# AN EMPIRICAL STUDY ON THE INFLUENCES OF WEBSITE DESIGN TOWARDS CUSTOMER SATISFACTION IN ONLINE SHOPPING

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This thesis is submitted in partial fulfilment of the requirements for the award of Bachelor of Technology Management (Technology Innovation) with Honours

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MAY 2019

#### **APPROVAL**

I/ We hereby declare that I/ we have read this dissertation/report and in my opinion, this dissertation/report is sufficient in terms of scope and quality as a partial fulfillment the requirements for the award of Bachelor of Technology Management (Technology Innovation) with Honours

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NAME OF PANEL	:	
DATE	:	

#### **DECLARATION**

I hereby declared that this thesis entitled

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is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in the candidature of any other degree.

SIGNATU	RE:	
NAME	:	
DATE	:	

#### **DEDICATION**

I would like to dedicate the appreciation to my family members who supported me in term of spiritual and financial, beloved supervisor and panel who guided me throughout this research and course mates that assisted me through the journey of research.

#### ACKNOWLEDGEMENT

I would like to take this opportunity to express my sincere appreciation to my supervisor Dr. Nurulizwa Binti Abdul Rashid for guidance and encouragement throughout the journey to complete this final year project. Throughout her guidance, I managed to finish my final year project successfully within the time frame given. Besides, there are some other important people involved in this final year project, for instance my beloved family, lecturers, friends and course mates. I am deeply grateful for the guidance and support towards this project as play as an important role for this project.

Next, I am sincerely thanks to the researchers that they have previously conducted the similar study and published online. Although the research topic of the study was different, but the theory and knowledge provided were useful as a reference in this final year project.

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#### **ABSTRACT**

This paper aims to report the findings of an empirical study on the influences of website design towards customer satisfaction in online shopping. To understand the mechanism surrounding these transactions, this study was conducted to investigate the influences of websites design that affect customer satisfaction in online purchase. In this study include four independent variables, namely web design, security and privacy, usability and accessibility to measure the relationship towards customer satisfaction in online shopping. The data for this research was gathered using questionnaires from 152 respondents in Faculty of Information and Communication Technology (FTMK) at Technical University of Malaysia, Melaka (UTeM). The results indicate that the most influencing factor that affect customer satisfaction in online shopping is accessibility. The findings on this research will be as a benchmark for e-commerce organization in Malaysia to improve their online shopping website to retain and improve their customer satisfaction.

**Keywords:** E-commerce, Online Shopping, Customer Satisfaction, Web Design, Security and Privacy, Usability, Accessibility

#### **ABSTRAK**

Kertas kerja ini ini bertujuan untuk melaporkan hasil kajian empirikal mengenai pengaruh reka bentuk laman web terhadap kepuasan pelanggan dalam membeli-belah dalam talian. Untuk memahami mekanisme yang mengelilingi urus niaga ini, kajian ini dijalankan untuk menyiasat pengaruh reka bentuk laman web yang mempengaruhi kepuasan pelanggan dalam pembelian dalam talian. Dalam kajian ini, terdapat empat pembolehubah bebas iaitu reka bentuk web, keselamatan dan privasi, kebolehgunaan dan kebolehcapaian untuk mengukur hubungan terhadap kepuasan pelanggan dalam membeli-belah dalam talian. Data bagi kajian ini telah dikumpul menggunakan soal selidik dari 152 responden di Fakulti Teknologi Maklumat dan Komunikasi (FTMK) di Universiti Teknikal Malaysia, Melaka (UTeM). Hasilnya menunjukkan bahawa faktor yang paling mempengaruhi yang mempengaruhi kepuasan pelanggan dalam membeli-belah dalam talian adalah kebolehaksesan. Penemuan kajian ini akan menjadi penanda aras bagi organisasi edagang di Malaysia untuk meningkatkan laman web membeli-belah dalam talian mereka untuk mengekalkan dan meningkatkan kepuasan pelanggan mereka.

Kata kunci: E-dagang, Membeli-belah Dalam Talian, Kepuasan Pelanggan, Reka Bentuk Web, Keselamatan dan Privasi, Kebolehgunaan, Kebolehaksesan

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#### LIST OF ABBREVIATIONS

#### ABBREVIATION

#### **MEANING**

Ho Null hypothesis

ANOVA Analysis of Variance

ICT Information Communication Technology

E-Commerce Electronic Commerce

SEO Search Engine Optimization

WB Web Design

SP Security and Privacy

UB Usability

AB Accessibility

CS Customer Satisfaction

UTeM Universiti Teknikal Malaysia Melaka

FTMK Fakulti Teknologi Maklumat dan Komunikasi

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#### **CHAPTER 1**

#### INTRODUCTION

#### 1.0 Introduction

This chapter will be introducing the background of studies of website design for e-commerce in Malaysia. It is indicating to measure up their impact on customer satisfaction in online shopping among UTeM student. Besides, this chapter also consists of the research question and research objective to focus on what aspect this research will studies. In this chapter also explain the current problem background. Finally, this chapter will consist of the scope and significance of this research.

#### 1.1 Background of Study

In recent year, the World Wide Web (WWW), or Web is one of the most widely used internet services. It comprises of a gathering of electronic archives worldwide

and each electronic document on the web is called a web page that can contain text, graphics, animations, audio and video.

In addition, web pages are generally connected to other papers and web pages are static or flexible means. In other words, the Internet and especially the web has enable a communication revolution because the ability to send and retrieve informational despite location around the world. As a result, for this hazardous advancement of web content, mechanized web index projects are utilized to look and arrange billions of site pages (Singhal and Srivastava, 2017).

The tremendous use of website in businesses and organization due websites should explain the products and service offered. It should also provide background and general contact. Until now in modern days, there is a lot of company has well-presented website. Nearly every business provides data via the website, and most of these websites also allow clients to purchase online. (van Nierop *et al.*, 2011).

Online purchases are a type of electronic commerce that enables customers to use a web browser to purchase products or services straight from vendors via the Internet. Users are looking for eye-catching products by visiting the site retailer legitimately or via looking between seller options utilizing a shopping web index, showing the accessibility and costs of a similar item at different e-retailers.

It has become a good shopping mode with excessive growth potential with the improvement of the Internet and its execution as another publicizing channel for web shopping. In recent years, online shopping has gone up much quicker and it is now essential to know the different elements of online marketing from all angles in a competitive setting. Internet shopping has attained traction in many Asian and other emerging nations owing to variables such as fast access to information-related goods, convenience of time, traffic bottleneck, restricted time, parking space, etc. (Tandon, Kiran and Sah, 2018).

Customer satisfaction can have a crucial effect on the achievement of fresh customer in online purchasing, both beneficial and negative. In latest years, the exponential development in the amount of internet distributors has driven client satisfaction's enhanced position. In the literature, the significance of customer satisfaction was acknowledged (Tandon, Kiran and Sah, 2017)

Throughout the online purchase, customer satisfaction was a key factor for customers to choose to buy products due to hazards such as financial risk, product quality risk, social risk, security risk and privacy risk. Therefore, to attain customer satisfaction, a significant balance of website functionality becomes compulsory. The research model proposed in this study enhances our understanding of website characteristics and their impact in online shopping among UTeM learners on customer satisfaction.

#### 1.1.1 Information and Communication Technology Development in Malaysia

In Malaysia, the use of information technology and communication is growing. It is an ingenuity of the government to encourage the advancement and progress of internet companies. The number is increasing as the user becomes an important driver of information and communications technology in Malaysia. Additionally, it offers an incredible encounter for internet users through the improvement of data and correspondence innovation and creates advanced organization in Malaysia.

Global Competitiveness Report in 2014 to 2015, Malaysia's ranking has increased from four places to 20 of the 144 (World Economic Forum, 2015). In the digital economy rankings of 2010, as determined by the Economic Intelligence Unit, Malaysia ranks thirty-six out of seventy countries. To determine the position of a

country, a four-decimal score is used, including infrastructure for connection and technology, social-cultural environment, law and business, policies that are mandated by governments, and adopted by users and business.

Therefore, Malaysia has participated in the Asia Pacific Economic Cooperation (APEC) to develop rules, policies, and laws in e-commerce. Malaysia's participation in this initiative will make Malaysia as the top country in the improvement of information and communications technology. Thus, the trend of buying on the website is not a stranger to Malaysians compared with people in other countries is more advanced. Malaysia is one of the developing countries that started using digital business in both domestic and international businesses. The Ministry of Communications and Multimedia is the government organization responsible for the development and development of Information Communication Technology.

Refer to the Department of Statistics, Malaysia (2016), Malaysia is a creating nation with a populace of 30,254,000 million until September of two thousand fourteen. The Malaysian government hopes to turn the country into a knowledge economy and to realize the vision to become a developed country by 2020.

#### 1.1.2 The Importance of Websites for E-commerce

The website is a platform for retrieving data and has many features to use. A website may include a private website, a business website, a public website or a website of a non-profit organization. The website is a compilation of related websites, including the usually recognized with a popular domain name, multimedia content and published on at least one internet server. Websites can be opened through a public Internet Protocol (IP) network, for example, the Internet, or a private local area network (LAN), with reference to a uniform search source (URL) that classifies the site.

Companies in both service and product-related businesses are using e-commerce to improve their sales. Defined e-commerce as the purchasing and retailing of goods and services over computer networks, including the Internet. Along with price and quality of electronic service now plays the main part in user's receptiveness. Meanwhile, a website is component of the relationship between a business and its clients, and it is evident that it must reflect the quality attempts made by the business.

Websites can also be split into two static and interactive extensive kinds. Static websites operate or capture information, but do not allow users or audiences to engage directly. Lately, the community part of e-commerce design has also emerged as the main concept (Huang and Benyoucef, 2013) which highpoints the meaning of Web 2.0 tools and online communities. Meanwhile, Interactive sites form part of the Web 2.0 site society and enable interactivity between site users or visitors and site owners. Some websites are informative or designed for individual use or entertainment by followers. Many websites use one or more business models, including e-commerce, to create cash. Through this means, to fulfill the request to visit the attractions and to survive in the long run, there is no prime but to include technology and improve market interactivity.

#### 1.1.3 Internet Users in Malaysia

Year	Internet Users**	Penetration (% of Pop)	Total Population	Non-Users (Internetless)	1Y User Change	1Y User Change	Population Change
2016*	21,090,777	68.6 %	30,751,602	9,660,825	2.2 %	453,560	1.39 %
2015*	20,637,217	68 %	30,331,007	9,693,790	2.2 %	453,369	1.43 %
2014	20,183,848	67.5 %	29,901,997	9,718,149	2.3 %	450,888	1.48 %
2013	19,732,960	67 %	29,465,372	9,732,412	3.3 %	636,523	1.53 %
2012	19,096,437	65.8 %	29,021,940	9,925,503	9.6 %	1,666,925	1.57 %
2011	17,429,512	61 %	28,572,970	11,143,458	10.1 %	1,598,233	1.61 %
2010	15,831,279	56.3 %	28,119,500	12,288,222	2.4 %	368,770	1.66 %
2009	15,462,509	55.9 %	27,661,017	12,198,508	1.9 %	286,349	1.7 %
2008	15,176,160	55.8 %	27,197,419	12,021,259	1.9 %	287,212	1.75 %
2007	14,888,948	55.7 %	26,730,607	11,841,659	9.8 %	1,327,238	1.78 %
2006	13,561,710	51.6 %	26,263,048	12,701,338	8.1 %	1,017,269	1.81 %
2005	12,544,441	48.6 %	25,796,124	13,251,683	17.2 %	1,841,086	1.83 %
2004	10,703,355	42.3 %	25,332,026	14,628,671	23.1 %	2,006,231	1.86 %
2003	8,697,124	35 %	24,869,423	16,172,299	10.2 %	805,963	1.92 %
2002	7,891,161	32.3 %	24,401,977	16,510,816	23.6 %	1,505,227	2.01 %
2001	6,385,934	26.7 %	23,920,963	17,535,029	27.5 %	1,377,469	2.14 %
2000	5,008,465	21.4 %	23,420,751	18,412,286	77.7 %	2,190,679	2.28 %

Figure 1.1: Malaysia Internet Subscribers

Figure 1.1 shows that the data for Malaysia Internet Users from 2000 to 2016. Internet User, in this case, refers to any individual who can access the Internet at home or any type of device and connection. Malaysia internet users had increased from 5,008,465 (2000) to 21,090,777 (2016) which was a huge change with an increase of 321% in 16 years (Internet live stats, 2016).