B2C Quality Evaluation Factors From Jordanian Consumer Perspective

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ABSTRACT

The consumer of B2C business plays a significant role in sustaining B2C business companies. However, many companies neglect to incorporate consumers need in their websites developments, resulting unachieved business objectives. Companies must identify consumers' factors in their websites developments so that the B2C websites receive higher hits.

This study aims to investigate and identify the B2C quality factors from the consumers' perspective, to rank these factors according to their importance, and to categorize these factors into meaningful groups. Methodology from three phases has been conducted to achieve the objectives. These phases include identification, ranking, and categorization of factors. Data was gathered from the literature and analyzed using SPSS. Simple descriptive statistics such as mean and frequency were used to rank the quality factors. In addition, factor analysis was used to categorize the quality factors. Seventeen quality factors were found to be important from the consumers' perspective. The seventeen quality factors were further categorized into three groups: E-usage, E-information, and E-services. These categories will be used to construct quality evaluation framework in the next stage of the study.

Keywords: Ecommerce, Consumer perspective.

I INTRODUCTION

Nowadays, web technology is transforming all business into information-based activities. Many organizations are moving from the traditional way of doing business to the electronic way to cope with the evolution, to be competitive and sustainable (Miranda et al., 2006; Liu et al., 2007). Therefore, companies have begun to focus on ecommerce website construction in their strategic planning activities (Liu & Hu, 2008). This is also in line with the fact that the number of internet users is constantly increasing which also signifies that online purchasing is increasing (Bai et al., 2008; Wang and Zhou, 2009).

Oppenheim & Ward (2006) claim that the increasing number of internet users and the growth of technology surrounding the internet are due to the growth in the use of broadband technology combined with a change in consumer behavior. Each internet user is considered a potential consumer for companies providing online sales. There is no doubt for successful ecommerce transactions, the consumers' factors must be known to help the companies to reach maximum numbers of consumers and raise the loyalty percentage for the companies. Also, the consumers' needs must be considered by the companies when strategizing their objectives. This motivated the companies to sell their products and services through their websites (Wang & Zhou, 2009).

Tang and Tung (2009) emphasized that organizations and companies are really eager to succeed in their promotions and sales over the internet and provide the best picture of the high quality of their products, with the aim of reaching more consumers and meet expectations. This in turn affects the gain and profitability of the companies. According to Kingston (2001), ecommerce is considered an excellent choice for companies to reach new customers, to help the companies to globalize, to allow companies to know about their customers, and to build strong relationship between the customers and the companies.

In general, ecommerce can be defined as a business process of selling and buying products, goods, and services through online communications or via the internet medium (Li et al., 2005; El-Aleem et al., 2005). Indeed, ecommerce is considered as one of the best methods for buying and selling products, services, and information electronically. Therefore, a large number of ecommerce websites have been established by companies to enhance the reputation and provide good services to the customers through the companies' websites.

Understanding the consumer factors has become an important issue in order to evaluate the ecommerce websites from the consumer perspectives (Cheung et al., 2003). However, the literature indicates that measuring user satisfaction is a very complex task. Furthermore determining the factors that enhance users' attitude toward companies' websites is very critical (Ahn et al., 2007). Many factors that affect the consumer satisfaction from B2C ecommerce websites, as well as consumers' point of view, must be considered (Zviran et al., 2006; Bai et al., 2008). According to IEEE standard definitions, and also supported by Albuquerque & Belchior (2002) and Tian (2004), failure of the dot.com companies occurs when the behavior of the websites deviates from user expectations or if the websites neglect consumers' needs. Unfortunately, the literature reveals a shortage of studies on websites' quality evaluation from consumer perspectives. In other words, the consumers' perspective is often ignored in website evaluation (Loiacono et al., 2002; Cheung et al., 2003; Gamon et al., 2005; Lee et al., 2006; Yahaya et al., 2008; Wang & Zhou, 2009).

According to the above scenario, many ecommerce websites fail to help the companies to reach their objective (Kearney, 2001; Thornton et al., 2003; El-Aleem et al., 2005; Hausman, 2009; Tan et al., 2009). Besides, it was reported that more than seventy five percent of dot.com companies do not last longer than two years (Kearny, 2001, Paynter et al., 2002; Albuquerque & Belchior, 2002; Irani and Love, 2002; Nataraj and Lee, 2002; Thornton & Marche, 2003). Many researchers related this failure to the neglecting of consumers' needs (Rosen and Purinton, 2004; Gamon et al., 2005; Joia and Olivera, 2005; Olivera and Joia, 2008; Lee and Kozar, 2006) or ignoring the consumers' element in their website development (Hausman & Siekpe, 2009). Therefore, the consumer factors must be taken into account in B2C ecommerce website development to ensure the success and quality of B2C ecommerce websites to meet the consumers' expectations. This study aims to identify the user perspective factors, rank these factors according to their importance, and classify and categorize these factors into meaningful groups.

II METHODOLOGY

The research methodology consists of three phases to achieve the aim of the study:-

A. Phase One:- Identification of Factors

The aim of this phase is to identify and gather the available B2C quality factors from the literature review. Specially, determine the consumer factors that affect quality from various dimensions. The first phase of the research begins with the literature review on the existing research related to software evaluation, websites evaluation, online consumer factors, quality categories, and the factors that affect the quality of evaluation. The sources of the literature included journals, books, proceedings and other academic research.

B. Phase Two:- Ranking of Factors

The aim of this phase is to rank the B2C quality factors that have been gathered from the previous phase. At this stage the quality factors were collected and tabled, in order to rank the factors according to their importance, empirical study was conducted. The sampling technique used was a simple random sampling. Four hundred questionnaires were distributed randomly to ADSL users using telecom list. The respondent were asked to rank the level of consideration of the listed B2C consumer quality factors that are considered as contributing factors to achieve high quality websites applications.

Likert scale from 1 to 5 has been used to determine the level of consideration based on the consumers' perspectives. The rank is according to Likert scale given as 1=*not considered*, 2=*low consideration*, 3=*average*, 4=*high consideration* and 5=*very high consideration.* The respondents were asked to rank the level of consideration of the 32 B2C quality factors. Descriptive analysis such as mean value has been used to rank the importance of quality factors. Mean value has been calculated using SPSS package in order to rank the importance of the quality factors from the consumer perspective. Other researchers also used Likert scale in the same fashion (Behkamal et al., 2009; Elahi & Hassanzadeh, 2009; Ellatif & Saleh, 2008; Faulkner, 2006).

The results were established by calculating the mean score and selecting the appropriate interval that represent the actual mean and present the importance for each quality factor. Since 5-point Likert scale with four intervals was used to represent the degree of consideration for each quality factor, appropriate interval scale needed to represent all level of consideration.

Therefore, appropriate interval for the study is calculated as (4/5) = 0.8. Table 1 shows the mean intervals with associated consideration levels. The same representation was used by Bidad & Campiseño, 2010 and Ahmad et al., 2012.

Table 1. Internal Presentation for the Degree of Importance.

Mean interval presentation	Degree of importance
From 1 to 1.80	Not considered
From 1.81 to 2.60	Low consideration
From 2.61 to 3.40	Average consideration
From 3.41 to 4.20	High consideration
From 4.21 to 5	Very High Consideration

C. Phase Three: - Categorization of Factors

The aim of this phase is to categorize the ranked factors from the previous phase. Exploratory factor analysis was used to categorize the new B2C quality factors into reasonable groups. Moreover, the categorization has been tested by experts.

III RESULTS

The results of this paper presented based on the methodology phases that have been presented.

A. Phase One Results

Table 2 presents 32 B2C quality factors that have been identified and extracted from the literature.

Table 2. Websites Quality Factors: Means Score.

Websites quality factors	Mean	Level of consideration
storage capability	1.76	N.C
The reputation of organizations websites	2.22	L.C
Impartiality	2.32	L.C
Competition and market situation	2.42	L.C
Coverage	2.66	A.C
Degree of care	2.79	A.C
Objectivity	2.81	A.C
Durability	2.88	A.C
Degree of participation	2.91	A.C
Convenience in contact	2.98	A.C
Resilience	3.12	A.C
Courtesy	3.17	A.C
Speed of responses to changes in market conditions	3.26	A.C
Compatibility	3.39	A.C
Tangibility	3.40	A.C

Appropriate interval =interval number / variable number (1)

Web documents current and updated	3.68	H.C
Relevance	3.68	H.C
Trust or Trustworthiness	3.71	H.C
Accuracy and Authority of web documents	3.92	H.C
Clarity	4.00	H.C
Promotive activities and website promotion	4.13	H.C
Enjoyment and Entertainment	4.16	H.C
The value of the web	4.18	H.C
User-friendly web interface	4.20	H.C
Web information	4.21	V.H.C
High responsiveness and Time saving	4.37	V.H.C
Web site visibility and Promptness	4.38	V.H.C
Online shops credibility	4.50	V.H.C
Price savings	4.52	V.H.C
Diversity of goods, services and information	4.54	V.H.C
Safety	4.56	V.H.C
Serviceability	4.64	V.H.C

Note. *N.C* - not considered; *L.C* - low consideration; *A.C* - average consideration; *H.C* - high consideration; *V.H.C* - very high consideration.

B. Phase Two Results

The highlighted mean scores in table 2 presents the seventeen factors that were found as high and very high consideration. The factors are: web site visibility, safety, serviceability, price savings, high responsiveness, online shops credibility, enjoyment and entertainment, websites information, the value of the web promotive activities, clarity, relevance, diversity of goods, services and information, web documents currency and updated, user-friendly web interface, trust or trustworthiness, and accuracy and authority of web documents. Other factors with lower mean scores (less than 3.41) were considered as not commonly used in evaluating B2C websites.

C. Phase Three Results

Table 3 presents 17 B2C quality factors with the new categorization.

Table 3. B2C Quality Factors Category.

Factor	Factors	Metric
	E-usage	Price saving
		The value of the web
		Safety
		Visibility
		User friendly
		Diversity of goods,

B2C user fulfillment		services, and information
	E-informational	Accuracy
		Web information
		Updated
		Relevant
		Trustworthiness
		Clarity
	E-services	Promotion
		High responsiveness
		Credibility
		Enjoyment
		Serviceability

Exploratory factor analysis determined three groups to represent the seventeen B2C quality factors. The factor analysis is conducted using principle component analysis (PCA) and varimax rotation with Kaiser Normalization (Ho, 2006). The results of the test reveal that there are three factors with an Eigenvalue of more than 1. This presentation covers 83.37 percent of all factors. KMO and Bartlet's were found 0.83 which is considered acceptable value for this representation. This categorization is consistent with the literature that categorized some of these factors and related it to the same field. Based on the factors analysis and expert opinion, the categorization was found valid and acceptable. After categorizing the seventeen quality factors to three representative groups, selecting suitable and representative name for these groups takes place. Referring to literature review and the expert, three representative groups name have been assigned which are e-usage group, e-information group, and e-services group.

E-usage category consists of the factors that relate, connect and touch the consumer in a direct way. The factors in the e-usage category includes price saving, user friendly., the value of the web, safety, visibility, , and diversity of goods, services, and information. Whilst e-information category consists of the factors that are related to the web information and the web content. These factors are accuracy, web information (content), web updated (freshness of the web), relevant, trust, and clarity. Finally, e-services category consists of the factors that are related to services issues. These factors comprises of web promotion, high responsiveness, credibility, enjoyment, and serviceability.

IV CONCLUSION

Thirty two factors from literature reviews were identified and listed in Table 2. Based on the data collected using a survey, these factors were measured and ranked using the mean score based on Table 1. Seventeen B2C quality factors were found high and very high consideration. The factors with lower mean score (less than 3.41) were considered as not commonly used in evaluating B2C websites.

Three categories were identified using factor analysis. These categorized groups were e-usage, e-information, and e-services group. The validity of the categorization have been checked and tested. The new B2C quality categorizations will be used to construct and develop quality evaluation framework based on consumer perspectives' in the next stage of the study.

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