

THE IMPACT OF TECHNOLOGY ACCEPTANCE AND WEBSITE QUALITY ON THE ACCEPTANCE OF ONLINE LEARNING WEBSITES

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ABSTRACT

This research study investigates the impact of technology acceptance and website quality on the acceptance of online learning websites. The objectives of this quantitative study are 1) to examine demographic factors affecting the acceptance of English language learning websites, and 2) to explore how technology acceptance and website quality factors influence the use of these websites. The sample consists of 400 residents in Bangkok. The analysis methods include frequency distribution, percentages, mean, one-way ANOVA, and multiple regression analysis. The research findings are as follows: 1) The majority of the sample were male (202 individuals), aged between 21 and 30, with most holding a bachelor's degree. The predominant occupation was homemaker, with an average monthly income exceeding 25,001 baht. 2) The technology acceptance factor was rated overall as high, with the perceived benefits highlighting the convenience of learning from any location, ease of use increasing the desire to learn, positive attitudes towards usage due to its effectiveness as a learning tool, and practical use being emphasized for its convenience. 3) The website quality factor was also rated overall as high, with the content being valued for providing beneficial knowledge to learners, the service aspect being appreciated for offering learning experiences tailored to learners' needs, and the system's flexibility being recognized. 4) The acceptance of English language learning websites was rated overall as high, with the primary focus on meeting users' needs and providing convenience. 5) Technology acceptance and website quality factors together accounted for 39.0% of the variance in website acceptance, with a standard error of $\pm .598$.

Keywords: Technology Acceptance, Website Quality, User Acceptance

INTRODUCTION

In an era where information and communication technology is rapidly evolving, online learning through internet-based systems, commonly known as e-Learning, has gained increasing popularity. This is due to its ability to meet learners' needs for convenience and flexibility, allowing them to manage their own study schedules and locations. Additionally, Learning Management Systems (LMS) support effective teaching and learning processes. (Pahasing, B. and et al., 2022) [1].

Online learning has now become a significant component of the education system, effectively supplementing or even replacing traditional teaching methods (Raji-Lawal et al., 2023) [2]. Research findings indicate that e-Learning systems enhance learning outcomes and promote learner-centered education. At the same time, the online learning service industry has experienced rapid growth. A wide variety of courses and online learning platforms have been developed to meet the diverse needs of users.

However, the intense market competition necessitates the continuous development and improvement of online learning platforms to effectively respond to user demands.

In light of this, the researchers are interested in studying the factors influencing the acceptance of online learning platforms, focusing specifically on technology acceptance and website quality. The aim is to analyze the factors affecting user acceptance and use the findings to provide guidelines for developing online learning platforms that better suit the needs of users in the modern era. [3].

OBJECTIVE

To study the factors of technology acceptance and website quality that affects the acceptance of online learning website usage.

Conceptual framework

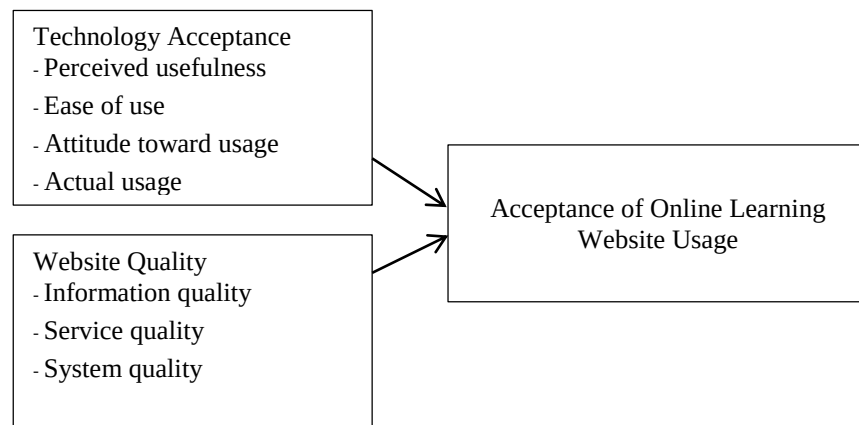


Figure 1: Conceptual Framework

METHODOLOGY

1) Research design

This study is survey research.

2) Population and samples

This research is conducted as a quantitative study. The population for this research consists of students enrolled at Suan Sunandha Rajabhat University for the first semester of the academic year 2024, totaling 26,190 individuals (Office of Registration and Evaluation, Suan Sunandha Rajabhat University, 2024).

3) Research Instrument

The research instrument applied for this study is a questionnaire divided the inquiries into 4 section; Section 1: General information of respondents, including gender, age, education level, occupation, and average monthly income. The questions consist of both open-ended and closed-ended formats. Section 2: Questions related to technology acceptance affecting the usage of online learning websites. This includes perceived usefulness, ease of use, attitude toward usage, and actual usage, measured using a 5-point Likert scale. Section 3: Questions related to website quality affecting the usage of online learning websites. This includes information quality, service quality, and system quality, measured using a 5-point Likert scale. Section 4: Questions related to the acceptance of online learning website usage, measured using a 5-point Likert scale.

4) Testing quality of research instrument

4.1) Content validity

The researcher submitted the questionnaire being reviewed and revised as suggested by the advisor to three experts to validate whether the questions are congruent with the research objectives or not. Item-objective Congruence Index (IOC), ensuring a value greater than 0.5.

4.2) Reliability

The questionnaire, reviewed by experts, underwent a pilot study using a homogeneous sample group to assess reliability. The Cronbach's alpha coefficient was 0.876, indicating acceptable reliability.

4.3) Data Collection

Data collection was undertaken through 3 steps; (1) request for informant cooperation with explanation on details of the questionnaire and how to answer the questions, (2) posting the questionnaire on the defined social media; Facebook, and directly send it to the requesting informants, and (3) collection of questionnaires and inspection on completion of answers and whether the collected numbers reach 400 sets.

4.4) Data Analysis

The descriptive statistical analysis was applied based on the values of frequency, percentage, mean and standard deviation through the statistical package to find out statistical values as follows; Section 1: Analysis of the demographic characteristics of the respondents Descriptive statistics were used to describe the respondents' demographic data through frequency and percentage analysis. Section 2: Analysis of the marketing mix for parents in the Bang Na district The data was analyzed using mean ($\bar{x}$) and standard deviation (S.D.). Section 3: Analysis of parents' decision-making in purchasing football courses in the Bang Na district. The data was analyzed using mean ($\bar{x}$) and standard deviation (S.D.). Section 4: Analysis of the marketing mix factors influencing parents' decision to purchase football courses in the Bang Na district. The data was analyzed using multiple regression analysis.

After data collection and verification, all collected questionnaires were filled in a coding form for data processing by the statistical package to obtain results for further discussion.

RESULTS

1) Analysis of the demographic characteristics of the respondents

The majority of the sample were male, totaling 202 individuals, aged between 21–30 years. Most respondents held a bachelor's degree, were homemakers, and had an average monthly income exceeding 25,001 THB. From Table 1.

Table 1
The number and percentage of respondents based on demographic characteristics can be presented as follows

No.	Characteristics	Number	Percentage
1. Gender	Male	202	50.50
	Female	198	49.50
2. Age	Under 20 years	39	9.75
	21–30 years	156	39.00
	31–40 years	151	37.75
	Over 40 years	54	13.50
3. Education Level	Below bachelor's degree	141	35.25
	Bachelor's degree	144	36.00
	Higher than bachelor's degree	115	28.75
4. Occupation	Students	45	11.25
	Business owners/Freelancers	84	21.00
	Private company employees	92	23.00
	State enterprise employees/Government officials	80	20.00

	Homemakers	99	24.75
5. Average Monthly Income	Below 10,000 THB	82	20.50
	10,001–15,000 THB	55	13.75
	15,001–20,000 THB	61	15.25
	20,001–25,000 THB	72	18.00
	Above 25,001 THB	130	32.50

2) Analysis of technology acceptance affecting the use of online learning websites

Technology acceptance was rated at a high level overall. Perceived usefulness: Primarily focused on enabling learning and teaching from any location. Ease of use: Emphasized ease of operation, which increases the desire for further learning. Attitude toward usage: Highlighted the tool's capability to facilitate easy learning. Actual usage: Focused on the convenience it provides for learning. From Table 2.

Table 2

Mean and Standard Deviation of Technology Acceptance

Factors of Technology Acceptance (Scale 1-5, n=400)	$\bar{x}$	S.D.	Level of Opinion
1) Perceived Benefits	3.59	0.82	High
2) Ease of Use	3.65	0.84	High
3) Attitude Towards Use	3.65	0.77	High
4) Actual Usage	3.55	0.89	High
Overall Average	3.59	0.82	High

3) Analysis of website quality affecting the use of online learning websites

Information quality: Focused on providing useful and beneficial knowledge to learners. Service quality: Emphasized the alignment of learning services with learner needs. System quality: Highlighted the system's flexibility in use. From Table 3.

Table 3

Mean and Standard Deviation of Website Quality

Factors of Website Quality (Scale 1–5, n=400)	$\bar{x}$	S.D.	Level of Opinion
1) Information	3.62	0.87	High
2) Service	3.42	0.67	High
3) System	3.62	0.69	High
Overall Average	3.55	0.60	High

4) Analysis of the acceptance of online learning website usage

Acceptance of online learning website usage was rated at a high level overall. Most responses emphasized that online learning websites address learner needs and offer convenience. From Table 4.

Table 4

Mean and Standard Deviation of Acceptance of Using Websites for Online Learning

Acceptance of Using Websites for Online Learning (Scale 1-5, n=400)	$\bar{x}$	S.D.	Level of Opinion
1) You choose a website for online learning because it meets your needs and is convenient.	3.63	0.93	High
2) You search for information or reviews of online learning websites from the internet to help in deciding whether to accept using the website for online learning.	3.39	0.96	Moderate
3) You compare online learning websites based on features, reliability, price, and promotions to choose the best one for online learning.	3.31	0.95	Moderate

4) You spend a short time selecting a website for online learning.	3.41	0.97	High
5) You will review your experience after using the online learning website on the internet.	3.39	0.96	Moderate
6) You feel satisfied with using the website for online learning and would recommend it to others.	3.36	0.98	Moderate
7) You are satisfied with the teaching experience via the online learning website and would return to learn again.	3.36	0.92	Moderate
Overall Average	3.41	0.76	High

5) Hypothesis testing of factors influencing the acceptance of online learning website usage

The model predicting acceptance of online learning website usage is as follows: Acceptance of online learning websites = $0.225 + (0.470 * \text{Website Quality}) + (0.409 * \text{Technology Acceptance})$ This model explains 39.0% of the variance in the acceptance of online learning websites. The standard error of prediction is ± 0.598 . From Table 5.

Table 5

Analysis of the Fit Model for Acceptance of Using Websites for Online Learning

Model	Model 1	Model 2
Constant	1.128	0.255
Website Quality	0.631	0.470
Technology Acceptance		0.409
R ²	0.306	0.390
Standard Error (S.E.)	0.637	0.598
F	175.474	54.813
P-value of F	0.000	0.00

DISCUSSION

Discussion of Findings Based on the Research Objectives to Study the Level of Opinion on Technology Acceptance and Website Quality, Influencing the Acceptance of Using Websites for Online Learning. The key findings are as follows:

This study aimed to explore the influence of technology acceptance and website quality on the acceptance of using websites for online learning. The findings revealed that both factors significantly influenced the acceptance of using online learning websites at a 0.05 statistical significance level. These factors were found to account for 39.0% of the variance in users' acceptance of online learning websites, with a standard error of prediction of ± 0.598 . These findings align with the work of Kanyaphat Saiwamorn (2020) [3], which identified factors influencing the acceptance of online banking services among Krungthai Bank customers, including perceived benefits, compatibility, complexity, and trialability as key elements. Furthermore, the results are consistent with the research of Pravee Manop and Patcharathai Jarutwepnukoon (2020) [4], who studied technology acceptance and website quality as factors affecting user satisfaction with the National Innovation Agency's website. Their research found that technology acceptance, ease of use, perceived benefits, and the intention to use were significant factors that also apply to the online learning context. The concept of Maslin Jaikun (2018) [5] on the impact of technology acceptance, trust, and social media marketing further supports these findings. According to Jaikun, perceived benefits, ease of use, trust, and social media influence were also identified as factors that shape the purchase intentions of consumers, especially for those using Facebook LIVE for online shopping. This is further reinforced by Thadathibeth Phuthong's (2018) [6] study on the acceptance of social media websites for sharing travel experiences, where website quality aspects such as performance expectations, user-friendliness, and privacy were deemed crucial. Additionally, research by Nontharuj Upatham (2018) [7] highlighted the role of website quality, including personal needs, social reference groups, and brand image, in the decision-making process of millennials selecting job-search websites in Bangkok. Similarly, Monthicha Chiamphong and Thadathibeth Phuthong (2018) [8] explored the impact of website quality factors, such as the perceived quality of health information, trust, and ease of use, on the intention

of elderly users in Bangkok to use health-related websites. The study's findings also align with Suchitra Duangthong (2021) [9], who emphasized the importance of information quality, perceived benefits, and ease of use in determining user satisfaction with the website of the Faculty of Arts at Rajamangala University of Technology Thanyaburi. The work of Apinya Ropwai (2018) [10] on the Tourism Authority of Thailand's website similarly highlighted the significance of website quality factors like credibility, system quality, trust, social influence, and user familiarity. From the results of this study, it is clear that technology acceptance plays a vital role in the adoption of online learning platforms. Key factors influencing technology acceptance include: 1) Perceived Benefits: Technology enables learning from any location, improving convenience and access to education. 2) Ease of Use: Simple-to-use technologies motivate learners to engage more with the content. 3) Attitudes Toward Use: Positive attitudes toward technology make learning easier and more effective. 4) Actual Usage: The convenience of technology in the learning process encourages users to adopt it. Similarly, the study identified several website quality factors that enhance the learning experience, including: 1) Information Quality: Websites that offer useful and relevant information that meets learners' needs enhance the overall learning experience. 2) Service Quality: Providing lessons that are aligned with learners' needs is essential for increasing engagement and satisfaction. 3) System Flexibility: A website system that is adaptable and responsive to various learning styles and user needs is crucial for effective online education. In conclusion, the findings of this study confirm that both technology acceptance and website quality play significant roles in influencing the acceptance and use of online learning websites. These factors contribute to a better learning experience by making the platform more accessible, user-friendly, and responsive to learners' needs.

CONCLUSION AND FUTURE WORK

1) Recommendations

Modern technologies such as AI, AR, and VR should be integrated into teaching to enhance engagement and elevate the learning experience. Additionally, websites should be continuously improved based on research findings and user feedback. This should be coupled with user training, especially for those unfamiliar with technology, along with providing fast and efficient technical support services to boost user confidence in using the website.

2) Recommendations for Future Research

It is recommended to study other factors that may influence the acceptance of online learning websites, such as cultural and social factors, to provide comprehensive and in-depth information for website development. Additionally, it is important to study the usage of online learning websites internationally, in order to apply the research findings to enhance the development of websites in Thailand, making them more modern and effective. Furthermore, the research should be expanded to explore a diverse target audience, such as high school students, university students, and working adults, in order to develop website content and features that better meet the needs and usage behaviors of each group.

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