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The Effect of Web Design Quality in the Success Rate of Online Website Design Agency

Ebrahim Jabbari, and Chokeanand Bussracumpakorn

King Mongkut's University of Technology Thonburi 126 Pracha Uthit Road, Bang Mod, Thung Khru, Bangkok, Thailand

ABSTRACT

This study aims to investigate the effect of website design quality on the success rate of the online website design agency. This research studies the impact of the design quality of the websites on customer behavior and purchase intention of novice and experienced clients. A questionnaire was used to conduct the research. To develop a questionnaire, some variables or indicators were needed to evaluate hypotheses. Since there were no standard questionnaires with specific indicators to check the objectives, the Delphi (Fuzzy Delphi Method) method is being utilized to obtain enough information to decide on the indicators. The study population included a random sample of people from all walks of life. To collect the data, 120 questionnaires were distributed among the sample group. The results indicated that the customers' initial and sustained purchase intents are most likely influenced by the design quality of a web design agency's website and overall design quality, presentation of their services, all-in-one service offering, the higher number of visitors, option for online payment, customer trust, and word-of-mouth has a positive impact on the success of the business. The findings show clear differences between how experienced and novice clients approach the web design agency's website.

Keywords: Web design, Design quality, Purchase intention, UX/UI, Web design agencies

INTRODUCTION

The information technology era has begun in the 21st century. Many consumers today prefer to do their business online rather than visiting stores, banks, or other physical venues (Kim & Lennon, 2013). A business website's primary goal is to keep existing clients while also attracting new ones. Retaining and gaining clients is a difficult endeavor for businesses because switching to a competitor's website comes at a minimal cost to the customer (Chang & Chen, 2008). High-quality website enhances the likelihood of keeping clients through influencing the customer's perceived risk (Gregg & Walczak, 2010; Kim & Lennon, 2013).

Web design has been recognized as a critical aspect in determining the popularity and success of websites. Web design agencies are no exception. From a website design quality perspective, the study examines the significant factors influencing the success rate of online web design agencies

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when novice and experienced clients visit the agencies' websites for the first time.

The purpose of this study is to investigate the impact of the design quality of the web design agencies website on customer behavior and purchase intention, which in this study would be the decisions of novice clients (The novice had neither experience in design nor able to distinguish a good website design from the poor one) and experienced (clients with any design background). The evaluation in this study comprises six factors of a website design quality which are; the overall design quality (A), presentation of services (B), all-in-one service offering (C), the higher number of visitors (D), option for online payment (E), customer trust, and word-of-mouth (F).

BACKGROUND

Background of Web Design Quality

The success of websites and e-commerce is mainly dependent on the quality of their web design. The World Wide Web considers website quality to be a critical notion. In today's world, a company cannot attract many visitors without a high-quality website. The ability of a website to help users achieve their goals and the willingness of users to return to the site to do so regularly are indicators of its quality (Loiacono, Watson, & Goodhue, 2002). The quality of a company's website impacts its reputation and dependability (Laja, 2015), Which, in turn, is linked to customers' intent to purchase through the website (Bai, Law, & Ivan, 2008).

Website quality can be defined as a website feature that gives value to its visitors (Chang, Kuo, Hsu, & Cheng, 2014). Other studies have identified some measurements and aspects for website quality, including information quality, ease of use, usability, aesthetics, trust, and emotional appeal (Barnes & Vidgen, 2001). Several studies on the impact of website quality attributes on user perceptions have found that website quality can significantly impact purchase intent in the online shopping context (Fung & Lee, 1999). Others have seen a strong link between the quality of a website and the trustworthiness of a company (Mcknight, Choudhury, & Kacmarc, 2002). Since the website is such a critical user interface for an Internet-enabled business, it is critical to assess website quality properties and what customers expect from a website (Straub & Watson, 2001).

Several factors contribute to a happy customer, including the user interface, information diversity, community, online reservations, amusement, aggravation, and credibility (Brackett & Carr, 2001). Nowadays, the website should accomplish much more. To be effective, a company's website must do more than provide information to visitors; it must also compel those visitors to act, such as making a purchase, learning more, or contacting the company. Alford (2014), among many others, proved the importance of website design and marketing strategy in influencing customer satisfaction.

METHODOLOGY

Fuzzy Delphi Method (FDM)

The Delphi method is performed with the participation of people who have knowledge and experience in the research topic. Noorderhaben (1995) indicated that using the Fuzzy Delphi Method to make group decisions can help to clarify the fuzziness of expert opinions and increase the efficiency and quality of questionnaires.

In this research, to apply the FDM method we have done the following steps:

Completing the first stage questionnaire: At this stage, experts are asked to rate them based on the importance of the indicators. Also, if they have different opinions in this regard, raise their issues. First stage calculations Using the relevant calculations, the indicators that did not get the required score are removed from the questionnaire.

Completing the second stage questionnaire: At this stage, the modified questionnaire is sent back to the experts. These calculations are performed similarly to the first step calculations. If the experts reach a consensus at this stage, the calculations will be completed, and the analysis will be completed. Otherwise, the process of modifying the new questionnaire and completing and calculating it will continue until the experts reach a consensus.

Presenting indicators and analyzing them: At this stage, neither the additional index nor the questionnaire index is reduced. The obtained indicators are the essential criteria obtained from experts' opinions. The questionnaire has been distributed among the participants after confirmation of three experts.

Survey

A questionnaire was used to conduct the research. The correlations between the variables were investigated using a survey methodology. An interview with the international marketing and web design expertise has been conducted to obtain the research's validity and reliability. The study population included a random sample of people over 18 years old from all walks of the life. To collect the data, 120 questionnaires distributed among the sample group. Multiple regression has been used to analyze data from a questionnaire.

RESULT

Demographic Information of Participants

One hundred twenty participants with experienced group (60) and novices (60) with a mean age of 33.24 were recruited. From One hundred twenty (120) questionnaires administered, table 1 shows that 70 which represent 58.3% are male while 50 which represent 41.7% are female.

Inferential Test

According to Cronbach's alpha coefficient, the dependability of each variable's question items should be rated between 0.65 and 1 (Nunnally, 1978).

Table 1. Gender demographic statistic.

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	70	58.3	58.3	58.3
Female	50	41.7	41.7	100
Total	120	100	100	

Table 2. Natural Data Distribution (Experienced Group).

	Kolmogorov-Smirnov test			Shapiro-Wilk test		
Variable	Sig.	df	Statistic	Sig.	df	Statistic
A	0.178	60	0.103	0.216	60	0.974
B	0.200	60	0.072	0.697	60	0.986
C	0.200	60	0.086	0.428	60	0.980
D	0.009	60	0.134	0.065	60	0.963
E	0.200	60	0.060	0.564	60	0.983
F	0.200	60	0.89	0.189	60	0.972

Table 3. Natural Data Distribution (Novice Group).

	Kolmogorov-Smirnov test			Shapiro-Wilk test		
Variable	Sig.	df	Statistic	Sig.	df	Statistic
A	0.200	60	0.088	0.165	60	0.971
B	0.200	60	0.074	0.846	60	0.989
C	0.200	60	0.075	0.730	60	0.986
D	0.002	60	0.149	0.037	60	0.958
E	0.056	60	0.113	0.232	60	0.974
F	0.022	60	0.124	0.020	60	0.952

the results from 120 sets of the questionnaires were applied for this test. The results of reliability test revealed that Cronbach's alpha value of 0.906 was acceptable. Thus, all data from the questionnaires could be used for further analysis.

Inferential Test of Hypotheses

Using the Shapiro-Wilk and Kolmogorov-Smirnov tests: This was used to determine the normality of the data. Based on this test, the distribution of data is expected when the value of P is greater than the critical number of 0.05. The results of this test showed that the distribution of all measured data were normal. The results of this test are presented separately in the following tables.

One-way analysis of variance to examine intergroup differences: Analysis of variance (ANOVA) can be used to perform a mean comparison test between two or more independent statistical populations. In the present study, because the difference between the groups is greater, which means that the hypothesis regarding the difference between two target groups is confirmed and both groups have different approach over the web design quality of the website of the web design agency.

Table 4. One-way analysis of variance (ANOVA).

Variables	Groups	Sum of Squares	df	Mean Sq.	F	Sig.
A	Between groups	1.728	1	1.728	6.247	.014
	Within groups	32.640	118	.277		
B	Between groups	.494	1	.494	.886	.349
	Within groups	65.815	118	.558		
C	Between groups	5.579	1	5.579	11.408	.001
	Within groups	57.711	118	.489		
D	Between groups	.579	1	.579	1.277	.261
	Within groups	53.462	118	.453		
E	Between groups	.188	1	.188	.406	.525
	Within groups	54.643	118	.463		
F	Between groups	2.444	1	2.444	4.587	.034
	Within groups	62.867	118	.533		

Table 5. Correlation between variables.

Correlation between variables		A	B	C	D	E	F
A	Pearson Correlation	1	.578	.475	.217	.248	.203
	Sig.		.000	.000	.007	.006	.026
B	Pearson Correlation	.578	1	.668	.191	.162	.233
	Sig.	.000		.000	.037	.077	.010
C	Pearson Correlation	.475	.668	1	.421	.307	.170
	Sig.	.000	.000		.000	.001	.063
D	Pearson Correlation	.217	.191	.421	1	.532	.160
	Sig.	.017	.037	.000		.000	.081
E	Pearson Correlation	.248	.162	.307	.532	1	.133
	Sig.	.006	.077	.001	.000		.147
F	Pearson Correlation	.203	.233	.170	.160	.133	1
	Sig.	.026	.010	.063	.081	.147	.203

The table above (Table 7) shows a one-way analysis of variance (ANOVA), sig value, and the numerical value of changes within and between and within groups. The result indicates that the average response of the experienced group is higher than the novice group. In this study, relations between two groups have been identified, which shows their significant differences.

Checking the Correlation Between Variables

In this study, the Pearson correlation coefficient is used to investigate the effectiveness and influence between the indicators of research variables. The correlation between the research variables is examined and demonstrated in the table below.

According to the data in the table above, the correlation between the research variables is observed. Since the correlation coefficient sign is the slope of the regression line, there is a positive and significant relationship between the

overall design quality and other research variables (Sig < 0.05). The Pearson correlation coefficient between them has become a positive and significant value. Therefore, the quality of website design impacts positively other research variables. Thus, it can be said that the research hypotheses have been confirmed.

DISCUSSION

The results of reliable statistics of criteria related to the sum of research variables using Cronbach's alpha test indicate high reliability. The result shows that the average Cronbach's alpha coefficients for the set of criteria are estimated to be 0.906, which shows a reasonable degree of reliability because it is calculated between $0.65< \alpha <1$. Shapiro-Wilk and Kolmogorov-Smirnov tests were used to determine the normality of the data. The results of this test proved that the distribution of all measured data was normal. Analysis of variance (ANOVA) was used to perform a mean comparison test between the experienced and novice groups. The result revealed that the score for the experienced group is higher than novice group, the difference between the groups is significant and two groups have different approaches over the web design quality of web design agency's website. The finding shows that there is a positive and significant relationship between the quality of the website and other research variables (Sig < 0.05) as the Pearson correlation coefficient between them is a positive and significant value. Therefore, the design quality of a web design agency's website has an impact on other research variables as well as clients' decision-making, the more services the customer purchases, the more they spend, and the more revenue the business collect and in the end, there would be an increase in the success rate of the business.

CONCLUSION

Customers' initial and sustained purchase intents are most likely influenced by design quality of a web design agency's website. Website design quality aspects can influence visitor's reactions while making purchase decisions.

This study investigated the impact of website design quality aspects on the success rate of web design agencies. Our findings showed that the quality of a website has a beneficial impact on initial intents and, thus, continued purchasing intent. Our findings proved that the web design agencies should consider focusing more on overall design quality of the website, proper way of service presentation, increasing the number of visitors, service variety, or all-in-one service offering, option for online payment, Customers trust and word-of-mouth. Our results overlap with the work of Khalil (2017), which suggested focusing on factors such as responsiveness, utility, reliability, and availability and online content and services such as personalization, user feedback and rating, and good tracking of customer complaints. Dzian, Triznova, Kaputa, and Supin (2015) found that word-of-mouth provided readers with indirect purchasing information, and that recommendations on these forums might have a substantial impact on their attitudes about various types of consuming objectives. The findings show clear differences between how experienced and

novice clients approach the web design agency's website. Experienced group scored higher than novice group on all variable measures. Experienced group attach great importance to the overall quality of the website while novice group are unaware of these design strategies. This suggests that, to attract the attention of experienced clients, web design agencies should be extra sensitive and pay more attention to important points and factors when developing web design strategies. This study's findings are also in line with Wolfinbarger and Gilly (2001) result which discovered that clients were happier when websites were more convenient, easy to use, offered a wider range of products, had more information available, and gave them more flexibility and control.

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