

# THE EFFECTS OF WEBSITE QUALITY ON CUSTOMER SATISFACTION IN MAHASARAKHAM PROVINCE: A CASE STUDY OF WWW.TARAD.COM

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## ABSTRACT

*At present, online shopping has become a popular way of shopping on the website. The trend of e-commerce websites in Thailand has been increasing day by day, and the aim of the business of e-commerce to reach wider markets and faster none-stop in business to the world. Since e-commerce shops have many competitors, most online shops try to attract their customers by offering lower product prices or conducting special promotions, and providing another reason to increase the numbers of online shoppers in Thailand. This study chooses www.tarad.com, the largest online shopping website of Thailand as its research setting. The research investigates effects of website quality on customer satisfaction. The data collection was carried out using questionnaires from 360 informants who are the users of the website from Mahasarakham Province, Thailand. Statistical analyses include mean, standard deviation, multiple correlation analysis, and multiple regression analysis. The research outcomes point out that website quality in term of system quality has a positive relationship and effect on customer satisfaction. In conclusion, the capability of website quality has positively affected and has been related to the customer satisfaction. Therefore, the e-commerce website process and resulting quality should strengthen the website's attraction to customers. The confidence and trust of customers due to website quality development can improve the situation of online business. It chapels to enhance competitive advantage to e-customers and become the guidelines for providing a stable and sustainable online business.*

**Keywords:** 1) E-commerce 2) Website Quality 3) Information Quality 4) System Quality 5) Service Quality 6) Customer Satisfaction

## 1. Introduction

Over the past decade, the world has become increasingly hyper-connected by technology in an environment where the internet and its associated services are accessible and immediate; and, where people and businesses have been able to communicate with each other instantly. This hyper-connectivity has deeply redefined relationships between individuals, consumers and enterprises, and citizens and governments; it is introducing new opportunities but also new challenges and risks in terms of individual rights and privacy, security,

cybercrime, the flow of personal data, and access to information (Dutta and Bilbao, 2012). Recently, technological developments, including websites, the telephone, the electronic devices and the internet have lessened physical barriers to communication and allowed humans to interact freely on a global scale. Also, the information society has changed the world in terms of human lifestyles, business and communication in an extreme way. Technology often focuses on computer equipment or computer-based products such as computer PCs, laptops and electronic devices (Wheeler, 2008). In many societies, technology has helped

develop more advanced economies including today's global economy. In actuality, information technology is the use of computers and software to manage information. The information technology department of a large company would be responsible for storing information, protecting information, processing the information, transmitting the information as necessary, and later retrieving information as necessary (Franklin, 2007).

Recently, a trend of e-commerce websites in Thailand has been increasing the aim of the business of e-commerce to reach wider markets and faster none-stop in business to the world. Since E-commerce shops have a lot of competitors, most online shops try to attract their customers by offering lower product prices or conducting special promotions, providing another reason to increase the numbers of online shoppers in Thailand (Pongvitayapanu, 2012). Additionally, the possibilities of increasing direct trade channels and the huge amount of markets in the online world are recognized. Though global economic conditions are facing a problem, online business's growth rate can be seen continually (Zhu, Kraemer and Xu, 2000). Today's consumers worldwide are able to shop in virtual stores anywhere, anytime, and with a better variety of choices. The growth of e-commerce is very positive being estimated that the figures for global e-commerce would exceed \$ U.S. 20 trillion by the United Nations Conference on Trade and Development (UNCTAD, 2011).

This research focuses on websites quality and customer satisfaction. These have been the most important things to the organization or companies that do their business; that is working and having transactions on the internet to offer their products and services directly to their customers. Many organizations succeed in their business by working on e-commerce websites in which they trust and believe regarding the website quality (such as product and service information) (Grover

and Saeed, 2004). Therefore, "e-commerce website" in this research is defined as the process of selling products and services to online customers. Previous researches have studied website quality performance from different perspectives, including six indicator types; namely, systems quality, information quality, service quality, utilization, user satisfaction, and benefit (Delone and Mclean, 2004). Even though many website enhance quality of informative, system quality, web designs, empathy, and service quality to their customers, they still want to find the way to attract their customers and make them satisfied with website quality.

Customer satisfaction on the internet has been a significant issue for companies doing business online. The customers satisfied or dissatisfied have a cognitive or affective reaction which appears as a response to a single or prolonged set of services used (Rust and Oliver, 1994). Satisfaction is post-consumption experience which compares perceived quality with expected quality, whereas service quality refers to a global evaluation of a firm's service delivery system (Anderson and Fornell, 1994; Parasuraman et al., 1985). Many companies now have a customer satisfaction index as one of their Key Performance Indicators (KPI). A high level of customer satisfaction is widely believed to be the best indicator of company's future profit. Therefore, with a better understanding of the customer satisfaction chain, firms would be able to make more effective use of their limited resources through quality initiatives for the real needs of their customers. Thus, customer satisfaction is considered to be one of the most important competitive factors for the future, and will be the best indicator of a firm's profit abilities.

According to the reason mentioned above, the researcher is interested to study the effects of website quality on customer satisfaction in Mahasarakham Province: in a case study of [www.tarad.com](http://www.tarad.com). The main purpose of this research is to examine the

website quality effects on customer satisfaction using www.tarad.com website in Mahasarakham Province, Thailand. The data has been collected from the people who used the internet for shopping online and have experiences in Mahasarakham Province. The result of this research is to provide information that utilizes to the development and adjustment of e-commerce website quality in Thailand, be able to better satisfy the customer and also enhance organization performance in Thailand. Such actions will help firms create value and improve business relationships with their customers.

#### *Research Objective*

1. To study the website quality of the website www.tarad.com in Thailand.
2. To study customer satisfaction on the website www.tarad.com in Thailand.
3. To test the relationship between website quality and customer satisfaction.
4. To test the effects of website quality on customer satisfaction in Mahasarakham Province.
5. To compare the website quality on customer satisfaction in terms of system, information and service quality with gender, age, marital status, educational level, employment status, average income per month and internet shopping experience.
6. To compare the differences between website quality on customer satisfaction in terms of gender, age, marital status, educational level, employment status, average income per month and internet shopping experience.

## **2. Research Methodology**

The samples used in this research are the www.tarad.com users who live in Mahasarakham Province, amounting to 400 users. The collected data started from January 25, to February 14, 2013.

The research instrument used to collect data from the samples in this research was by the convenient distribution of questionnaires to the www.tarad.com

users who live in Mahasarakham Province and included three parts.

Part 1 questions asked about the general information of the respondent in Mahasarakham Province such as gender, age, marital status, education level, employment status, average monthly income and Internet shopping experience. The researcher used a checklist scale with seven questions.

Part 2 questions deal with the measurement of website quality including system quality, information quality and service quality. The researcher used the Likert rating scale (5 scales) from a descending order of 5 to 1 with fifteen questions.

Part 3 questions deal with the measurement of customer satisfaction including repeat purchase intention, positive word-of-mouth and generation of less complain behavior. The researcher used Likert rating scale (5 scales) from a descending order of 5 to 1 with thirteen questions.

The entire questionnaires passed the consideration of three experts committee and were examine the reliability and  $\alpha$ -coefficient = 0.925

The researchers used face to face interviews with a questionnaire to website www.tarad.com users in Mahasarakham Province for data collection, the questionnaires were distributed on January 25, 2013 and collected on February 14, 2013.

The researchers distributed 400 questionnaires to the informants in Mahasarakham Province, but 360 questionnaires (90%) were returned, which conformed to Aaker, Kumar and Day (2001:1) was presented that the questionnaires distributed must be returned at least 20%, therefore we acceptable these. This verifies the scoring criteria of Bunchong Sisaart, (2002).

The highest level sets to 5 points.

The high level sets to 4 points.

The neutral level sets to 3 points.

The low level sets to 2 points.

The lowest level sets to 1 point.

Then, the research found the mean and standard deviation by using the statistical basis of SPSS following the principle of Bunchong Sisaart, (2002).

The average of 4.51-5.00 means opinion in the highest level.

The average of 3.51-4.50 means opinion in the high level.

The average of 2.51-3.50 means opinion in the neutral level.

The average of 1.51-2.50 means opinion in the low level.

The average of 1.00-1.50 means opinion on the lowest level.

The research compared the different mean between website quality and customer satisfaction, and the relationship and effects between quality of website and customer satisfaction.

Statistics used for data analysis are percentage (%), mean (x), standard deviation (SD), t-test, F-test (ANOVA and MANOVA), Multiple Correlation Analysis, Sample Regression Analysis, and Multiple Regression Analysis

### 3. Results

The results of data analysis demonstrate the conclusion as follows:

**Table 1:** Concepts of quality regarding website www.tarad.com in Thailand

Quality of website tarad.com		S.D.	Level of Agreement
1. System Quality	3.85	0.71	High
2. Information Quality	3.85	0.70	High
3. Service Quality	3.85	0.77	High
Overall	3.85	0.66	High

*Concepts of customers in Mahasarakham Province related to customer satisfaction*

The overall perspective of customer on satisfaction was at neutral levels and was considerably individualized. This aspect of

*General information about the sampled users of www.tarad.com website*

The information was collected from 360 customer sets that use www.tarad.com of which 135 users were male and 225 were female. Most users of www.tarad.com website were female 62.50%. Most were 15-25 years old at 72.50%. The majority of marital statuses were single at 81.94%. The majority of educational levels were a bachelor's degree or lower at 87.22%. The majority of employment statuses were employment with private enterprises at 54.72%. Most of average income per month was less than 15,000 Baht at 70.00%. Lastly, most of the research subjects' internet shopping experience was less than 1 year at 61.39%.

*Concepts of customers in Mahasarakham Province relate to quality of website www.tarad.com in Thailand*

The overall perspective of customers included positive thinking on website quality at high levels. Consideration of the individual aspects of customers revealed that they agreed on system quality, information quality and service quality at the high levels.

customers revealed that they agreed with repeat purchase intention, positive word of mouth, and generated less complain behavior at neutral levels.

**Table 2:** Concepts of customer satisfaction using the website www.tarad.com in Mahasarakham Province, Thailand

Customer Satisfaction		S.D.	Level of Agreement
1. Repeat Purchase Intention	2.88	1.04	Neutral
2. Positive word-of-mouth	3.19	0.80	Neutral
3. Generating less complaint behavior	3.31	0.77	Neutral
Overall	3.12	0.78	Neutral

*Multiple correlation analysis of e-commerce website quality on customer satisfaction using www.tarad.com in Mahasarakham Province, Thailand*

The result of Table 3 reveals that each individual aspect of independent variables are correlated or show

multicollinearity, Therefore, researchers tested multicollinearity by VIF, and it appeared that the VIF values of independent variables resulted in values from 2.678 - 2.820 which is less than 10, Therefore, the multicollinearity problem was of no concern. (Black. 2006:585)

**Table 3:** Multiple correlation analysis of website quality on customer satisfaction

VARIABLE	CS	SQ	IQ	SERQ	VIFs
$\bar{X}$	3.12	3.85	3.85	3.85	
SD	0.78	0.71	0.70	0.77	
CS	-	0.407*	0.370*	0.343*	
SQ		-	0.754*	0.744*	2.820
IQ			-	0.738*	2.769
SERQ				-	2.678

\* Significant at a 0.05 level

*Correlation and multiple regression of customer satisfaction using the website www.tarad.com in Mahasarakham, Thailand*

The result of Table 4 reveals that website quality (WQ) on the factor of system quality (SQ) has correlated

positively with customer satisfaction at a significant level of 0.05. For the component of website quality in terms of information quality (IQ) and service quality (SERQ), there is no correlation with customer satisfaction (CS).

**Table 4:** Correlation and multiple regression of customer satisfaction

WEBSITE QUALITY	Customer Satisfaction		t	p-value
	Coefficient	Std. Error		
Constant	1.226	0.224	5.469	0.000 *
System Quality	0.308	0.089	3.462	0.001 *
Information Quality	0.146	0.090	1.631	0.104
Service Quality	0.039	0.080	0.483	0.629
F=25.191 p=0.000 AdjR2=0.168				

\* Significant at a 0.05 level

## Discussions

The research reveals that customers who used the website [www.tarad.com](http://www.tarad.com) possessed in overall perspective and individual aspects which showed agreement concerning system quality, information quality and service quality at a high level. Therefore, it was predicted that the high quality of a website would attract higher online shoppers to visit, buy, and use services of [www.tarad.com](http://www.tarad.com) website. It's similar to the research of Bai et al (2008) who found that website quality has a direct positive impact on and relationship to customer satisfaction and that customer satisfaction has a direct and positive impact on purchase intentions. While the influence of website quality on purchase intentions exists, customer satisfaction does significantly mediate this effect. In the same way, Magerhans (2006) found that customers like to visit a new website where there is a wide selection and variety of products, good price incentives, customer feedback, web reputation and credibility of the company exists, easy order processing, no language barrier, acceptable page download speed, short delivery time, having family and friends who happily shop at the site, the website is new and different, easy to find products, a fast response for customer service, easy return policy, credit card safety, no tax, a good place to find agreements, low or no charge for shipping and handling, product information, family and friends like to know opinions, and hear about it on TV, radio or newspapers.

The customer's satisfaction of those using [www.tarad.com](http://www.tarad.com) shows an overall agreement of perspective and individual aspects regarding with repeat purchase intention, positive word-of-mouth, and reduction of customer complaints at the neutral level because online customers seem to be more interested in discount policy, contact and destination information, accurate information, language used, specific layout, prompt service, security of system, and graphics on the website

[www.tarad.com](http://www.tarad.com). It is similar to the research of Parasuraman and Grewal (2000) who found that customer satisfaction is a dimension of an environment where customers interact with technology rather than service personnel. Consumer characteristics such as their demographics, lifestyles, experience with other technology-based systems, and technology readiness, which affect their perceptions of the quality and values of their purchase intention. In the same way Tantakasem (2007) found that there are three types of quality attributes that affect customer satisfaction: (1) basic factors, (2) performance factors, and (3) excitement factors and these factors will vary in their impact on customer satisfaction. Basic factors in terms of the reputation of the website and convenient access to the website, a flexible system, accuracy of service, security of information, easily understood statements, and prompt service are correlated with overall customer satisfaction on the contrary, excitement factors in terms of information and service are found to have increasing correlation. The relationship of performance factors with overall customer satisfaction is found to be at higher levels. This study also finds that the higher the level of customer satisfaction, the higher the levels of customer attitudinal and behavioral loyalty.

## 4. Conclusions

According to analyses of relationships and effects, it was found that (1) website quality has a positive relationship with, and effects on customer satisfaction, system quality were found as significant factors influencing customer satisfaction. (2) System quality is found as a significant factor influencing repeat purchase intention. (3) System quality and information quality were found as significant factors influencing positive word-of-mouth advertising. (4) System quality was found as being a significant factor influencing reduced customer complaints at the level of  $p < 0.05$ .

In conclusion, the website quality capability positively affects and relates to customer satisfaction. Therefore, e-commerce website processing should be strengthened to attract customers by the quality of the website.

### *Suggestions*

#### *Suggestion for research use*

1.1 Customers using www.tarad.com website should emphasize more on system, information, and service quality.

1.2 www.tarad.com website administrators should realize that website quality (especially system quality) is more important than information and service quality.

1.3 Customer using www.tarad.com website should encourage other customers to participate at the www.tarad.com website.

1.4 www.tarad.com website administrators should be able to show leadership regarding the quality of the website to determine the competitive advantage strategies of business operations in order to achieved sustainable business.

1.5 www.tarad.com website administrators should be able to create acceptability among consumers and society in terms of system, information, and service quality.

1.6 Customers should realize that website quality focuses on system, information, and service quality because those factors affect consumer decision-making to purchase and use services on the website www.tarad.com.

#### *Suggestions for future research*

2.1 Future research should more deeply study the effects and relationships

regarding the quality of Thai and foreign e-commerce website.

2.2 Future research should compare the effects and relationships with other e-commerce websites inside and outside the country of Thailand.

2.3 Future research should study the others factors of website quality which more effects customer satisfaction such as product/service enhancement, internal organizational efficiency, and market information support.

2.4 Future research should more deeply study the competitive advantage strategy of other e-commerce website.

2.5 Future research should extend the sample groups in Mahasarakham to the whole country.

2.6 Future research should change how to gather data collection from direct questionnaire distribution to in-depth interviews in order to attain the usefulness of the information for future research.

2.7 Future research should study the problem of, and barriers to influence thinking regarding e-customer in order to more efficiently fine the way to adjust and correct the quality of websites.

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