JUTEKS
JURNAL TEKNIKAL & KAJIAN SOSIAL

JOURNAL OF TECHNICAL & SOCIAL STUDIES

Whilst every effort has been made to ensure information in this journal is precise and up-to-date, neither the authors nor the publisher can guarantee to its accuracy or completeness. We reserve the right to make changes to the information and we welcome your feedback and comments for improvement.

JURNAL TEKNIKAL & KAJIAN SOSIAL (JUTEKS)
JOURNAL OF TECHNICAL & SOCIAL STUDIES

<u>CONTENTS</u>

VOLUME 22. NO. 1. DECEMBER 2023.

PRELIMINARY STUDIES ON FACTORS AFFECTING THE DEVELOPMENT OF LIFELONG LEARNING PROGRAMMES STRATEGY

Noorhasyimah binti Ismail[1] Siti Fatimah binti Mohamad Ayop[1,2] Aina Mardziah Ahmad Rifa'i[1,3] Nur Azreen binti Saidon[1,4] Nurfarah Faqihah binti Mansor[1,5] Nur Liyana binti Zakaria[1,6]

[1] Centre for Degree Programme, School of Professional and Continuing Education, Universiti Teknologi Malaysia, Johor, Malaysia

[1]E-mail: hasyimah@utmspace.edu.my
[2]E-mail: sitifatimah@utmspace.edu.my
[3]E-mail: aina@utmspace.edu.my
[4]E-mail: nurazreen@utmspace.edu.my
[5]E-mail: nurfarah@utmspace.edu.my
[6]E-mail: nurliyana@utmspace.edu.my

ABSTRACT – The objective of this study is to uncover the experience of UTMSPACE to strategies in offering opportunities for lifelong learning in the future. There is a need to develop new strategies in order to promote the pathway for lifelong learning education in academic and professional requirements. In particular, there is a growing demand for upskilling through lifetime learning programmes from the industrial players from the individual perspective, that is the adult learner or participant of the study. 35 individuals, both inside and outside of Malaysia, participated in the data collection using questionnaires from the distributed surveys and semi-structured interviews questions. The results are anticipated to show how a lifetime learning program affects the trajectory of higher education and industry strategic planning. The advantages of lifelong learning are explained and conceptualized to show how the desired outcome is understood and perceived. The study also aims to highlight how the participants' career progress is influenced by their educational and lifelong learning experience.

1. INTRODUCTION

The term 'lifelong learning' (LLL) in social science studies has a variety of definitions. Literature has shown that the term itself is not used as such, but it has a lot of implications that is used in a lot of areas [1]. There is no contradiction on a limitation

of information when it comes to the various meanings of LLL. To assume that a fundamental, primary, or unquestionable definition of LLL can be established is to start with LLL's application. The conceptual clarity for the term LLL and definition of it in terms of application have been discussed amongst scholars. In addition, the current assessment in higher education does not fully prepare students for lifelong learning and holistic development of the programmes offered [2]. Instead, an appropriate development in teaching strategies for students should be suggested as the solution as such using the ground-breaking technologies. Identifying and analysing are two significant steps in the process of delivering the LLL programmes, which this study intends to carry out.

In the context of industrial needs and demands, developing a real concept of LLL programmes and effectively LLL management is an important strategy for education providers to be aware of. Yap, J. S., & Tan, J. (2022) [3] state that lifelong learning programmes has become a trend among higher education provider in the global setting. It is due to the contribution, benefits and satisfaction obtained through the learning outcomes. However, to achieve the industrial demand in particular areas, the education experience must be aligned with the skills needed for career progress. Therefore, the different interpretations and applications of lifelong learning terms, such as "self-directed learning" in this context, provide a serious obstacle to the development and deployment of best practices in this field.

2. RESEARCH METHODOLOGY

The explanation of research approach in this study is based on a general concept of educational sociology. The main goal is to gain a better understanding of what people do in real-life situations from a social-economic standpoint. The ability of this study to take a qualitative and quantitative approach is aided by the clarity of purpose. Therefore, this study utilises semi-structured interview and questionnaire as the primary research instruments. The purpose of a qualitative interview, for example, is to learn more about the interviewee's perspective, specifically how and why they have it [4]. In which, it is to access their experience and understanding of the topic. the analysis involves the descriptive and factor analysis for quantitative data, while thematic analysis is used for the qualitative data collected.

The data collection process was conducted from September to November 2022, involving 35 UTMSPACE stakeholders. This group includes bachelor's degree and

Professional Certificate students, lecturers, administrative staff, and managers both within and outside Malaysia.

The data collected included responses from participants of different ages, genders, ethnicity, and departments, who had given their consent to participate. Snowballing strategy was used in the interview. Therefore, open-ended questions were prepared as an interview guide for semi-structured interviews to achieve the research objective.

3. RESULTS AND DISCUSSION

The findings of the study demonstrate the experience on individual of the LLL programme that addressing certain aspects in contributing to the development of future strategies for the higher education providers. The results of the data analysis reveal subsequent themes, and examples from the transcript of the interview sessions are provided as references. The following findings are the preliminary results of the three (3) main factors of participants' experience of lifelong learning programmes:

3.1 Factor 1: Job Satisfaction

The lifelong learning programmes in general is designed to promote individual decisions that enrich knowledge and job satisfaction, leading to better results within the organization. Committing to enrolling in a structured program at UTMSPACE is expected to enhance the continuous learning process. Qualifications obtained through this education, coupled with an industrial integrated approach, reflect job experience marked by continuous learning and skill development within the organization. The certification received upon completion of the lifelong learning program significantly impacts job satisfaction, leading to improved knowledge and successful career pathways [5].

Hence, this factor has identified and linked with another factor concerning to education satisfaction which in turns reflecting the formal and meaningful development of individual learning process. The participants with industrial experience shared their journey of enhancing job processes through the Professional Certification they had undertaken. In response to the question, 'What motivates you to continue studying, even when your primary focus is on your career?' one of participants mentioned that:

"*I chose to be successful in life by taking the risk of continuing to learn new things and upskilling. At my age, it is almost impossible, according to what people might think, especially my colleagues or my company. However, I proved them wrong.*" - Respondent 1

Based on the response, the improvement and development of knowledge through education are key factors for the participants to pursue their studies. The certification proves the need for upskilling and upgrading their knowledge within the higher education arena.

Furthermore, another factor elucidated the various perspectives regarding the choice of continuing studies at UTMSPACE.

3.2 Factor 2: Job Efficiency and Motivations

Pursuing further studies, which means investing a huge amount of money to pay fees, can be considered as a risk-taking step to some of the participants. The result of incompletion of the programme duration or a decline in motivation level to attend classes could be among the significant factors in decision to continue taking the risk. Moreover, evidence suggests that the investments in lifelong learning programmes had improved their knowledge and upgraded their education level. One of the respondents commented on the question given "*What is the significance that makes you interested in furthering your education, considering the associated costs, from your point of view?*":

"*Learning new things is a cost-saving measure from my point of view. It aligns with the demands of my current job. The education I gained before might be outdated for use in new technology. Hence, efficient and independent job skills or experience are important.*" - Respondent 8

However, the choice of which programme to invest in is significant for the participants. Specifically, investments related to their career needs must be able to stimulate their decision before pursuing further studies. UTMSPACE offers several programmes that address corporate-industrial demands for skills and knowledge. For instance, the Project Management in Construction and Development program exposes students to a structured and qualified curriculum, resulting in efficient programmes. Therefore, in

order to increase interest in the programmes offered, industrial support for quality acceptance is important.

This involves discussions between industrial players and educators. Such efforts can also assist UTMSPACE in setting appropriate course outcomes and meeting expectations for program implementation and job independence measures in the workplace.

3.3 Factor 3: Career Survival

In comparison to other higher education institutions, UTMSPACE introduced the University-Industrial programme with the 2U2I initiative, which entails 2 years at the university and 2 years in the industry. For example, as it relies on do-it-yourself (DIY) methods, it is typically viewed as being less expensive and more effective as an employee development strategy. However, in respect to this matter, the HR department of an organisation might continue to plan more training in which the organisation will not be able to afford the sort of money that it has been to train for the future.

UTMSPACE is one of the providers that allows employees to complete programmes on their own time and at their own expense, aiming to maintain their eligibility for employment. This effort is made to assess the effects of employee development activities on employees. The programmes have specific objectives as learning outcomes, identifying how people perceive organizational initiatives and the extent to which those initiatives influence people's willingness to learn and take personal responsibility for acquiring new skills, aligning with industrial demands.

4. CONCLUSION

The findings of the preliminary study demonstrate the impact on individual experiences in LLL. This impact will guide the study in revealing certain aspects of LLL to education providers, aiding in future strategies for the management of LLL. For example, the study highlights that personal traits significantly influence an individual's decision to continue learning. Hence, the impacts of lifelong learning programmes on students offered by UTMSPACE, such as Professional Programme Certification, should be unique, focused, and distinctive. In addition, the study also reveals how participants' career progress is influenced by their educational and lifelong learning experiences, including factors such as self-satisfaction, job efficiency, motivation, and

career survival. These factors are valuable for the development of strategies for higher education providers.

ACKNOWLEDGEMENT

REFERENCES

[1] New, A., Baker, M., Nguyen, E., & Vallabha, G. (2022). Lifelong learning metrics. *arXiv preprint arXiv:2201.08278*.

[2] Mhlanga, D. (2023). Open AI in education, the responsible and ethical use of ChatGPT towards lifelong learning. *Education, the Responsible and Ethical Use of ChatGPT Towards Lifelong Learning (February 11, 2023)*.

[3] Yap, J. S., & Tan, J. (2022). Lifelong learning competencies among chemical engineering students at Monash University Malaysia during the COVID-19 pandemic. *Education for Chemical Engineers*, *38*, 60-69.

[4] Savin-Baden, M., & Major, C. H. (2023). *Qualitative research: The essential guide to theory and practice*. Taylor & Francis.

[5] Pham, Q. T., Tan Tran, T. G., Pham, T. N. B., & Ta, L. (2022). Work pressure, job satisfaction and auditor turnover: Evidence from Vietnam. *Cogent Business & Management*, *9*(1).

A STUDY OF CULTURAL MARKERS ON MALAYSIAN WEBSITES

Mohammad Ahmad Nasrul[1*], Syed Ardi Syed Yahya Kamal[2], Harmi Izzuan Baharum[3], Mohamad Zulkefli Adam [4], Hafiza Abas [5], Rozana Ismail [6], Norzaharawani Busu [7]

[1,2,6,7] School of Professional and Continuing Education, Universiti Teknologi Malaysia
E-mail:mahmad.kl@utm.my, syedardi.kl@utm.my, rozana@utmspace.edu.my,
norzaharawani@utmspace.edu.my

[3,4,5,] Universiti Teknologi Malaysia
E-mail:harmi.kl@utm.my, mzulkefli.kl@utm.my, hafiza.kl@utm.my

Through a website content analysis, this article aims to investigate the Malay and Chinese cultural elements that are present on the Malaysian websites. This study makes an effort to look into how culture affects usability. The term "culturability" is a combination of two words: "culture" and "usability." Cultural markers are distinguishing elements of commonly used user interfaces that are tied to specific cultures, such as national emblems, icons, colours, orientation, language, spatial organisation, and others. Depending on the cultures involved, these signs could be recognised. This study aims to determine the presence of cultural markers for Malay and Chinese on Malaysia race-based websites. Four cultural markers that are languages, images, colours, and layout are chosen. The findings of this study are crucial to enhance a website's high usability for both potential and existing users. It is also assisting website designers in designing a website targeted for multiracial users, particularly in Malaysia. The results of this study shows that some cultural markers, for instance, language, image, and page layout, are still present and being used on Malaysian websites because they ease and assist users while using the websites.

Keywords: Website; User Interface; Usability; Cultural Markers; Culturability

1. INTRODUCTION

Information literacy is a foundation for lifelong learning and reflects the 21st century ability to obtain information quickly and accurately from various sources. High information literacy skills enable a website user to assess the amount of information required, access the information effectively and efficiently, evaluate the information and the sources it comes from critically, incorporate chosen information into one's knowledge base, and use information effectively to achieve a specific goal. The ease of

use and the website usability enhance information searching process, and therefore help users to obtain information easily and quickly.

A university website serves as a channel of communication to its target users who among others, include staff, current and potential students, as well as public members. The website serves as a forum for promoting and disseminating educational projects among scholars, students, and possible funders, worldwide. Additionally, university websites are one of the most useful sources of information to communicate academic and non-academic endeavours, such as admission procedures, list of programmes offered, list of academicians, also library and housing facilities for prospective students to fully utilise when deciding to further their studies at undergraduate and postgraduate faculty and university levels. Therefore, designing a university or faculty website with good usability is crucial for both potential students and the general public.

Culture is known to affect people's thinking, acting, and feeling. As such, users from diverse backgrounds will have different perceptions of a website, particularly on its user interface. Effective information retrieval from the website is crucial for the users, and it may be accomplished by customising the user interface to suit their preferences (Sauer, Sonderegger, & Schmutz, 2020; Tractinsky, 2018). A user interface that is built/designed based on the users' cultural settings provides ease and satisfaction in using the website because of the awareness and familiarity they already have with its characteristics and values. Considering this factor, the characteristics of the users are taken into account during the design process to improve the usability and utility of the website. The user interaction on websites is made easier by accommodating it to the user's culture (Cyr, 2013; Akiba and Yang, 2021; Oladapo, *et al*., 2021).

Researchers in human computer interaction (HCI) were the first to suggest the idea of designing user interface that is based on the needs of the users (Barber & Badre, 1998). They offered advice on important issues including visibility, structure simplicity, mapping, error design, and other issues when designing with the user in mind. For instance, website creators must respond to questions about potential users. How much do their expertise and experience differ from one another? What type of work is being put into developing a website that is really simple to use right now? In other words, the user must always come first while developing a website. Usability draws attention to the user's demands by encouraging a user-centred approach to website's developing that makes its use easier, simple to learn and satisfying.

Malaysia is located in Southeast Asia and is composed of two regions: Peninsular Malaysia and East Malaysia. There are 13 states, in which 11 of them (Johor, Melaka, Negeri Sembilan, Wilayah Persekutuan, Perak, Kedah, Pulau Pinang, Perlis, Kelantan,

Terengganu, and Pahang) are in Peninsular Malaysia while the remaining two (Sabah and Sarawak), are in East Malaysia. Malaysia is a multiracial nation and has a total population of 33 million people, of which 67.4% are Malay and Bumiputra, 24.6% are Chinese, 7.3% are Indians, and 0.7% are members of other racial groups (Department of Statistics Malaysia, 2022). Each race in Malaysia has its own distinct culture.

Political parties, newspapers, and educational websites are just a few examples of websites that target specifically to particular races. The majority of political organisations are centred on race, including the Malaysian Indian Congress (MIC), the Malaysian Chinese Association, and the United Malay National Organisation (UMNO). As for news portals, certain websites appeal to particular racial groups based on the use of their native languages, such as Tamil Neesan for Indians, Nanyang Siang Pao for Chinese, and Utusan Malaysia for Malays. Furthermore, there are higher education institutions where the majority of the students are from a particular racial group, such as Tunku Abdul Rahman University of Management and Technology (TAR UC) and Universiti Teknologi Mara (UiTM), mostly attended by Chinese and Malays, respectively.

2. LITERATURE REVIEW

According to Barber and Badre (1998), even though a website was designed with "global" users in mind, it nonetheless had a local focus due to cultural limitations. The need to adapt the user interface to the user's culture in order to make it usable was emphasised. They investigated many websites from different countries and discovered that there were distinctive components of the usual user interface that were related to particular cultures. They called it "cultural markers" and the examples include national symbols, icons, languages, orientation, colours, and others. Their experiment results showed users' preference. Users were found to be comfortable with website interface that had their cultural markers.

Others researchers also studied the importance and existence of cultural markers on websites (Berger & Kungu, 2019; Khanum *et al.*, 2012; McMullen, 2019). Sheppard and Scholtz (1999) conducted several experiments to test whether the availability of cultural markers elements in website influenced users' performance when browsing the Internet. The outcomes demonstrated that Middle Eastern participants fared better when they used the Middle Eastern website settings, and that American participants performed better when they utilised the United States of America (USA) website

settings. The results showed that United States of America subjects performed better when using their country's version as compared to other versions.

Badre (2001) carried out two experiments to test whether the existence of cultural markers could increase usability. Once again, the results indicated that in comparison to other versions, subjects from the United States of America performed better when using version that is from their own country. Ruskhan *et al.* (2021) emphasised the importance of considering the many ways that culturally varied users would present information and interact with the web in order to enhance their online performance and pleasure.

Colour determines how users interact with a website and affects users' behaviour, cognition and emotional (Fu *et al.*, 2020). In Jacques and Evelyn's (2008) study, their findings demonstrated that when a website was designed with the user's native language first in mind, the user's perception of its usability increased. Low-context cultures, like German, tend to favour organised and logical layout. People were also found to feel more at ease on a website if they saw images related to their culture (Sun, 2001).

Therefore, this study aims to investigate the availability of specific cultural markers for two major races in Malaysia, that are Malay and Chinese, on the Malaysian websites. This study also intends to identify the availability of the common cultural markers on culturally specific websites.

3. RESEARCH METHODOLOGY

Content analysis was used to find the availability of Chinese and Malay cultural markers on Chinese and Malay based websites. Studying information's content through content analysis is acknowledged as a credible method in social science research (Berelson, 1952; Krippendorff, 2004). Content analysis was carried out from December 2022 to January 2023 with the aim to find the specific cultural markers for ten (10) individual Chinese-and-Malay-based Malaysian websites. More specifically, four (4) cultural markers were investigated: images, colours, languages, and page layouts. Previous researchers also limited their cultural markers to employ only a few (Kim and Kuljis, 2010; Sun, 2001; Tong and Robertson, 2008;). This study is a replication of Sun's (2001) investigations on image, colour, language, and page layout. The word "image" describes a photograph, metaphor, icon, symbol, flag, or architectural design that is specific to a certain culture. Colours refer to the colour of the background, font, and layout of the website. The pillars of page layout are information orientation,

information structure, and visibility style. The last item is the language used on the website.

Twenty (20) websites were carefully chosen from different sources such as websites from schools, government agencies, political parties, higher education institutions, religious offices, NGOs, media, and social clubs, where the target users were Chinese and Malays. Sin Chew Daily and China Press, for example, are two Chinese media portals which are normally/mainly utilised by Chinese people in Malaysia. Khanum *et al*. (2012) used content analysis to identify cultural markers on twenty-seven (27) websites from Kuwait, Saudi Arabia and the United Arab Emirates. Layout, colour, text, language, and link count were all examined.

Table 1 and Table 2 depict the separate lists of Malay and Chinese websites that were investigated, respectively.

Table 1: List of Malay Websites Investigated

No	Website	Genre	URL
1	Universiti Teknologi Mara (UiTM)	University	https://www.uitm.edu.my/index.php/ms/
2	Majlis Amanah Rakyat (MARA)	Government Agency	https://www.mara.gov.my/en/index/
3	Utusan Malaysia	Newspaper portal	https://www.utusan.com.my/
4	Persatuan Pengguna Islam Malaysia (PPIM)	Non-Government Organisation (NGO)	https://www.ppim.org.my/
5	Majlis Agama Islam Selangor (Mais)	Government Agency	https://www.mais.gov.my/
6	Kolej Universiti Poly-Tech Mara	University	https://www.kuptm.edu.my/
7	Universiti Kuala Lumpur (UNIKL)	University	https://www.unikl.edu.my/

8	Federal Land Development Authority (FELDA)	Government Agency	https://www.felda.gov.my/
9	Majlis Agama Islam Wilayah Persekutuan (MAIWP)	Government Agency	https://www.maiwp.gov.my/i/index.php/
10	United Malay National Organisation (UMNO)	Political Party	https://umno-online.my/

Table 2: List of Chinese Websites Investigated

No	Website	Genre	URL
1	Sin Chew Daily	Newspaper portal	https://www.Sinchew.Com.My/
2	Tunku Abdul Rahman University of Management and Technology (TAR UMT)	University	https://www.tarc.edu.my/#gsc.tab=0/
3	University Tuanku Abdul Rahman	University	https://www.utar.edu.my/
4	China Press	Newspaper portal	https://www.chinapress.com.my/
5	SJK (C) Chung Kwok	School	http://www.sjkcchungkwok.edu.my/
6	Malaysian Buddhist Association	Non-Government Organisation (NGO)	https://www.malaysianbuddhistassociation.org/
7	Democration Action Party (Dap)	Political Party	https://dapmalaysia.org/en/

8	Malaysian Chinese Association (MCA)	Government Agency	http://www.mca.org.my/1
9	Shaolin Wahnam Kuala Lumpur	Martial Art	https://shaolinwahnammalaysia.com/
10	The Associated Chinese Chambers of Commerce and Industry of Malaysia (ACCCIM)	Non-Government Organisation (NGO)	https://www.acccim.org.my/

4. RESULTS AND DISCUSSION

Table 3: Summary of Findings for Malay-Based Websites

COLOURS	
BACKGROUND COLOUR	White
FONT	Black, White
FONT MENU	White, Black, Blue
FONT LINK	Black, White, Blue, Yellow, Orange, Purple
FONT TITLE	Black, White, Yellow, Red
PAGE LAYOUTS	
INFORMATION ORIENTATION	Left to Right
INFORMATION STRUCTURE	Upper Text Based Main Menu
VISIBILITY STYLE	Picture or Icon Based, Newspaper style, Text Column Based, Row Column Based
FOOTER	9 Out of 10 Websites have Footer section
LINK TO SOCIAL MEDIA	9 Out of 10 Websites have link to social media
IMAGES	
COAT OF ARMS OF THE COUNTRY	4 websites have Malaysia and Selangor Jata Negara

NATIONAL FLAG	3 websites have Malaysia and United Kingdom flags to represent the selection of languages. Malaysia flag for Malay language selection and United Kingdom flag for English language selection
PICTURE OF BUILDINGS AND MONUMENTS	KLCC, Menara KL, Medan Mara Building, Mount Kinabalu, Cameron Highland, Tioman Island
LANGUAGES	
MALAY ONLY	5 Websites
ENGLISH ONLY	1 Website
MALAY AND ENGLISH	3 Websites
ENGLISH AND ARABIC	1 Website

Table 4: Summary of Findings for Chinese-Based Websites

COLOURS	
BACKGROUND COLOUR	White, Blue
FONT	Black
FONT MENU	White, Black
FONT LINK	Black, White, Blue, Red
FONT TITLE	Black, White, Purple
PAGE LAYOUTS	
INFORMATION ORIENTATION	Left To Right
INFORMATION STRUCTURE	Upper And Text Base Main Menu
VISIBILITY STYLE	Icon or Image based, Newspaper Style, Blog Style, Column Based, Row Based
FOOTER	9 out of 10 Websites have footer
LINK TO SOCIAL MEDIA	8 out of 10 Websites have link to social media
IMAGES	
COAT OF ARMS OF THE COUNTRY	No
NATIONAL FLAG	1 website uses China and United Kingdom Flag to represent the selection of languages.

	China flag for Chinese language selection and United Kingdom for English language selection. 1 website uses 14 flags of states in Malaysia
PICTURE OF BUILDINGS AND MONUMENTS	KLCC, Menara KL, MCA Building
LANGUAGES	
CHINESE ONLY	2 Websites
ENGLISH ONLY	2 Websites
MALAY AND ENGLISH	1 Website
CHINESE AND ENGLISH	2 Websites
CHINESE, ENGLISH, AND MALAY	3 Website

The findings of the cultural markers in Malay and Chinese websites are summarised in Tables 3 and 4, respectively. In terms of colours, no colour was distinctive to culture in terms of cultural identifiers. For instance, aside from one Chinese website, neither the Chinese nor the Malay-based websites were found using sacred or popular colours for font links. Moreover, two websites, Universiti Teknologi Mara (UITM) and Kolej Universiti Poly-Tech Mara (KUPTM), made use of their corporate colour, which is purple. Black and white, which are prominent colours for website design, were also a popular choice. The background colour of the vast majority of websites is white whereas the font colour is often a contrast colour, such as black, so that typography, pictures, and other visual components may stand out, as a result.

In terms of layouts, most websites used by both races employed the following layouts: left to right for information orientation; an upper, text-based main menu for information structure, and an image or icon-based layout for visibility style. Since Malay language is a left-to-right information oriented language, it was noted that the layout for Malay websites were designed according to this orientation. However, in keeping with the Chinese language, which is a pictographic language, images or icons on the Chinese websites were designed based on the visibility style. It was also discovered in this study that a large number of websites used footer layout and at the same time included a link to their social media pages.

As for images, four (4) Malay-based websites employed the Malaysia and Selangor coats of arms, three (3) adopted Malaysia flags, and five (5) harnessed images of skyscrapers and tourism places as cultural markers. The usage of image to signify culture was not as prevalent on Chinese-based websites as it was on Malay-based

websites. Two (2) websites used Malaysia and the States of Malaysia flag, while one (1) website chose to use skyscrapers for its image.

In regard to languages, five (5) of the Malay-based websites solely utilised the Malay language, and merely/just one (1) website was in English. Another four (4) Malay-based websites offered bilingual languages: Malay-English and Malay-Arabic. Two (2) of the Chinese-based websites each used Chinese and English, whereas the remaining websites either utilised bilingual languages, Chinese and English (2), or Malay and English (1); also trilingual, Chinese, English, and Malay (3).

4. CONCLUSION

Website usability and culture have been researched since the 1990s when the Internet and websites first became widely accessible. However, some issues in this area are still under-researched. This study reveals how race, as a cultural unit, continues to influence website usability and users' pleasure. Website localisation, which bases settings on various cultures, is essential, especially for a nation like Malaysia, where many races cohabit. Given that culture has an impact on how people think, act, and behave, it is important to investigate how it affects website usability and users' experience. This study finds that Malay-based website uses a lot of cultural markers (page layouts, languages, and images), as compared to Chinese-based websites. Colours are found not used based on cultural settings. These findings support the assertions that cultural markers are still visible and is one of the important website elements for achieving website usability. Overall, it can be concluded that user interface elements on a website need to be configured in different ways to suit users from various cultural backgrounds.

REFERENCES

[1] Akiba, M., Yang, W. (2021). User Interface Characteristics of Mobile Applications Across Cross-Cultures. In: Shin, C.S., Di Bucchianico, G., Fukuda,

S., Ghim, YG., Montagna, G., Carvalho, C. (eds) Advances in Industrial Design. AHFE 2021. Lecture Notes in Networks and Systems. vol 260. Springer, Cham. https://doi.org/10.1007/978-3-030-80829-7_5.

[2] Badre, A.N. (2001). The Effects of Cross-Cultural Interface Design Orientation on World Wide Web Use Performance. Technical Report. GVU Technical Report, GIT-GVU-01.03. pp. 1-30.

[3] Barber, W. and Badre, A. (1998). Culturability: The Merging of Culture and Usability. In Proceedings of the 4th Conference on Human Factors and the Web. Basking Ridge. NJ.

[4] Berelson, B. (1952) Content Analysis in Communication Research. Glencoe, Ill: Free Press.

[5] Berger, J.I and Kungu, K. (2019). Cultural Markers and Their Impact on Teaching in Higher Education. Handbook of Research on Cross-Cultural Online Learning in Higher Education. DOI: 10.4018/978-1-5225-8286-1.ch002.

[6] Cyr, D. (2013) Website Design, Trust and Culture: An Eight Country Investigation. Electronic Commerce Research and Applications. Vol 12(6). pp 373-385.

[7] Fu. Guo, F. Li, M. Nagamachi, M. Hu, M. Li. (2020). Research on Colour Optimization of Tricolour Product Considering Colour Harmony and Users' Emotion Colour Res. Appl. 45 (1). pp. 156-171.

[8] Jacques, Nantel., Evelyne, G. (2008). The Impact of Language and Culture on Perceived Website Usability. Journal of Engineering and Technology Management. Volume 25. Issues 1–2. Pages 112-122. ISSN 0923-4748.

[9] Khanum, M., Fatima, S and Chaurasia, M. (2012). Arabic Interface Analysis Based in Culture Markers. IJCSI International Journal of Computer Science Issues. Vol. 9, no. 1. pp. 255-262.

[10] Kim, I., and Kuljis, J. (2010). Manifestations of Culture in Website Design. Journal of Computing and Information Technology. Vol. 18 (2). pp 125-132.

[11] Krippendorff, K. (2004). Content Analysis: An introduction to its Methodology. Beverly Hills: Sage Publications.

[12] Malaysia Total Population. (2023, July 14). Department of Statistics. https://www.dosm.gov.my.

[13] McMullen, M. (2019). Cross-Cultural Design: Identifying Cultural Markers of Printed Graphic Design from Germany and South Korea. The International Journal of Visual Design 13 (2): 1-15. doi:10.18848/2325-1581/CGP/v13i02/1-15.

[14] Oladapo, H., Owusu, E., Chakraborty, J. (2021). Effects of Culturally Tailored User Interface Design. In: Ahram, T.Z., Falcão, C.S. (eds) Advances in Usability, User Experience, Wearable and Assistive Technology. AHFE 2021. Lecture

Notes in Networks and Systems, vol 275. Springer, Cham. https://doi.org/10.1007/978-3-030-80091-8_100.

[15] Rukshan, A., Nik, T., Tanya, M., David, M. (2021). The Influence of User Culture on Website Usability. International Journal of Human-Computer Studies. Volume 154. ISSN 1071-5819. https://doi.org/10.1016/j.ijhcs.2021.102688.

[16] Sauer J, Sonderegger A, Schmutz S. (2020) Usability, User Experience and Accessibility: Towards An Integrative Model Ergonomics. 2020;63(10):1207–1220. doi: 10.1080/00140139.2020.1774080.

[17] Sheppard, C., and Scholtz, J. (1999). The Effects of Cultural Markers on Web Site. In Proceedings of the 5th Conference on Human Factors and the Web.

[18] Sun, H. (2001). Building a Culturally-Competent Corporate Web Site: An Explanatory Study of Cultural Markers in Multilingual Web Design. SIGDOC 01. October 21-24. pp. 95-102.

[19] Tong, M. C., and Robertson, K. (2008). Political and Cultural Representation in Malaysian Websites. International Journal of Design. Vol 2 (2). pp 67-79.

[20] Tractinsky, N. (2018). The Usability Construct: A Dead End? Human–Computer Interaction 33: 1–4.

MUHAMAD AFZAMIMAN BIN ARIPIN, Ph.D
School of Education, Faculty of Social Sciences and Humanities (FSSH)
Universiti Teknologi Malaysia (UTM)
[*Technical and Vocational Education*]

NOORZANA BINTI KHAMIS, Ph.D
School of Education, Faculty of Social Sciences and Humanities (FSSH)
Universiti Teknologi Malaysia (UTM)
[*Educational (Physics)*]

Graphic design by:

MOHAMAD NAZRI BIN SAYUTI
Division of Marketing & Customers Relations
UTMSPACE

Typesetting by:

AZNITA HAZLINA BINTI MANSOR
Division of Research Management and Learning Resources
SPACE

NUR ILI NAZIHAH BINTI ROSLAN
Division of Research Management and Learning Resources
SPACE

MANUSCRIPT SUBMISSION INVITATION

JUTEKS is a peer reviewed open access journal for the publication of original research. JUTEKS was first published by Program Pengajian Diploma (PPD), Universiti Teknologi Malaysia (UTM) City Campus in year 2002. In year 2008, PPD was restructured to be under Kolej Sains and Teknologi, UTM City Campus, and currently known as Pusat Pengajian Diploma, School of Professional and Continuing Education (SPACE), UTM. Starting from June 2020, JUTEKS is published by UTMSPACE with the following specific area of interests:

- Lifelong learning
- Technology and innovation for education
- Academic leadership
- Transnational education
- Research within organization
- Industrial revolution 4.0

The journal also accepts manuscripts on any of the following aspects: Civil and Environmental Engineering, Chemical and Energy Engineering, Mechanical Engineering, Aeronautical Engineering, Electrical and Electronic Engineering, Mechatronic Engineering, Computer Science, Software Engineering, Information Technology, Graphics & Multimedia, Built Environment and Surveying, Social Studies, Policy Studies, Fundamental Studies, General Studies, Linguistics, Religion, and Civilizational Studies.

Manuscripts submitted for the journal could be in Malay or English Language. Research article / case report / review article / opinion / short communication / mini review or letter-to-editor are most welcome. Publications of case studies are possible when the authors discuss broader applications of their insights or techniques.

Kindly contact the editor-in-chief for enquiries/manuscript templates or formatting at the following address:

<div align="center">

Editor-in-Chief
Journal of Technical and Social Studies (JUTEKS)
School of Professional and Continuing Education (SPACE)
Level 4 and 5, Block T05
Universiti Teknologi Malaysia
81310 Skudai, Johor, Malaysia
Email: juteks@utmspace.edu.my
(*Attn: Dr. Siti Munira binti Jamil*

</div>

UTM
UNIVERSITI TEKNOLOGI MALAYSIA

Sekolah Pendidikan
Profesional dan
Pendidikan
Berterusan
(SPACE)

UTMSPACE JOHOR BAHRU
Aras 4 & 5, Blok T05
Universiti Teknologi Malaysia
81310 Skudai, Johor

KAMPUS UTMSPACE Kuala Lumpur
Aras 2, Residensi UTM Kuala Lumpur
No. 8 Jalan Maktab
54100 Kuala Lumpur

LRQA
CERTIFIED
ISO 9001

UKAS
MANAGEMENT
SYSTEMS
0001

Approval number(s) : ISO 9001 - 0058972

space.utm.my