Using AHP to Investigate Qualitative Aspects of Business English E-learning Websites

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Abstract

This study explores the website characteristics that are most useful to learners of English. Website characteristics include systems, information, access and service. Users are more likely to use websites that match their preferences. We used the analytic hierarchy process (AHP) to develop an evaluation model that prioritizes website quality factors, including system, information, access and service quality. The results revealed similarities and differences in the impact of system, information, access and service quality on website and search engine quality. System designers can use the results of this study as a reference to improve the appeal of their e-commerce websites. The results of this study can also be used by social scientists to identify cultural trends.

Keywords: AHP (analytic hierarchy process), Website quality, Search engine optimization (SEO), e-business success, English e-learning website

Introduction

1.1. Rationale :

Assessment Information System (IS) success, it has long recognized the importance of both, researchers and practitioners. Evaluation is a challenging task, since the information technology systems are complex social entities, and generally are not accumulated. The success of e-commerce is no exception, we need to be carefully assessed. Policy makers in developing e-commerce companies have continued to invest huge e-commerce Web site, without the need for a clear understanding of what factors contribute to the development of high-quality sites, as well as how to measure the impact of e-commerce success. Delone and McLean noted that "the company is investing heavily in e-commerce applications, but suffer not possible to assess the success of its e-commerce systems…...Researchers already turning their attention to the development, testing and application of e-commerce measures of success. " Therefore, there is an urgent need to assist decision-makers better understand the more desirable site online customer view point.

1.2. Motivations of the study:

The quality of the web site, the relationship between preference and business performance has made many studies, but there is no empirical research is rarely complete. The research on the issue, which restricts the scope of this study, in order to quality for the site's B2C online retail customers site investigation.

1.3. Research method:

Utilizing Delone and McLean IS success model, and then by using and through the application and Analytic Hierarchy Process (AHP) method, the study investigated the relative importance of each factor and ranking of alternative web sites. Analytic Hierarchy Process has been successfully applied to solve complex problems alternative analyzes over 1,000 studies have been published in the refereed journals. In the system developed in the previous literature, the perception gap between users and designers has been recognized as the most important reason is the failure of the poor and development projects. By investigating at this gap, the needs of the research can provide and online customer preferences, and how to resolve this misunderstanding manager / designer misunderstanding insight. Successful evaluation of information systems

1.4.1. Research Finding and Discussion:
 Application of AHP For Evaluating Website Quality
1.4.1. System Quality
In e-commerce, website system quality has been known for online customers and online to purchase a significant significantly effect. Customers' dissatisfaction characterized by poor site navigation, the system can be used to navigate quality, response time, personalization, presence and safety measure.
1.4.2 Information Quality
Reliability, responsiveness, and empathy are useful for measuring e-commerce service quality. Reliability is the ability to accurately complete the promised services; response refers willing to help online customers to provide timely services; and compassion means that care and attention of online retailers offer their customers.
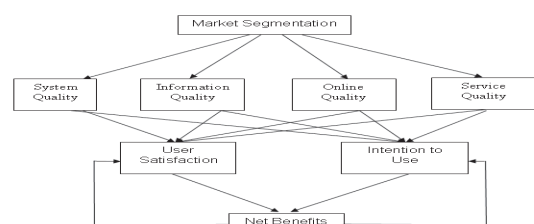### 1.4.3 Online Quality

Figure 1. DeLone and McLean (2003) used this model.

Many search engines appeared information seekers could also browse the directory instead of doing a keyword-based search. This will help internet user to get their information easily and effectively.

1.4.4.. Service quality
A search engine maintains the following in near real time.
1.Web accessing, 2..Indexing, 3.Searchin**g**

Literature review:

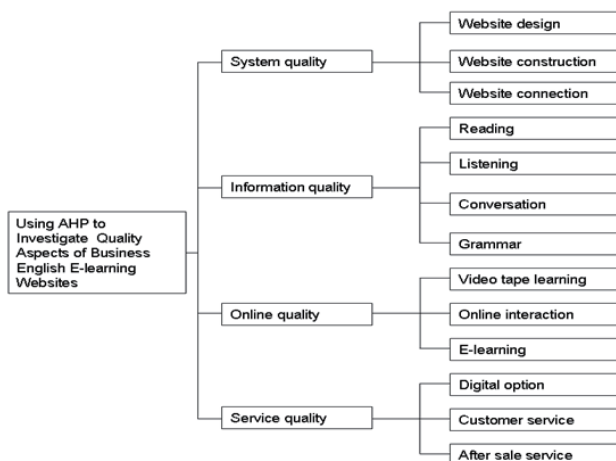*2.1. Research model W.H.Delone & E.R. McLean model*

Figure 2. DeLone and McLean (2003) model.

Research method: Fuzzy cluster analysis

Research finding and discussion

Results
The data were analyzed using Expert Choice before AHP was performed. Expert Choice was used to identify the criteria and sub-criteria weights as well as the choice priorities.

4.1. Analysis of results
In Figure 2, the criteria percentages are shown. The order of importance from highest to lowest was system quality, information quality, service quality, and online service. Our survey revealed that English website learners emphasized website design, structure, and connection.

In this study, information quality was divided into reading, listening, communication, and grammar. Communication was the most crucial to English learners. Increasing English ability can enable learners to communicate more effectively with foreigners.

4.2. Significance
Globally, website design is crucial. According to our rankings, post sale service significantly influences consumer website evaluation. Additionally, website users also value online interaction and conversation.
The analytical results indicated some differences in the evaluation of system, information, online, and service quality. For example, English learners weighted "system quality" (0.327) more than "information quality" (0.266). Moreover,

English learners weighted "service quality" (0.205) more than "online quality" (0.203). According to the global sub-criteria weights in Figure 2, "website design" (0.158), "website connection" (0.096), and "post sale service" (0.085) were weighted heaviest by English learners. However, according to the criteria weights, "system quality" (0.327) was weighted heaviest among all criteria by English learners. Finally, according to the global weights of 13 factors, the most crucial factor was "website design" (0.158) in "system quality" (0.327).

4.3. Hypothesis Testing
According to the results, system information and service quality are crucial to English learners. Website systems largely determine user website satisfaction. If websites have effective systems, then users can solve their problems quickly and perceive that websites provide personalized service.

Conclusion

Our survey revealed that English website learners value website design, structure, and connection, all of which enhance English learning.
This study used the AHP to examine the similarities and differences between system quality and service quality groups regarding website quality evaluation. According to the final criteria weights shown in Figure 2, "system quality" most influences user website appreciation. Figure 2 shows that website design is the most crucial among the sub-criteria regarding user website evaluation. Learners are more likely to use e-learning websites that are effective. This research will help website designers optimize their website design and attract users.

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