

# Evaluating the Usability of Free Web Hosting among University Students

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**Abstract:** Nowadays, most university students search for information through the Internet. Internet becomes a popular source of information in completing assignments, projects and other tasks assigned to university students. Besides searching for information, students also should have the opportunity to deliver information through Internet. Therefore, universities are recommended to provide course to develop websites using free web hosting among students. Students were given assignments to develop an interesting website by using free web hosting services. This paper seeks to evaluate the usability of free web hosting among university students as a convenient as well as simple way of fulfilling their needs. This paper also highlights the students' view on the usefulness, convenience, design and quality of free web hosting. A sample of 200 users was invited by e-mail to participate in the online survey. A total of 119 valid responses were received which represented 59.5 of response rate. The findings of this study reveal that students are satisfied with the usefulness of the system as well as satisfied with the system itself. In conclusion, majority of respondents were ready to use the tools for future web designing tasks.

## 1 INTRODUCTION

### 1.1 Background of the Study

There are many purposes of websites development. Different kinds of websites have different purposes depending on its targeted users. Some websites are designed for selling products, providing practical information or sharing entertainment. This study focuses on the usability of informative and practical information website on educational purposes. The aim of an information centric website is to convey specific and helpful information for reader so that the users learn something new or understand a topic better. According to Williamson & Parolin (2012), web design is the process of collecting ideas, aesthetically arranging and implementing them, guided by certain principles for a specific purpose with the intention of presenting the content on electronic web pages, which the end-users can access through the Internet with the help of a web browser.

Free web hosting can be described as programs that allow users to design and develop their own

website through an easy interface that takes all programming and coding work out (Prodan & Ostermann, 2009). Users can produce an interesting and functional website without having to understand technicalities aspects like code and error.

### 1.2 Problem Statement

In today's world, people may deliver and receive information by only one click. People are heavily relying on the Internet to find ideas and search for information. Bernama (2015) has reported that the Internet users in Malaysia has exceeded 20.1 million. According to Ho (2016), there is an increment of 14% of Internet use in Malaysia from 2013 to 2015. In 2015, the most popular activities through Internet were participating in social networks (84.3%) followed by searching and getting information (79.6%) (Ho, 2016). It shows that the second highest percentage of the use of Internet is for the purpose of searching for information. It is important for web designer to design their websites and deliver valid information that may influence others to possess positive traits.

Bauer (2009) stated that in designing website, the web designer does not need to be expert in programming. Free web hosting were created for common people to build web site, without learning programming. The web designers only need to include information and create the website creatively without facing difficulties in programming. The web designer may save time and enhance his creativity to attract viewers. The web designer must be very particular if he doing programming because missing space in coding program can return errors which require more time to check thoroughly. There is no need to do extensive testing to make sure all the parameters and inputs work as the programming are supposed to work. Therefore, this study evaluated the usability of free web hosting in designing websites among university students.

## 2 LITERATURE REVIEW

### 2.1 Characteristics of Interesting Website

In this interconnected world, the most effective way to deliver information with others is sharing information through Internet. The Internet users who have the right platform to deliver information may influence others but with several factors that need to be considered. According to Liu & Arnett (2000), there are four factors that have been identified to be critical to website success such as information and service quality, system use, playfulness, and system design quality.

Ganning et al. (2014) stated that there are several elements to create interesting website such as layout of the web site in which includes the arrangement of graphics, ads and text. In the web world, the key goal is to help the audience find the information they seek at a glance. This includes maintaining the balance, consistency, and integrity of the design. Graphic use in the web designing can include logos, photos, clipart or icons, which may attract the users to browse the web site. For user friendliness, graphic and color of web site need to be placed appropriately so that the users feel pleasant browsing the web site. Content of the website should also be arranged appropriately, while not making it too congested or slow to load. Written text should always be relevant and useful, so as not to confuse the users and to give them what they want so they remain on the web site. Content should be optimized for search engines and

be of suitable length, incorporating relevant keywords.

Besides the basic elements of web design that make a site beautiful and visually compelling, a website must always consider the end user. According to Sicilia et al., (2005), website designer must consider these aspects such as navigation, multimedia, compatibility, technology and interactive. Site mapping, menus and other navigation tools in the web design must be created with consideration of how users browse and search. The goal is to help the user to move around the site with ease, efficiently finding the information they require. Relevant video and audio stimuli in the web design can help users to grasp the information, developing understanding in an easy and quick manner. This can encourage visitors to spend more time on the webpage. The web designer should design the web page, to perform equally well on different browsers and operating systems. Advancements in technology give designers the freedom to add movement and innovation, allowing for web design that is always up-to-date, dynamic and professional. Active number of users' participation and involvement can be increased by adding comment boxes and opinion polls in the design.

### 2.2 Using Free Web Hosting

In designing a website, the web designer will aim for usability, performance and accessibility. The web designer should have basic ability in graphic design so that he may develop an attractive web site. The web designer needs to observe what visually demands by users in order to keep them on the page and draw more traffic (Bauer, 2009). The goal of web designing is that everything should look professional. The web designer only needs to have information and include pictures, graphs and photos into the website.

The website needs to be easy for others to use. Users may only have the ability to click a button or type in their information (Wen, 2001). If the website is confusing or too advanced, they will not be able to interact and influence by information that the web designer delivers. Everything needs to have a good flow. One of the templates must be used and then be customized to specific needs.

Web designer can upgrade content easily by using free web hosting. The web designer does not need to write new code every time to make a change to the web site. The web designer may minimize

errors and keeps things running smoothly by using a free web hosting.

### 2.3 Web Development and Web Tools

Previous study has highlighted several examples of web, blog and podcast which provided free web design tools that may assist students to create and design their own website interactively and interestingly (Boulos et al., 2006). The availability of these web tools helps them to simplify the tedious web development process. The tools and technology of new, powerful front-end require only minimum knowledge of coding (Jin, 2017).

Furthermore, Annarelli et al. (2017) claimed that the availability of free web and open source web design tools helps web designer communities to become web innovators in a simplest way and at rapid growth. On the other hand, Jin (2017) highlighted that mobile web development is also one of the fast growing fields in IT. As part of the concern, the responsiveness and mobile friendly characteristics of websites was important and must be carefully looked in depth to be included at an entry level of web design and development classes (Jin, 2017).

### 2.4 Usability in Web Design

Usability aims to assist web users. The organization of information in web should be done in the simplest way and accessible from any kinds of gadgets, devices or platforms (Leibowitz, 2014). Lawrence & Tavakol (2007) categorized website usability into two; either good or poor usability. Good usability refers to a situation whereby website users did not even aware they were currently uses web interface to browse the website.

Furthermore, frustration of users while using website was linked to the poor usability of web design (Lawrence & Tavakol, 2007). Several approaches can be considered by the web developers to evaluate their web usability depends on the cost bear to them. The practices of usability assessment of web can now be done using automatic approaches which offers automatic usability statistics (Grigera, et al. 2017).

## 3 METHODS

### 3.1 Sampling and Methodology

An online survey on the usability of the free web hosting was conducted to obtain data from university students in Universiti Teknologi MARA Cawangan Kelantan, Malaysia who have experienced using the free web hosting in class sessions. A sample of 200 users was invited by e-mail to participate in the online survey. A total of 119 valid responses were received which represented 59.5% of response rate. The researchers used descriptive analysis to evaluate the usability of free web hosting among the university students.

## 4 RESULTS AND DISCUSSION

### 4.1 The Usefulness of the Free Web Hosting

Five questions on the usefulness of the free web hosting were asked among students. Results confirmed that students found the usefulness of the free web hosting in developing the website. Half (51.3%) of the students agreed that they could complete the tasks and scenarios quickly using the free web hosting system. Sixty-three (52.9%) of students believed that they could become productive quickly using this system. Regarding the statement where the system gave error messages that clearly told them how to fix problems, 52.1% (62) of the students were undecided, while 37% (44) agreed.

Similarly, 44.5% (53) of students were undecided whenever they made a mistake using the system, they could recover easily and quickly while 41.2% (49) of students agreed. On the other hand, half of students (60) agreed that the information in the system was effective in helping them to complete the tasks and scenarios.

Table 4.1: The Usefulness of the web hosting (n=119)

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
I was able to complete the tasks and scenarios quickly using this system	0 (0%)	0 (0%)	45 (37.8%)	61 (51.3%)	13 (10.9%)
I believe I could become productive quickly using this system	0 (0%)	0 (0%)	36 (30.3%)	63 (52.9%)	20 (16.8%)
The system gave error messages that clearly told me how to fix problems	0 (0%)	2 (1.7%)	62 (52.1%)	44 (37%)	11 (9.2%)
Whenever I made a mistake using the system, I could recover easily and quickly	0 (0%)	4 (3.4%)	53 (44.5%)	49 (41.2%)	13 (10.9%)

Note: Scale: 1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree

## 4.2 Convenience of the Free Web Hosting

Five questions regarding the convenience of the free web hosting were combined into this study. Results confirmed that majority of students decided that the free web hosting was convenient to use. Majority of students 73 (61.3%) agreed that they were satisfied with how easy it is to use this system in the development of the website. In addition, majority of the students 70 (58.8%) agreed that it was simple to use the system. Similarly, highest percentage (56.3%) of students felt comfortable using this system. Sixty-one students (51.3%) agreed that it was easy to learn to use this system. Furthermore, over half of the students (55.5%) agreed that it was easy to find the information they needed while only 2 (1.6%) disagreed.

Table 4.2: Convenience of the free web hosting (n=119)

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
Overall, I am satisfied with how easy it is to use this system	1 (0.8%)	0 (0%)	27 (22.7%)	73 (61.3%)	18 (15.1%)
It was simple to use this system	1 (0.8%)	0 (0%)	36 (30.3%)	70 (58.8%)	12 (10.1%)
I felt comfortable using this system	1 (0.8%)	0 (0%)	35 (29.4%)	67 (56.3%)	16 (13.4%)
It was easy to learn to use this system	1 (0.8%)	2 (1.7%)	38 (31.9%)	61 (51.3%)	17 (14.3%)
It was easy to find the information I needed	1 (0.8%)	1 (0.8%)	32 (26.9%)	66 (55.5%)	19 (16%)

Note: Scale: 1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree

## 4.3 Design of the Free Web Hosting

The researchers formulate four questions related to the design of the free web hosting. The majority of the students 66 (55.5%) agreed that the organization of information on the system screens was clear. Moreover, over half of the students (51.3%) agreed that the interface of the free web hosting system was pleasant. Fifty-nine students (49.6%) agreed they liked using the interface of this system while 39 of them were undecided. Likewise, 49.6% (59) of the students agreed that the information (such as online help, on-screen messages and other documentation) provided with this system was clear and 33.6% were undecided.

Table 4.3: Design of free web hosting (n=119)

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
The information (such as online help, on-screen messages and other documentation) provided with this system was clear	1 (0.8%)	0 (0%)	40 (33.6%)	59 (49.6%)	19 (16%)
The organization of information on the system screen was clear	1 (0.8%)	0 (0%)	39 (32.8%)	66 (55.5%)	13 (10.9%)
The interface of this system was pleasant	1 (0.8%)	3 (2.5%)	38 (31.9%)	61 (51.3%)	16 (13.4%)
I liked using the interface of this system	1 (0.8%)	0 (0%)	39 (32.8%)	59 (49.6%)	20 (16.8%)

Note: Scale: 1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree

## 4.4 Quality of the Free Web Hosting

This study also explored the quality of the free web hosting. Results demonstrated that majority of the students were satisfied with this system (55.5%). Sixty-three students (52.9%) agreed that this system has all the functions and capabilities they expected to have in developing the websites.

Table 4.4: Quality of free web hosting (n=119)

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
This system has all the functions and capabilities I expect it to have	1 (0.8%)	0 (0%)	42 (35.3%)	63 (52.9%)	13 (10.9%)
Overall, I am satisfied with this system	0 (0%)	0 (0%)	32 (26.9%)	66 (55.5%)	21 (17.6%)

Note: Scale: 1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree

## 5 CONCLUSIONS

This study focused on evaluating the usability of free web hosting among university students in Malaysia. The free web hosting is a free web hosting services provided for users around the world to design their own websites. Therefore, using free web hosting in designing the websites among university students may enhance their creativity, intuitive and associational thinking. The findings of this study revealed that students are satisfied with the usefulness of the system as well as satisfied with the system itself. The university students may have potential for increased access and exposure to the quality of information in order to develop websites that are informative and interactive for users. They did not only experience delivering information in class but also sharing information to the world to promote social interaction. Besides, the university students also should be educated on positive uses of the Internet to enhance public awareness on their responsibilities when using the Internet in this digital era which needs to be identified in future research.

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