Analysis of Webqual Usefulness, Information Quality and Interaction Service in Cultural Sites Online

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Abstract: This research investigated the differences of respondent's profile in culture sites online and whether there are influenced from *WebQual* dimensions: usefulness of the website, information quality, and interaction service to the intensity of visits in cultural sites online. This research aims to know the difference of respondent's profile in culture sites online and to find out the effect of webqual dimensions: website usability, information quality and interactions service to intensity of visits in culture sites online.

This research conducted by distributing questionnaires to users of the website and an online questionnaire on several social networking sites. In this research, samples were taken by simple random probability which all individuals or subjects of population have probability that included a member.

Profile of respondents noted that the dimensions of form WebQual usability, information quality, and interaction service to the intensity of visits in cultural sites online. In results, there is not significant difference of respondent's profile. Respondents profile namely gender and occupation. The result shows that the difference is very low, especially at level of student profile of the third respondent *WebQual* dimensions are nearly the same effect. Influence of three variables (3*WebQual* dimensions) to the intensity of visits in culture sites online is very small. The intensity of visits from respondents was not influenced by the three *WebQual* dimensions. While the intensity of visits was influenced by the three dimensions which can be seen from WebQual significant.

Keywords: adoption, cultural, sites on-line, determinant

1. INTRODUCTION

Information technology is made of computer technology based. The computer technology development to produce the main techonology implications in data processing that culminates in obtaining information. According to Gnanlet and Kullu [1], the rapid development of information technology and its spread which is not limited by space and time. Good management information system can take a role in the development of information and communication technology. Management is the art in carrying out and

managing to utilize all resources to achieve goals effectively and efficiently. Information systems that are managed well and correctly in delivery of appropriate information can be up to its recipients. The spread of culture is strongly influenced by the channels of information and good communication in order to be accepted and applied in life; and the entire community support to development and introduction of culture. (Kai, Xiaofan, Qiuying and Huanhuan [2]). The research problem is to assess differences of respondents profile in culture sites online and whether there is influenced from *WebQual* dimensions: usefulness of the website, information quality, interaction services to the intensity of visits online cultural sites. The aim of research is to know the difference of respondent's profile in culture sites online and find out the effect of *WebQual* dimensions: website usability, information quality and interaction service to the intensity of visits in cultural sites online.

There are several developments in technology which significantly contribute to the development of ICT to the present. First, the telephone is found by Alexander Graham Bell in 1875. The findings are developed into the procurement of communications with the cable networks covering the entire mainland United States, and then it followed the installation of the trans-Atlantic communications cable. This telephone network is a massive infrastructure that was built by humans to global communication. The 20th century, precisely between the years 1910 to 1920, achieved a sound transmission without cables through the first AM radio broadcast. This cordless voice communication was soon booming. The electronics technology development is the forerunner to the current ICT to get a golden moment in the Cold War era.

Chiou and Pan [3], explained that spur technological development through the electronics miniaturization of electronic circuits efforts for controlling the spacecraft and machines of war. Miniaturization of electronic components through the creation of integrated circuits delivered microprocessors at its peak. Telecommunication devices grow rapidly began to use digital technology replaced analog technology. Analog technology started to show the maximum limits of exploration. Equipment of telecommunications and computers digitalization is the device which adopted digital technology. This convergence product is currently appeared in the form of a cell phone. This infrastructure such as telecommunications and computing actually content in the multimedia form to get the right place to grow. The digital revolution is the convergence of telecommunications and computing multimedia took place through the implementation of digital technology to create machines that can improve the ability to change the human brain.

Management Information System consists of word management and information systems. Management is the process of resources utilization for achieving its specific purpose; information system is the computer application to support operation: operating, installation and computer maintenance, software, and data. Of the two senses, it can be concluded that the Management Information System is a system designed to provide information to support decision making on management activities in the organization. All Information systems have 3 (three) elements or main activities, namely (1) received data as input, (2) processing the data by calculating, combining the data elements, updates and other estimates, and (3) obtain information as output (Khawaja and Bokhari [4]).

Integrating information systems is one of the key concepts of management information systems. Sharing system can be interconnected with one another in different ways according to the needs. The flow of information systems is very useful when the data in a file system is also required by other

systems, or the system output as input for other systems. It can also be achieved manually a specific integration, eg data taken from another part, and by the administrative officer of data were merged with data from other systems. So manually, it became a high degree of integration. The main advantage from the improved integration of information systems is information flows within an organization. A report usually needs time, however it will more and more relevant information in managerial activities that can be obtained when needed. This gain is a good reason to give priority to inform integrated system because the main purpose of information system is to provide the right information at the right time. Another advantage of integration system is a character that encourages managers to share information produced by the section on a regular basis so that it flows to other systems. This information is used to help the broader organization (Elangovan [7]).

Acoording Liong, Arif, Rasli, and Jusoh [6], in 1990, people can use from one computer to another computer which is forms a network. This is the program called *www or World Wide Web*. In 1992, computers that are connected to each other to form a network already exceed a million computers and the internet term appread at the same year. In 1994, the website has grown into a 3000 page address and for the first time *virtual-shopping* or *e-retail* appeared on the Internet so the world changed. In the same year *Yahoo!* Established and also Netscape Navigator 1.0. Experts often defined culture as the norm of the average behavior especially behavior or who are always done over - again. Ideal norm is very important to explain and understand certain human behaviors and ideas about these norms affect the majority of social behavior including human communication behavior. A culture definition is considered as a continuum value of trust to certain feelings and behaviors. Behavior model is recognized and accepted by the supporters of culture that it represents the behavior of cultural norms. Culture according to some experts, the first culture appeared in the renaissance era to describe the customs, beliefs, social forms, and European languages that are different in the past with the present. The second period, culture occurred when the concept of culture is beginning to get the recognition by human being in the face of earth. The variation is reinforced by language which they used, their ritual practice and communities types based on where they live.

Social change is a symptom of cultural change in social structure and cultural patterns in a society. Socio-cultural changes are common symptoms that occur over the life of every society. Sosial changes occurred in accordance with environment and human nature that always wants to make a change. There are factors that can affect social change, such as pressure of work in society, communication effectiveness, and changes in the natural environment. Cultural change can also arise from the emergence of the community environment changes, new discoveries, and contact with other cultures (Gnanlet and Kullu [1]).

Gera [8], stated that customer of a product or service satisfaction can be a measure of corporate success in running the business being operated. As the economists had predicted that consumers who will be the key of an enterprises' success, it happened because of the reciprocal relationship between the producer of the needs and consumer for goods and services needs. Companies should pay attention to consumer's desires so consumers become loyal to their market of products or services. Satisfaction and experience customer gained from consumer perception after consumption of goods and services, many factors that affect consumer satisfaction, such as: price, quality, taste, packaging and service.

Basically, customer satisfaction has many definitions, among others, according to (Kotler, 2002) suggested that customer satisfaction is the customer's responses to the evaluation of the perceived

discrepancy between prior expectations and actual performance of the product that is felt after the demonstration. Kotler [5] defined as an emotional response experienced to product evaluation or service consumption. Customer satisfaction is evaluation purchase in which the selected alternatives at least equal or exceed customer expectations, while dissatisfaction arises if outcome does not meet the expectations.

Acording to Liong *et., al.* [6] stated that If the needs and demands successfully to meet between users and services, so it will cause a sense of satisfaction in health services. With the above understanding, the quality of health services is a reference to excellence level in health care lead to a sense of satisfaction on every customer and the better service quality of higher customer satisfaction. However, subjective satisfaction depend on the background of every person and it can have different satisfaction levels for one similar health services besides it is often found in health services deemed to have satisfied customers but if we had seen from the code of ethics and professional of standards service may be just have not been met.

Some of the most successful company is currently increasing expectations and deliver performance. These companies are heading to the TCS (*Total Customer Satisfaction*). The concept of Total Customer Satisfaction to emphasize the importance of high goals and satisfaction which the consumers are not easily tempted by another offer. The Companies target is customer satisfaction as well as marketing tips. There are various tools to track and measure customer satisfaction that is a complaint and suggestion systems, customer satisfaction surveys, shopping stealth and lost customer analysis.

Consumer satisfaction can be measured in various ways. Some of them are raised by Kotler, which consists of methods, namely the system of complaints and suggestions, such as providing advice and complaint boxes, comment cards, customer hot lines, employing collector opinion or customer complaints, and others. Satisfaction survey is conducted through a questionnaire survey which can be sent by mail or distributed at shopping customers, by phone, e-mail, and fax or by direct interview. Lost customer analysis, the company has contacted customers who stop buying from companies or those who have switched suppliers. Shopping is used to observe the strengths and weaknesses of products and Services Company and its competitors. Sales-related methods, customer satisfaction are measured by criteria of growth purchase, market share and the ratio of repeat purchases. Although widely used, this method can be used in customer satisfaction, especially in situations of monopoly market structure, excess demand and in the case of customers who are reluctant or difficult to switch suppliers, but it had not satisfied. The company will establish sample of customer panels periodically to determine what they feel from all companies' service. In this case, panel members may be taken from the volunteers who paid for it (Gera [8]).

WebQual developed as a method to measure the opinions of visitors to the quality of *E-commerce websites*. The instrument has been in development since early 1998 and has risen through the repair process over and over from different *e-commerce and e-government area* (Elangovan [7]). *WebQual* is one method or technique of measuring the quality of *websites* on the end user perception. This method is the *SERVQUAL* development which is widely used previously in the measurement of service quality. *WebQual* research instruments were developed with the method of *Quality Function Development* (QFD), which means: structured and disciplined process is to identify and bring voice to the customer through stage of development and implementation from the product or service (Elangovan [7]). *WebQual* had been developed

since 1998 and it have experienced in some interaction of dimensions of preparation and 14 items of questions. *WebQual* is arranged by 3.0 based on research, information quality and information system. Information Quality contained on the site, worth at least user information for purposes such as accuracy, format and coherence. Interaction Service Quality is service which experienced by users when they investigated deeper into the sites, which is manifested by the trust and empathy, as an example the issue of security of transactions and information, product delivery, personalization and communication with site owners. Usability of computer and human interaction is a quality associated with the sites design such as appearance, ease of use, navigation and image conveyed to the user.

Perception included the perception of service quality perceived (*actual*) with the expectations level (*ideal*). Elangovan [7], stated that using of *WebQual* to measure the quality of our website which is managed by the OECD (*Organization for Economic Cooperation and Development*). Web site quality from the user perspective can be seen from the perception of high service level and perception gap. *WebQual* model or the quality of our website was used in portal business schools based on factors of ease of use, experiences, information and communications, and integration.

2. RESEARCH METHODOLOGY

This research is conducted by distributing questionnaires to users of the website and an online questionnaire on several social networking sites. In this research, samples were taken by simple random probability in which all individuals or subjects of the population have probability that each included a member. Likert scale used in this writing are the type of scale used to determine the frequency distribution of respondents based on characteristics of the research are age, gender, education and frequency of respondents based on overall satisfaction in each *WebQual* dimension. Respondents were asked to fill in the form of questions in verbal ordinal scale in a number of specific categories. This case used level of very satisfied, satisfied, fairly satisfied, not satisfied, and dissatisfied.

Variable of attributes objects have a variation between one people to another and one object with another object. Variables to be studied is the profile of respondents, consisting of gender, age, college, rank, department, level, having a personal computer, often using the internet, have email, website possess/ own website, the internet area. Variables, represents grains *WebQual* questions on a questionnaire consisting of 14 grains of questions. In 14 is a three-dimensional question *WebQual* 3.0 which has been developed since 2004, namely (Elangovan [7]).

Progress in information technology has promoted the progress in all information dissemination tools. It can be seen from the increasing number of people who use the Internet as a source of extensive and complete information. It apparently also made a push popular culture sites that contain information about the regions in Indonesia in terms of culture and tourism. Cultural sites online contain the history of a province or a region, what is the unique culture that owned from this area, how the customary system which took place, it is supported by information on historical sites and characterizes in this province or region. Cultural sites online allow visitors in navigating throughout the country without being limited space and time. Cultural sites online is expected to be a window of culture information, the nation wealth source and in cultural sites online can be seen the facilities and features available of the popular Culture Sites.

In this research, the respondents came from different backgrounds. The number of questionnaire distributed to as many as 70 respondents and then the questionnaire was further analysis. This following can be seen the characteristics or identities of respondents. Male respondents were 39 people or about 55.7%, while female respondents were 31 people or 44.3%. It can be concluded that the majority who visit online cultural sites are male. Age of respondents who filled out questionnaires is between 17-year up to 27 years with the majority of respondent's aged 22 years, and as many as 23 people or 32.9%. Respondents with Diploma level or D3 as many as seven people at 10% and undergraduated (S1) as much as 63 people or 90%, it can be concluded that the majority of respondents were from undergraduated (S1).

From the ownership of personal computers, there are 67 people or 95.7% of respondents who have personal computers and as many as three people who do not have a personal computer or a total of 4.3%. Respondents who frequently used internet as many as 65 people or equal to 92.9% and the rest as much as 5 people or 7.1% of people do not often used the Internet. All respondents who numbered 70 people or equal to 100% of people have e-mail, but just as many as 32 people or 45.7% who have a personal website and the rest as much as 38 people or 54.3% did not have a website. Known to the majority of respondents access the internet from home as many as 38 people or 54.3%, from the office as many as 9 people or 12.9%, from Internet cafes as many as 17 people or 24.3%, and from others as many as 6 people or equal to 8.6%.

3. INTERNET PATTERN USAGE AND FREQUENCY OF POPULAR CULTURE SITES USAGE

The majority of respondents have over 5 years experience with the Internet. Respondents who can access the internet from home as many as 51 people or a total of 72.9%, respondents who can not access the internet from home as many as 19 people or a total of 27.1%. Respondents who access the Internet from cafes as many as 56 people or 80%, and respondents who can not access from cafes as many as 14 people or 20%. The majority of respondents, as many as 65 people or a total of 92.9% using the Internet for personal purposes and as many as 5 people or 7.1% did not use the Internet for personal purposes. Frequency of respondents visit the online cultural sites was almost every day as many as 20 people or a total of 28.6% and the lowest was as much as one person once a month or a total of 1.4%. Based on the results of grouping the respondents' answers on the internet using is found several factors, (a) factors as sources of information, (2) factor as source of entertainment and (3) factors as assist the completion of tasks.

4. ONLINE CULTURAL SITES EVALUATED FROM RESPONDENT'S PROFILE

The differences of online culture sites based on gender using t-Test Two Independent Samples are as follows based on statistical results can be seen that respondents with male gender were 39 men and female as many as 31 people. t-test Two Independent samples included Levene's Test of hypothesis testing to determine whether or not the second of equal variance completed. The results of Levene's Test on tot.usa variables obtained significantly by 0.434>0.05. The second assumption is equal variances assumed, it is used for test-t Two Independent Samples with two variants of same assumptions that give the value of t equal to 1.128 with df of 68 and significant (two-tailed) for 0.017<0, 2005. Thus, opinions

about the elements of usability online culture sites which can be seen from gender. There are significant differences between men and women. The majority of respondents were male, from the results of Levene's Test on tot _usa variables obtained significantly by 0.426>0.05. The second assumption is equal variances assumed, then used a t-test results of two independent samples with two variants of the same assumptions that gave the value of *t* equal to 2.454 with *df* of 68 and significant (two-tailed) for 0.263<0,05. Thus, the opinions of respondents about the quality Information elements on the *Website* Online Culture sites which can be seen from gender, there was no significant difference between men and women. The majority of respondents were men. The results of Levene's Test on tot_usa variables obtained significantly by 0.021<0.05. The second assumption is Equal variances not assumed, then used a t-test results Two Independent Samples with two variants of the same assumptions that give the value of *t* equal to 1.159 with *df* of 68 and significant (two-tailed) for 0.124< 0.05. Thus, respondents opinions about Interaction service elements of culture sites online which can be seen from gender, there is no significant difference between men and women. The majority of respondents were men.

The statistical calculation results of *WebQual* with *ANOVA* obtained in tot_usa F count = 1.752 and sig. = 0190, because the *F* counts<F table or 1.752<2.744, then *Ho* is accepted. These results indicated that illustration of the website usefulness, there is no difference opinion significantly from all four levels. The majority of respondents came from level IV. The ANOVA results obtained in tot_iq F count = 0.389 and sig. = 0190, because the *F* count<F table or 0.389<2.744. These results indicated that illustration of information quality website, there is no difference opinion significantly from all four levels. The majority of respondents came from level IV. The ANOVA results obtained in tot_si F count = 2.285 and sig. = 0190, because the F count<F table or 2.285<2.744. These results indicated that illustration of interaction service website, there is no difference opinion significantly from all four levels. The majority of respondents came from level IV. From the three result above calculations, we concluded that *WebQual* has not difference significantly from the F count<2.744 in all three dimensions of Usability, Information Quality, and Service Interaction. The majority of respondents came from the Level IV.

5. ANALYSIS AND DISCUSSION

Results of multiple regression analysis included in the regression equation model as follows: Y = 4.943 to 0.096 X1 + 0.070 X2 - 0.135 X3. From these equations can be seen that the only variable positively influenced Information Quality, while variable Usability and Interaction Service is negative effect. Illustration of *R* value obtained at 0.371, it can be concluded that the relationship between independent variables and dependent variable is 37.1%. Illustration of *R* value square obtained at 0.138 and Adjusted *R* square of 0.062, it can be concluded that only 6.2% variation is influenced by the *WebQual* dimension, while the other 93.8% is determined by other factors. From these results can be said that the majority of respondents from the Employee is less interested or even not interested to visit in culture sites online because they were not aware of cultural sites online and also less to enjoy things relating to art and culture so they rarely visited cultural sites online. Illustration of regression coefficient is negative so that *WebQual* dimensions significantly less influenced on the intensity of visits in cultural sites online. Introducing and promoting of cultural sites online widely used features of popular web or by adding a web facility to attract them to visit this site. Tests above are also obtained sig.F value 0.163> 0.05, it can

be concluded that variables independent such as *WebQual* dimensions simultaneously have not significantly effect on the intensity of visits in cultural sites online.

Results of multiple regression analysis included in the regression of equation model. From these equations can be seen that only variable positively influenced Information Quality, while variable of Usability and Interaction service is negative effect. Illustration from *R* value obtained at 0.678, it can be concluded that the relationship between independent variables and dependent variable is 67.8%. Illustration of *R* value Squae of 0.460 and Adjusted R Square of 0.402, it can be concluded that only 40.2% variation was influenced by *WebQual* dimension, while the other 59.8% is determined by other factors. From these results, it can be said that the majority of respondents are less interested to visit cultural sites online. Basically, they were surrounded by the tools of information technology such as computers and internet; they have pleasure in finding information through the virtual world than search information directly. Illustration of the regression coefficient is negative indicating that *WebQual* dimension is significantly less influenced on the intensity of visits in cultural sites online. Information Quality dimensions are positive so that the increase of information technology features can affect the increase the intensity of their visiting. Tests above are also obtained sig.F value 0.001<0.05, it can be concluded that the independent variables of *WebQual* dimensions simultaneously is significantly influenced the intensity of visits in cultural sites online.

6. CONCLUSION

The profile of respondents noted that the dimensions of *WebQual* usefulness, information quality, and interaction service in which there is no significantly difference in results when the profile of respondents illustrated. The respondents profile namely: gender, and respondents levels. The result shows that the difference is very low, especially at the level of the student profile of the third respondent *WebQual* dimensions are nearly the same effect. Influence of the three variables (3 *WebQual* dimensions) to the intensity of visits Popular Culture Sites is very small. The intensity of visits was not influenced by the three *WebQual* dimensions which can be seen from the sig. F. While at the intensity of visits was influenced by the three dimensions which can be seen from *WebQual* significant.

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