

The Impact of Web Site Attributes on Internet Users' Online Behaviour: Malaysian Perspective

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Abstract— The literature on Web site attributes focuses on five attributes, functionality, design, content, originality, and professionalism and effectiveness. Web sites can be classified into four categories by their use purposes, communication, information gathering, entertainment and commerce or online transaction. The design of Web site becomes a critical success factor especially for E-Commerce purposes. However, there is no further study has been done in Malaysia related to Web site attributes and its impact on netizens online activities, in terms of communication, information gathering, entertainment and online transaction.

Keywords—web site attributes; netizen; online activities

I. INTRODUCTION

“A Web site can be defined as a group of interface and functional attributes that are connected to each other to serve high levels of usability, performance, and beauty to users, to satisfy users' wants, and to obtain their satisfaction in a competitive market of online and offline sales and information services” [1]. The design of Web sites becomes a critical success factor especially for E-Commerce purposes. First, Web sites are the main interface between businesses and consumers. Second, the Web site becomes one of the main factors in judging a corporation [2]. A Web site consists of multiple attributes [3]. “Attributes are features or aspects of a Web site. Users see each Web site as a bundle of attributes with varying capacities to satisfy their needs. Attributes can be technology or user-oriented. Technology-oriented attributes are the structural properties of a site such as hyperlink multimedia modalities, whereas user-oriented attributes are the qualitative experiences of users in relation to the structural properties of a site, for example navigability and demonstrability” [4].

The quality of Web site designs depends on task, performance and development [5]. However, Web-based business models are still in the nascent stage as is research into the design and utilisation of commercial Web sites. Given the early stage of research in Web site development for business purposes, there are no obvious criteria to evaluate the effectiveness of commercial Web sites [6]. There is no proper study related to impact of Web site attributes on netizens online activities especially in Malaysia.

II. OBJECTIVES

The main objective of this study is whether Web site attributes have strongly impact on netizens online activities,

in terms of communication, information gathering, entertainment and online transaction in Malaysia.

III. LITERATURE REVIEW

A. Netizen's Online Activities

1) Overview

Web sites can be classified into four categories by their use purposes, communication, information gathering, entertainment and commerce or online transaction [1]. The uses and motivations to use media are related to diversion/entertainment, personal identity, personal relationships, social interactions and surveillance/information [7,8]. By 31th of June, 2010, the global netizen population had hit 6,845,609,960 [9].

2) Information gathering

Providing information is the basic goal of a Web site [10]. As content on the Web includes text, pictures, graphics, layout, sound and motion, making the right Web content decisions are critical to effective Web design [11]. Web site information flow is a virtual process that contains a variety of Internet information in space and time that can change from static to dynamic. It is a space in which information is transformed from one Web site to netizens [12].

3) Communication

In an Internet environment, interactions with other customers are considered crucial in developing a virtual community [13]. Since the year 2000, the truly transformational effect of the communications technologies [14]. The Web is a communication medium and it is supported with animation, and even full motion video and audio [15]. Digital network technology has turned the world into a global village and made universal communication possible. It has made communication global, universal and boundless. The speed of network technology is 5000 miles an hour and the time required for communications to travel round the world is only 0.003 seconds [16].

4) Entertainment

A study by on the Internet usage items revealed three facets of online recreation, including, using the Internet for computer-based entertainment, to facilitate offline entertainment and for information about the entertainment world [17]. Instead, pleasure-oriented consumers typically enjoy interacting with the Web to play Web-based games, e-

mail, or chat. That is, interactive communication behaviour can be viewed as a sort of entertainment [14].

5) *Online transaction*

The World Wide Web is one of the most relevant driving forces in the commercial usage of the Internet [18]. To achieve competitive edge, a firm needs to integrate its business activities with Internet adoption [19]. Retail sales generated through online sales channels like E-Commerce Web sites have been growing at an average annual rate of 110% a year [20]. Marketers need to focus on Internet users attitudes as a strong mechanism to move Internet users to adopt the Web for retail usage. To create positive attitudes, marketers should focus on creating strong perceptions that the Web is useful for retail activity [21].

B. *Web Site Attributes*

1) *Overview*

The need of Website attributes has a strong correlation with the objective of Web uses [19]. Refer to Quality Criteria for Website Excellence [22], five criteria at the level 1 are required to achieve the World Best Website Award, which are functionality, design, content, originality, and professionalism and effectiveness.

2) *Functionality, Design and Content*

A study found that eight functionality areas of Web site: customer feedback and comments, customer-to-customer communication, keyword search, navigation, online ordering system, order status tracking, personalisation and virtual reality display [3]. Website design and usability has been widely studied academically [23]. Another study by using six criteria (business function, corporation credibility, contents reliability, Web site attractiveness, systematic structure and navigation) shows that there is a significant difference in the design of Web sites across these different industry groups [2].

3) *Originality, and Professionalism and effectiveness*

The interaction between the user, Web site and context forms the starting point of evaluating Web site creativity. The creativity guideline and checklist for Web site design are related to affective, important, novel and flexible, interactivity, changeability, personalisation, and aesthetics. Web site effectiveness is based on the role of a website as a communication tool [24]. Market segmentation based on how consumers form attitudes and intentions when interacting with a Web site will help companies to design more effective online communication tools [25]. Under Quality Criteria for Website Excellence criteria, five variables of originality, and another five variables of professionalism and effectiveness have been highlighted.

- Originality
 - Innovation and lateral thinking
 - Creativity
 - Technology
 - Distinctiveness
 - Vision

- Professionalism and effectiveness
 - Customer service and client respect
 - Values
 - Focus
 - Advanced components
 - Overall site effectiveness

4) *Security, Privacy and Trust*

In most of the studies do not include security, privacy and trust as part of the Web site attributes. Security is one of the main reasons why web users opt not to make purchases over the Web [26, 27].

Both consumers and marketers perceive privacy concerns in terms of information control: who has access to personal data (disclosure), how personal data are used (appropriation) and what volume of advertising and marketing offers arises from the use of personal data (intrusion). An alternative approach focuses on consumer states [28].

Six features of Web sites have been identified that enhance consumer perceptions of the marketer's trustworthiness. These Web features include safeguard assurances, the marketers' reputation, ease of navigation, robust order fulfillment, the professionalism of the Website, and the use of state-of-the-art Web page design technology [29]. Another study highlighted three main features of trust: the vendor uses a certified transaction platform, when a consumer encounters transaction problems, the vendor provides an instantaneous explanation and online assistance, and the vendor provides detailed transaction contracts that specify the rights and responsibilities of trading entities [30].

IV. METHODOLOGY

A. *Research Framework and Hypotheses*

Based on the reviewed literature, the relevant hypotheses of the model are presented as follows. The research model is shown in Figure 1.

Four hypotheses will be tested:

- H1: Web site attributes have positive impact on netizens communication activity.
- H2: Web site attributes have positive impact on netizens information gathering activity.
- H3: Web site attributes have positive impact on netizens entertainment activity.
- H4: Web site attributes have positive impact on netizens online transaction activity.

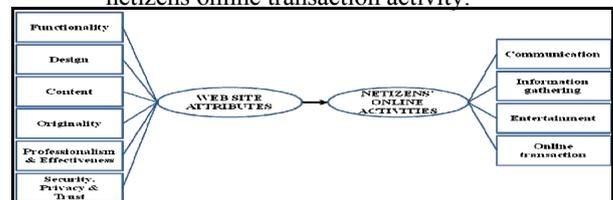


Figure 1. Research framework

B. *Research Process*

The research processes are implemented in the following order (see Figure 2) [31]:

1. Identification of research problems.
2. Review the theories and existing knowledge related to the research problems.
3. Formulation of hypotheses.
4. For data collection processes.
5. Data analysis process with selected data analysis methodology.
6. Summarising results and drawing the conclusions, as well as implications
7. Reviewing all works.

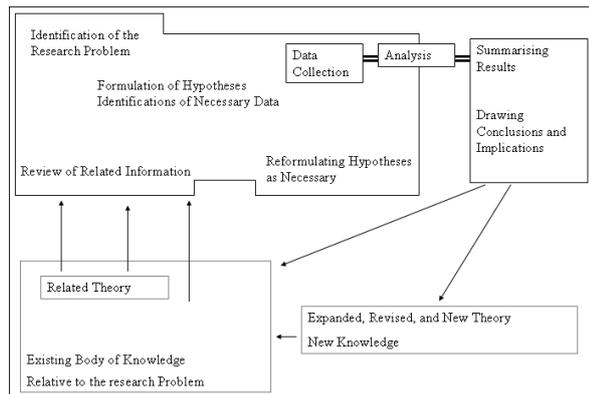


Figure 2. Research Process

C. The Sampling

To determine size of samples, literature suggests ten to fifteen of participants in the case of homogeneous group. The experience indicates that few new ideas are generated within a homogeneous group once the size exceeds 30 well-chosen participants [32, 33]. Another suggestion related to the minimum sampling size for problem solving research is 200 samples. Thus, the sampling size for this research should be greater than 200 [34].

D. The Questionnaire

Primary data for this research will be collected using a self-administered questionnaire designed to serve the purpose of the research objective. The questionnaire will be distributed to Internet users (netizens) around Malaysia. The questionnaire distribution will be based on the traditional and online techniques. For the traditional technique, printed questionnaires will be distributed to the Internet users randomly. Softcopy of the questionnaires will be distributed to the selected Internet users by Email. Another alternative way, Internet users also is able to fill in the questionnaire through an online survey.

E. Data Analysis

Data will be analysed with SPSS and AMOS. SPSS will be used for mean, correlation and factor analysis test. AMOS will be used for model fitness and regression test.

V. CONCLUSION

This study hopefully helps marketers to identify the right Web site attributes and its impact on netizens' online

activities. The contribution of this research hopefully will help the Internet marketer to identify the right Web site attributes and to provide the basic idea of improvement of Web site development for Internet marketing purposes.

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