

FEATURES OF EFFECTIVE E-COMMERCE WEB ACCESSIBILITY FOR
THE PARTIALLY BLIND USERS

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To my beloved father MOHAMMAD ARIF,
my precious family members and to all whom were beside me

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ABSTRACT

Web accessibility means that anyone at any time with the help of internet should be able to access any website and get full understanding of it and fully interact with it, if necessary. It is an extensive subject referred to by various numbers of writers in the past, pertaining it to other concerns though, this particular project will explain web accessibility problems faced a specific disability group (partially blind) users. The purpose of this project is to find measures of the effective accessibility of E-commerce websites for partially blind users, to propose solution to those problems and to examine that the proposed model provides improved satisfaction. The findings and analytics will be done by conducting face to face interview with the group of partially blind users.

ABSTRAK

Akses Web bermakna bahawa sesiapa sahaja pada bila-bila dengan bantuan internet akan dapat mengakses mana-mana laman web dan mendapatkan pemahaman penuh dan berinteraksi sepenuhnya dengan itu, jika perlu. Ia tertakluk luas dirujuk oleh pelbagai nombor penulis pada masa lalu, ia berkaitan kepada pertubuhan lain walaupun, projek ini khususnya akan menjelaskan masalah akses web menghadapi kumpulan kecacatan tertentu pengguna (sebahagiannya buta). Tujuan projek ini adalah untuk mencari langkah-langkah yang berkesan boleh akses laman web E-dagang untuk pengguna sebahagiannya buta, untuk mencadangkan penyelesaian kepada masalah tersebut dan untuk memeriksa bahawa model yang dicadangkan memperuntukkan kepuasan yang lebih baik. Hasil kajian dan analisis akan dilakukan dengan menjalankan muka dengan muka wawancara dengan kumpulan pengguna separa buta.

TABLE OF CONTENTS

CHAPTERS	TITLE	PAGE
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGMENT	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	x
	LIST OF FIGURES	xii
1	INTRODUCTION	1
	1.1 Problem Background	2
	1.2 Problem Statement	4
	1.3 Research Objectives	4
	1.4 Research Questions	5
	1.5 Research Significance	5
	1.6 Research Scope	6

2	LITERATURE REVIEW	7
	2.1 Introduction	7
	2.2 History of Web Accessibility	8
	2.3 Partially Blind Users of Web Accessibility	9
	2.4 Web Accessibility Related Models	9
	2.4.1 Usability Quality Model	10
	2.4.2 A Comprehensive Model	11
	2.4.3 WAI	12
	2.4.4 Social Commerce Design Model	13
	2.4.5 Mental Model	14
	2.5 Benefits of Accessible Design	15
	2.6 Design and Implementation	16
	2.7 Evaluation of Web Accessibility	18
	2.8 Research Studies with Evaluation of E-commerce	19
	2.9 Conceptual Terms	19
	2.10 Selection and Justification of the proposed Models	20
	2.11 Proposed Model	22
	2.12 Proposed Model Inference	23
	2.13 Summary	25
3	RESEARCH METHODOLOGY	26
	3.1 Introduction	26
	3.2 Research Methodology	26
	3.3 Operational Framework	27
	3.4 Research Design	29

3.5 Data Collection and Technique	30
3.6 Sampling and Population	31
3.7 Summary	31
4 RESEARCH FINDINGS	32
4.1 Introduction	32
4.2 Participants' Profiles	33
4.3 Coding	34
4.4 Research Findings and Analysis	36
4.5 Summary	77
4.5.1 Mudah.my	77
4.5.2 Lazada.com.my	79
4.6 Making Contrast or Comparison	80
5 DISCUSSION	83
5.1 Introduction	83
5.2 Summary of Findings	84
5.2.1 Visual Design	84
5.2.2 Navigation	84
5.2.3 Content	85
5.2.4 Contrast	85
5.2.5 Ease of Use	86
5.2.6 Design Effectiveness	86
5.3 Research Limitations	86
5.4 Contribution of this Research	87
5.4.1 Theoretical Contribution	87
5.4.2 Practical Contribution	87
5.5 Suggestions for future work	88

5.6 Summary

LIST OF TABLES

TABLE NO.	TITLE	
PAGE		
2.1	Social Commerce Design Model	14
4.1	Participants' Demographic Table	33
4.2	Start List of Codes	34
4.3	Summary of Findings (mudah)	81
4.4	Summary of Findings (lazada)	82

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
2.1	Economic benefits received from creating	18
2.2	Proposed Model	23
3.1	Operational Framework	27
3.2	Research Design	29
4.1	Mudah.my (a)	76
4.2	Mudah.my (b)	76
4.3	lazada.com.my (a)	78
4.4	lazada.com.my (b)	78

CHAPTER 1

INTRODUCTION

1.1 Overview

It is well known that the Web has become a standout amongst the most essential and far reaching media to give access to news, administrations, excitement and all various types of data in individuals' everyday lives. A plenty of every day exercises can now be performed utilizing the Web, for example, paying bills, buying merchandise, utilizing saving money administrations, doing online courses and numerous others.

“Accessibility is when anyone using any kind of web browsing technology must be able to visit any site and get a full and complete understanding of the information as well as have the full and complete ability to interact with the site if that is necessary” Letourneau (2001) in Zaphiris and Ellis (2001).

The limit of e-commerce has extended from the old request of exchanging, data pursuit, and joint effort with a business introduction, to individual life backing, and then back to business. This is as a consequence of the rise of web 3.0. Organizations are presently embracing social registering advances that were intended for individual utilization, (for example, sites, wikis, document sharing and informal communities) to build the viability and proficiency of their operations (Turban et al., 2008).

E-commerce is well-regarded to have a lot of prospective advantages (Lee, 2010), a few of which are;

- The prospect to scope hundreds of millions of people.
- Capacity to innovate using new business models.
- The creativity and growth of its infrastructure such as the www.
- Fewer licenses and less taxes.

The e-commerce websites accessibility of for impaired users is an advancing exploration zone in the contemporary the educated community. Aside from this, the openness of e-commerce sites in developing nations could be impacted by a few different factors, such as economic upbringing and geographical locality of users. Therefore, it is an essential necessity for web idea creators in the creating nations to consider the above variables keeping in mind the end goal to guarantee the fruitful dispersal of business data through e-commerce destinations. On the other hand, the method for planning available web interfaces is as yet staying as an open inquiry with respect to developing nations (Brault, 2010).

1.2 Problem Background

Notwithstanding the significance of making sites accessible, research studies have demonstrated that numerous sites still present numerous hindrances for disabled users to utilize. In the major of the studies, performed by the Disability Rights Commission of Great Britain (2004), it was established that visually impaired clients could finish just 53% of the assignments they endeavored, demonstrating that accessibility issues can keep them from having entry to a lot of data and administrations on sites. Those discoveries highlight that it is so basic to make sites more available and improve sites that users with disability can adequately utilize.

There are a number of reasons why designers ought to make their e-commerce sites available to individuals with disability. From a business point of view, it implies that sites can achieve a more extensive crowd, and thus, grow the scope of potential users. The present maturing of the populace is likewise an essential inspiration to make sites more available (Hanson 2009, Hanson 2001, Kurniawan and Zaphiris 2005), as the

pervasiveness of disability is higher with more established individuals. From the ethical point of view, e-commerce sites ought to be made available on the grounds that everybody should be qualified for have admittance to data, items and administrations, in spite of any disabilities.

Even though some extensive studies, for example, the one performed by the (DRC) Disability Rights Commission (2004), have given critical commitments to building confirmation of issues experienced by disabled users on sites, not much has been done to develop on the consequences of these studies. The DRC study uncovered a few issues experienced by disabled users, however it would be vital to take after information from this study and extend the comprehension of the way of issues experienced by disabled users, and the seriousness of such issues.

The study focused on users with partially blind disabilities. The limitation on the user groups included in the study is vital with a specific end goal to perform an all the more inside and out examination of the issues experienced by every gathering. Results from the DRC (2004) study demonstrated that this user groups experienced a more extensive scope of issues than other users groups.

There are a number of researches done by various researchers in this particular ground, one of such referred as, Goldie (2006) contends that pop-ups without notice and inadequate color contrast are different samples of Web accessibility boundaries for vision impaired users. Likewise, design are dangerous for hard of hearing users who need to get to the Web.

The creators in past paper work clarify graphical data is troublesome for hearing disabled users in light of the fact that they arrange and recover learning about graphical data in long term memory uniquely in contrast to the hearing enabled.

1.3 Problem Statement

E-commerce web accessibility is often overlooked. Keeping in mind the end goal to utilize the Web, numerous disabled users need to utilize adjustments in their PCs, for example, the utilization of extraordinary settings in programs (e.g. bigger text styles, shading changes) or specific assistive innovation. A few clients who are somewhat located may utilize screen amplification and changes in the color scheme. Users might likewise require options or improvements to substance, for example, providing textual description to pictures, sound depiction of videos, etc. Whether all these solutions relate in case of e-commerce websites, is the major issue in this project, the question remains as to how we can have for partially blind better web accessibility.

1.4 Research objectives

- To identify features of effective accessibility of e-commerce web sites for partially blind users.
- To propose model to those problems by analyzing previously proposed models for using e-commerce websites.
- To examine that the proposed model provides improved enactment on e-commerce websites for partially sighted users.

1.5 Research questions

- What are the features of effective accessibility met by partially blind users when making an attempt to use e-commerce websites?
- What solution models can be suggested for accessibility effectiveness encountered by partially blind users while surfing e-commerce websites?
- How to evaluate that the proposed solution offers effective accessibility to partially blind users of e-commerce websites?

1.6 Research Significance

The findings of the research are totally based on the behavior and the reaction of the partially sighted users of e-commerce websites. This research is intended for web designers to collect features that affect the accessibility of partially blind users.

1.6.1 Practical Significance

It is with the help of this research which will benefit in finding out what concerns and difficulties do the partially sighted users have and what recommendations they demand the web developers for web accessibility to apply to e-commerce website development.

1.6.2 Theoretical Significance

Looking at the past history of the researchers' point of concern regarding web accessibility and their considerable contribution to the society it is obvious to say that it is important to further more specifically the study on how partially sighted users would think about the use of it.

1.6 Research Scope

Visual disability (or vision impairment) is a diminished capacity to see to a degree that extra it causes issues that are not fixable by normal means, for example, glasses or prescription. It can be because of disease, injury, or inherent or degenerative conditions. This loss of vision is normally characterized as partially blind. These users are being interviewed on a number of E-commerce websites in order to particularly find out the difficulties, their technical causes and level of severity they face while using the website and navigating through it.

Partially blind users' expression is used by schools, colleges, universities and other educational and vocational institutions to describe users with visual impairment as partially blind users indicate some type of visual problem, with a need of a person to receive special education in some cases.

- The participants; are the number of partially blind users,
- Particularly geographically located in Kuala Lumpur Malaysia
- The number of participants is five (5)
- Face to face interview with the partially blind participants will take place “qualitative research”

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