	Community	Page layout and composition of images	Background Image	Logo Image	Graphic resolution	Logo with Ads and text
Average rating	9.47	9.14	7.65	6.24	5.94	7.64	7.45	7.53	5.76	5.57	6.41	6.20	6.01

* At the significant level 0.05

There is a difference between the mean of rating the effective components at the significance level 0.05. According to Friedman test, the priorities of components affecting the customers' trust and loyalty in purchasing the computer products via the Internet are security, trust seal, navigation, being error-free, community, order completion, logo image, color, graphic resolution, , logo with text and Ads, recommendation, layout, composition of pictures, and finally the background image, respectively.

5. Conclusion

Analyzing the data obtained from this study indicates that the technical features of websites and also features of Brands on the Internet can play an effective role in gaining the competitive advantage and customers' trust and loyalty.

According to the results obtained from the research sub-hypotheses, and confirming the mentioned hypotheses, the following results are noteworthy about the main hypotheses:

• Technical features of website have a positive and significant effect on the computer products customers' positive attitude and trust.

• Features of Brand on the Internet have a positive and significant effect on the computer products customers' positive attitude and trust.

The results of research indicate that the technical factors and brand image on the website in general, and also each of their elements in particular have a positive effect on the customers' positive attitude and trust. This means that according to the rapid changes in today world, more trade and tendency of organizations to E-commerce, the organizations can benefit from the creation opportunities by more investment and attention to the factors affecting the customers' positive attitudes and trust and get ahead of their competitors. More clearly, designing the proper website as one of the important organizational capabilities and assets according to the criteria mentioned in this study can help the companies to attract and maintain the customers and as a result the profitability and create the more sustainable organizational advantage compared to other companies.

The results of this research about the factors affecting the consumers' positive attitude and trust indicate that based on the priority these factors are the security, Trust Seal, navigation, being error-free, community, order completion, logo image, color, graphic resolution, logo with the text and ads, recommendation, page layout and the composition of images, and background image, respectively. Since, forming the positive experience in the first purchase of products is very important, the customers, who buy the products of company for the first time, should be considered significantly. The website environment is an important communicational tool which its value is increased every day and it will become as one of the most important channels of communicating with the customers in the future. The existence of a proper environment on the website along with the beautiful clarity and appearance, a good brand image and a proper advertising… all can create a positive and enjoyable experience of company in the customers' minds and also it can be stated that by observing these factors and necessary investments and according to the performed prioritizations, the organization can encourage its own customers to re-purchase from the organization through the Internet by creating an appropriate image of its own Internet brand and creating a good website with respect to its features.

6. Suggestion

Since the technical factors of website has a positive effect on the computer products buyers' positive attitude and trust, it is recommended that the companies try to create a positive experience in the customers 'mind while communicating with them.

It is recommended that the organizations do the necessary investments for proper design of their own website in order to better use of this tool, and the website designers should pay attention to the mentioned factors in designing the website for making it effective.

It is recommended that the organizations pay much attention to the brand image and form in the cyberspace because according to the results of research it can affect the customers' loyalty and re-purchase. However, the companies should also pay attention to the customers, who have visited the website for the first time, and also be able to transfer this important factor of trust-making and positive attitude to the customers.

Website security is an issue which has been taken into account seriously in recent years and according to the results of research based on the importance of this factor compared to other factors, it is recommended that they should respect the customers privacy because it should be noted that the customers are aware and surely they will affect the hierarchy in their own purchase and loyalty.

Finally, it is recommended that the sellers should take the tested priorities into account for designing the website and pay special attention to the first priorities because it increases dramatically the effectiveness of website and customers' loyalty in the cyberspace if possible.

7. Suggestions for future studies

Future researchers can evaluate and study other aspects of trust establishment on a website, such as the way a customer recognizes a company and its goods, the study of customers' behaviors by recording their past actions, and the level of their acquaintance with the trust building elements on a website.

In addition, they may carry out researches on the other fields of trust in brands and websites, including Electronic Payment Systems (EPS) and the effects of the electronic rules and regulations on trust. Moreover, a

very interesting case for researchers to study is the study of effects of the cultural elements on the level and the way a customer trust websites

8. Research restrictions
Generally, all the restrictions of the research are as follows:
- Non-acquaintance of the research society with the research culture
- Relative non-acquaintance of the participants with some independent variables, such as a trust seal
- Sample dispersion caused problems in accessing samples and distributing and collecting questionnaires, which might have had some effects on the results.

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