

ISLAMIC KNOWLEDGE: FACTORS EFFECTIVE ISLAMIC KNOWLEDGE TRANSFER FOR VISUALLY IMPAIRED USERS VIA MALAYSIA E-LEARNING WEBSITES¹

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ABSTRACT

It is necessary for visually impaired users (VIUs) to be able to make use of information communication technologies (ICTs), especially e-Learning websites to acquire knowledge through them. This paper explores the factors that influence effective Islamic knowledge transfer (EiKT) via e-Learning websites for VIUs in Malaysia according to the knowledge providers (KPs), service providers (SPs) and VIUs. The paper is exploratory and applies thematic analysis to analyze the qualitative data that were collected through the use of 41 interviews with the three groups of participants. Four factors were identified which influence Islamic knowledge transfer (KT) through the use of this websites. The paper has identified the factors and suggests the considerations of these factors in making decisions on the transfer of Islamic knowledge to VIUs through the use of them.

Keywords: Islamic knowledge, Islamic knowledge transfer, visually impaired users, e-learning websites.

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INTRODUCTION

E-learning is a method of teaching, learning and training through the electronic means which is now used globally as a means of KT by various organizations and people to disseminate knowledge to people without face to face interaction. Researchers such as Pulist (2013) and Munezero (2016) defined it as a term that generally refers to web-based learning, online learning, blended learning, networked learning, distributed learning, flexible learning that requires the use of computers to be carried out and is delivered through a networked technology. The recent technological revolution that has taken place in the past three decades has provided a platform for further development of educational opportunities (Embi et al., 2012). The use of ICT has become a new reality nowadays and as a result, the use of e-Learning for learning has become more common (Xanthidis and Nikolaidis, 2013). Each user has a different set of circumstances relating to their disability, and e-Learning websites need to take into consideration the limitations posed by these circumstances. However, the main focus of our paper is on the VIUs. Visually Impaired Users (VIUs) are the internet users with visual disabilities such as differentiating between dark and light, tunnel vision, full blindness, have low vision, or who have color blindness. As a result, e-Learning websites need to take into consideration the limitations posed by these circumstances such as using tools to enable them use computers. VIUs who are totally blind requires screen readers to translate text to audio, partially impaired users requires screen magnifiers to enlarge text and objects on screen display while screen reading software helps to translate text into audio (Armstrong, 2009). As a result, there is a need to identify the factors that affect Islamic KT via e-Learning websites to VIUs.

The purpose of this paper is to present the findings from a case study on the factors that affect Islamic KT through e-Learning websites in Malaysia to VIUs according to the VIUs, SPs and the KPs. The next section briefly reviews the relevant literature which includes the generation of a list of potential factors for E_iKT to VIUs via e-Learning websites; the subsequent section discusses about the methodology, followed by the result and discussion sections. Finally, the conclusion of the paper is presented.

ISLAMIC KNOWLEDGE AND ISLAMIC KNOWLEDGE TRANSFER (KT)

Islam has given greater attention to the importance of knowledge acquisition more than any other human activities. This has been reflected in many Al Quran, Sunnah teachings and Islamic scholars' works. The main sources of knowledge are the Al Quran and Hadith (Jamilah et al, 2014). In fact, it addresses the issue of knowledge acquisition to all mankind regardless of race, color, gender or disability to learn and acquire knowledge (Salleh et al., 2011). The process of gaining knowledge influences the learner in two ways. Firstly, he develops a sense of not knowing anything along with gradual increase in learning such that the vastness of knowledge shrinks his self-

consciousness. Secondly, he may prove blockhead and fails to recognize his own existence as a tiny and worthless spot on the expanse of universe (Tahir-ul-Quadri, 2007).

Knowledge Transfer (KT) is the sharing of knowledge with the VIUs in order to fulfil the receiver's knowledge needs (Hasnain et al., 2016). The importance of KT is to multiply knowledge quickly in order for knowledge to reach a large group of people on time (Lindkvist, 2005; Choi et al., 2010). As a result, KT is based on the absorptive capacity of an individual and his motivation to share knowledge. Islamic KT as defined for this paper is the process through which Islamic knowledge is exchanged between providers (SPs and KPs) and VIUs through the knowledge management (KM) medium (e-Learning). Even though, e-Learning is being used as a medium of learning for people with impairments, Zheng et al. (2012) stated that there are limited researches specifically focused on the development of Islamic knowledge courseware for the VIUs. Also, Abdullah et al. (2011) mentioned that the effectiveness of KT model can be realized if the purpose for which the website was developed is fully achieved.

Parameters of knowledge, in the Islamic perspective, are a broad and integrated concept. It encompasses the whole gamut of information that reflects the true nature of an object, and provides an understanding of its operation in the world. It includes micro and macro understanding and exposes the metaphysical nature of the object. It provides unified and holistic information, which help us in the furtherance of our action and operation. It develops such acumen as to comprehend reality and its eminence and manifestation in various forms. It imbues the human being with an understanding to differentiate between what is right and wrong and what is good and bad (Salleh et al., 2011). It is pertinent to know the nature of blindness for each impaired students in order to meet the specific assistance needed for KT (Permvattana et al, 2013).

CONCEPTUAL MODEL OF EFFECTIVE ISLAMIC KNOWLEDGE TRANSFER (EIKT) FOR VISUALLY IMPAIRED USERS (VIUs) IN E-LEARNING

As a result of the lack of E_iKT model for VIUs through e-Learning websites (Saowapakpongchai & Prougestaporn, 2012) which is the focus of the research, the researcher tries to develop an E_iKT model for VIUs by utilizing an adapted form of Abdullah et al. (2011) effective KT in e-Learning model to facilitate the identification of factors that affect Islamic KT for VIUs through e-Learning websites as a medium. This model has been chosen because of its e-Learning capability and the identification of influencing factors that affect e-Learning websites. The researcher has extended the application of Abdullah et al.'s model in order to identify the factors that affect the knowledge receiver, knowledge to be transferred and the medium of KT. Figure 1 presents the proposed conceptual model.

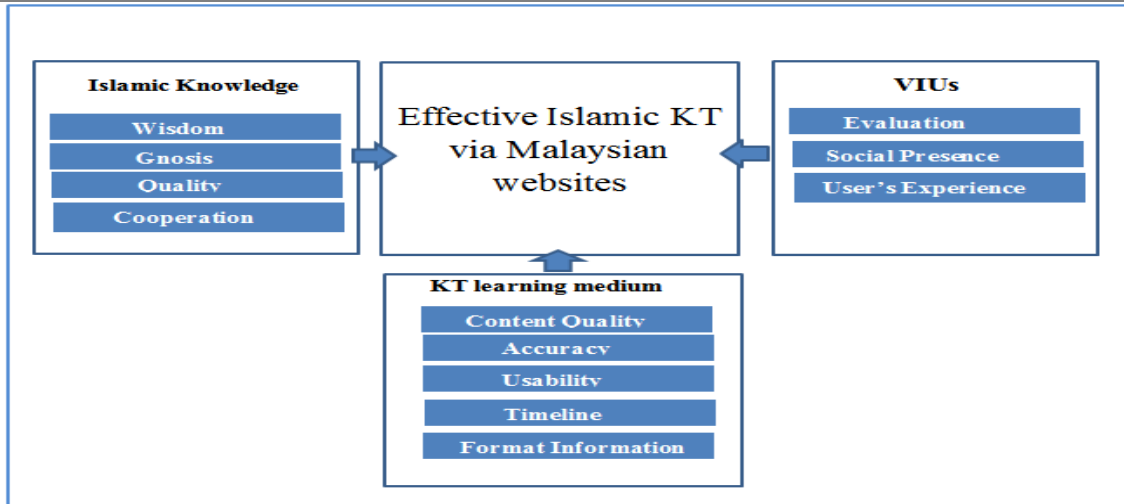


Figure 1: The proposed conceptual model of the study, EiKT for VIUs in e-Learning.

This conceptual model has been derived through the use of a significant number of relevant and associated literatures that concentrate on the factors and concepts that has been raised. Table 1 presents the factors, descriptions and their association with extant literature.

Table 1: Potential Factors for Islamic KT to VIUs via e-Learning Websites

Groupings and Factors	Description	Associated Concepts & Authors
Mobile learning development	A mixture of online learning and learning using materials previously downloaded onto handheld devices helps to reduce costs and the inconvenience of signal disruption.	Attewell, 2005; Butean, Moldoveanu & Morar, 2015
Format Information	Ability to change the face, font type and size of interface and have control over the e-Learning website.	Nganji, 2012; Rebaque-Rivas et al., 2013
ICT Skills	A person's belief in his capability to effectively use technology to improve learning or teaching.	Luskin & Hirsan, 2010; Permvattana et al., 2013
E-learning Quality	Transfer of credible knowledge effectively and efficiently in a specific time according to the official standards required.	Hammoudeh, 2012; Simonson et al., 2012
ICT Infrastructure	The e-Learning websites should have appropriate supporting ICT infrastructures.	Hussain, 2004; Al-Sobhi et al., 2010; Karunasena et al., 2012

Table 1: Potential Factors for Islamic KT to VIUs via e-Learning Websites (Continued)

Groupings and Factors	Description	Associated Concepts & Authors
Usability	Usability is the ease of use of an e-Learning website for the VIUs. Adaptive, rehabilitative and assistive devices and processes for locating, selecting and helping in providing support for people with different disabilities through allowing them in accomplishing different tasks. Audio, textual and audio-visual content that users' experience when using websites and they include, videos, sounds, images, text and animations.	Bocconi et al., 2007; Schulze & Kromker, 2010; Saowapakpongchai & Prougestaporn, 2012
Accuracy	Islamic knowledge content provided on e-Learning websites should meet with the VIUs needs and expectations.	Wang & Strong, 1996; Ordonez, 2014
Timeliness	Regular update of knowledge contents that needs the needs of the users.	Reimann, 2009; Luskin & Hirsens, 2010; Ordonez, 2014
Gnosis	Knowledge from experience especially experience of divinity or that which is beyond the five senses.	Banu Shirin et al., 2014
Content Quality	The way content is exhibited and presented which will help in achieving easy reading and understanding.	Abdullah et al., 2011; Simonson et al., 2012; Saowapakpongchai & Prougestaporn, 2012
Wisdom	Selecting the right way to transfer Islamic knowledge to VIUs depending on a suitable way according to their needs and ability, and total insight and having sound judgment concerning a matter or situation through understanding cause and effect phenomena	Walker & Christenson, 2005; Burhan, 2012; El Garah et al., 2012
Co-operation	Implementation of Islamic teachings on e-Learning websites should be carried out with love and affections. Islamic preaching on love and affection should be encouraged and impacted in the daily lives	(Buzzi et al., 2012)

	of users.	
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Table 1: Potential Factors for Islamic KT to VIUs via e-Learning Websites (Continued)

Groupings and Factors	Description	Associated Concepts & Authors
Social Presence	VIUs perception of being in and belonging in an online course. An instance of a higher degree communication medium is the video while that of a lower degree communication medium is the audio. People with the same interests coming together to share knowledge regularly.	Russo & Benson, 2005; Lowenthal, 2008
User Experience	User experience is the level of positive or negative feelings which a specific user is experiencing in a particular setting during and after a product use which will propel a user for further usage.	Betts et al., 2015; Beauregard et al., 2007; Hassenzahl, 2008; Johnson et al., 2009; Schulze & Krumker, 2010; Chu & Chu, 2010; Ordonez, 2014
Awareness Creation	The e-Learning websites should have appropriate supporting ICT infrastructures.	Al-Sobhi et al., 2010; Karunasena, 2012
Government and Voluntary Support	Provision of support in terms of development of ICT infrastructures and funding by government and voluntary organizations.	Schwester, 2009; Al-Rashidi, 2010
Evaluation	Tasks should comply with guidelines and standards and provide feedback on all sections of the e-Learning environment.	Luskin & Hirsens, 2010; Permvattana, et al., 2013
E-Learning Experience	Providers of knowledge must be experienced and vast to impact effective knowledge through e-Learning.	Cooper et al., 2006
Motivation	Giving motivation and incentive to users so that they will be able to make use of the website by providing ICT infrastructures and assistive technologies that can be bought at a reduced price for the visually impaired users.	Faghih et al., 2013; Junus et al., 2015
	Perceived enjoyment is related to perceive	

Perceived Enjoyment	satisfaction as the enjoyment of any particular task will lead to satisfaction. Perceived enjoyment is influenced by perceived usefulness and self-efficacy.	Liaw, Huang & Shen, 2007; Junus et al., 2015
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FACTORS THAT AFFECT ISLAMIC KNOWLEDGE

Study by Salleh et al. (2011) also found out that the use of e-Learning for teaching Islamic knowledge provides a lot of resources for students to learn about administration, Prophet hood, da’wah, Al Quran revelation, expansion of Islamic Empire, Tawhid and so on. It is important for Islamic knowledge to be learned and transferred to other people to learn from. According to the Islamic perspective of knowledge, the main factors that affect Islam knowledge include the following are wisdom, gnosis, co-operation and quality (Mohannak, 2011).

WISDOM

Burhan (2012) provides a practical definition of (Hikmah) as act of performing any required task in the right way, at the right time and in the right place. For example learners with physical disabilities need special equipment to read and write. Where VIUs need a different media and system that help to read material subjects and acquire knowledge easily by using wider screens and special visual equipment to improve the vision of knowledge. Therefore, knowledge is not just a particular cultural production, neither an empty wisdom of an individual’s experiences to include every single way of looking at things nor acting accordingly using wisdom in Islam (Muhamadul and Yaakub, 2011). Al-Hudawi et al (2014) stated that wisdom is a key resource to the successful management of any organization and helps them to deliver value-added services and products. Relating this statement to Islamic knowledge, the transfer of knowledge requires that it should be carried out with wisdom in order to make the transfer of knowledge successful.

GNOIS

This concept generally signifies a spiritual knowledge or "religion of knowledge". Therefore it is a deliverance of man from the constraints of earthly existence through insight into an essential relationship, as soul or spirit. Gnosis describing mystical intuitive knowledge of spiritual truth as reached through ecstatic experiences rather than revealed or rationally acquired. In this view knowledge is considered to be derived from two sources: 'aql (mind) and 'ilmhuduri (in the sense of unmediated and direct know ledge acquired through mystic experience). In Islam the spiritual knowledge called Ma’rifah (Akhtar, n.d.). This comes from three sources which are the Holy Quran, Sunnah (Hadith) and Islamic scholars works.

According to the Al Quran and the traditions of the Holy Prophet (peace and blessings of Allah be upon him), the unveiling of divine gnosis is entirely dependent on inner purity and moral excellence (Ahmed, 1981). Islamic knowledge should be transferred to the people searching for it in a way that the learners can be able to put the knowledge gained into practice (Al-Hudawi et al, 2014). This knowledge should be imparted according to their hierarchical place and follow the criteria and parameters set by the Al Quran. Divine gnosis and nearness to Allah must emanate from all learning.

QUALITY

The philosophical context of quality in Islam stems from the holy Al Qur'an and the Hadith. Islamic principles reinforce and enhance quality in learning and delivering knowledge with high quality which is a substantial element in achieving (Itqan) which is a quality-related term used by Prophet Mohammad to denote continually improving performance by the parties in any task, activity or function. Since KT process is a type of work achieved by the teachers, then the Islamic principle of quality play a significant role in Islamic KT (Maqbouleh, 2012). Quality is one of the basics of doing things and work in life of Muslims. These responsibilities towards ourselves and others mean that we should be honest, transparent and do the work just perfect with high quality by making use of the best standards, ensure integration in tasks and behavior, acquisition of knowledge and skills needed to carry out duties and upholding fairness in activities being carried out (Al - Sheikh, 2000; Alkhatani, 2014).

CO-OPERATION

Researchers like Poltrock and Grudin (2005) stated that co-operation is a term used by a small users group that share fundamental objectives and co-operate among themselves. Training process will be facilitated during practice in an e-Learning websites by active co-operation between VIUs. Co-operation can be defined as helping VIUs and learning support to them. It is regarded as an important value of all Muslims and receiving divine blessings in return. Tutors/instructors, SPs and learners (refers to the VIUs) should co-operate with one another and help one another in other for KT to be effective and KT should be done with love and sincerity. It is believed that users who co-operate with one another but do not have the chance to get sufficient information awareness will not reach the same quality in joint projects (Huang et al, 2012). So in order for communication to occur between the VIUs and the e-Learning community as a whole, there should be sharing of knowledge (Paulin & Suneson, 2012) and a lot of information between users and which can be achieved by not only the use of conversation by also by making use of sensory

information like interaction and touch sounds. Knowledge sharing and transfer through an online environment requires trust and sharing has to be done in an open and mutual way. All users should also have common attributes and goals for effective KT to occur.

For an effective Islamic KT, KT and retrieval should be able to meet the needs of the VIUs (Bouramoul *et al*, 2010). The transfer of Islamic knowledge to VIUs via e-Learning websites is to give Islamic education through an online environment with easy accessibility. Islamic education is a type of education which is in all aspects directed towards the personality of human being and its ultimate goal is to produce an Islamic generation (in this case, the VIUs) who will have the ability to adjust positively and interact constructively with their surroundings thereby achieve the ultimate goal of life. Even though, KM has three elements, Islamic KM has one more added element which is the knowledge sources (Muhamadul & Yaakub, 2011).

METHODOLOGY

A semi-structured interview was conducted individually for 41 participants that consist of 14 VIUs, 13 SPs and 14 KPs. Respondents that took part in this study were from Malaysian organizations which are: Malaysian Association for Blind (MAB), Society of the Blind in Malaysia (SBM), Persatuan Orang Cacat Penglihatan Islam Malaysia (PERTIS), Setapak Blindness Special Education Secondary School (SMPK), Ministry of Education (MOE), Jabatan Kemajuan Islam Malaysia (JAKIM), Universiti Kebangsaan Malaysia (UKM), International Islamic University Malaysia (IIUM), Universiti of Malaya and Teachers Training Institute for the Blind. VIUs refers to the people who are legally blind or have vision impairment and as a result make use of assistive technologies to make use of the computer, internet or e-Learning websites. The SPs refers to the organization or companies that provide and manage the e-Learning websites through which Islamic knowledge (such as Hadith, Tawhid, Islamic economy and finance) is learned and transferred to users (VIUs). The KPs include the lecturers and teachers that teach users and impact knowledge to them.

The author asked each group of respondents' direct questions regarding the factors that affect Islamic knowledge which is transferred to VIUs via e-Learning websites. Data obtained from interview were classified according to the three groups of respondents. As the sample size used was small, the data analysis was done manually and the shared factors from all groups of respondents were stated. The interview transcripts were then analyzed, using inductive thematic techniques (Boyatzis, 1998; Braun & Clarke, 2006; Azizan, 2011). The potential factors were available to seed this analysis, supplemented with the outcomes of the thematic analysis which allowed the researchers to code category names that emerged from the data.

RESULTS

This section shows the response of participants on the factors that affect Islamic KT to VIUs via Malaysian e-Learning websites. The factors stated are presented below according to the group of respondents.

VISUALLY IMPAIRED USERS (VIUs)

Drawing upon analysis of the interviews, VIUs have identified three factors that affect the Islamic KT to VIUs through e-Learning websites in Malaysia. The factors include content quality, wisdom and gnosis.

VIUs – CONTENT QUALITY

Islamic e-Learning websites should give quality, correct Islamic knowledge and information on issues and questions asked by its users. Good communication skills are also required to effectively pass information on Islamic knowledge in a way that it will inhibit communication gap. *“JAKIM is a credible body. Is a body that we have trust in because JAKIM that only body that always get us to the, always guide us to the right track, fasting especially AQIDA, FIQH and Tafseer, Hokom. It is a correct knowledge website” VIU_10: Member).*

VIUs – WISDOM

It is defined as the ability of VIUs to use Islamic knowledge and experience to make good decisions and judgments. *“Honest and transparency and (itqan) are important factors which lead us to the wise decision at work or relationships” (VIU_ 10: Chairman).*

VIUs – GNOSIS

The quality of content on the e-Learning websites should be prepared, presented and structured in a way that it will grounded in Islamic values and principles . It is known as a spiritual knowledge or "religion of knowledge", in the sense of mystical enlightenment or "insight". *“Spiritual and religious cultures are very important in the education and learning process” (VIU_ 10: Member).*

SERVICE PROVIDERS (SPs)

Three factors have been identified by SPs as factors that affect the Islamic KT to VIUs through Malaysian e-Learning websites. The factors are content quality, wisdom and gnosis.

SPs – CONTENT QUALITY

The Islamic knowledge content on the e-Learning websites should be prepared, presented and structured in a way that the VIUs will be able to understand easily with important references and labels added for further information and show the quality of the content. The content on the e-Learning website should have comprehensive and better content so as to help VIUs to be able to follow easily. *“Websites supplied with the specific references and labels. Layout is not difficult to use” (SP_11: Chief Executive Officer). “Better content and comprehensive content. Easily followed and understood multi-lingua, more interesting of the presentation (quizzes, games, role-plays) and more effective presentation” (SP_3: Director General).*

SPs – WISDOM

The e-Learning websites should be designed wisely to meet the needs and requirements of the VIUs and Islamic knowledge should be transferred in the right way. As the VIUs cannot see the text content on the websites, the e-Learning websites for the VIUs should have majorly voice and video resources more than text content and content should be delivered in audio and video content and less of text, images, maps and graphics. *“The first is Al Quran in braille. The second one is halal information in the form of software which can be used by the VIUs. Again, software that can read all the information from the website, from the database, from the application so that they can be used by a blind person going out and it will spell out the halal restaurant nearby” (SP_4: General Director).*

SPs – GNOSIS

Islamic teachings on the e-Learning websites should be carried out according to Islamic principles or values and not cultural inferences and ideology. The Islamic knowledge content to be provided should be based on the Al Quran and Hadith as they are the two main sources for obtaining

spiritual knowledge. *“You must adhere to Islamic principles because any Islamic knowledge is very important if you saw that knowledge is that knowing what you are doing is zero, then it’s useless. You have to know what you are doing because you are Malaysian Muslim but you have to speak Arabic in Solat, you have to know what you are saying in prayers” (SP_4: Director).*

KNOWLEDGE PROVIDERS (KPs)

KPs have identified three factors based on factors that affect Islamic KT to VIUs via e-Learning websites in Malaysia: The factors are content quality, wisdom and co-operation.

KPs – CONTENT QUALITY

References should be provided in e-Learning websites to verify the authenticity of the Islamic contents being taught. The quality of the Islamic knowledge content should be based on the objectives that are to be achieved in the online learning and with accurate references for the users. The content should also be delivered in a way that VIUs will be able to easily access and make use of it. *“References are very important for the websites in JAKIM. It is important” (KP_12: Lecturer).*

KPs – WISDOM

Information and Islamic knowledge content presented on the e-Learning websites must be accurate, precise, and easy to comprehend and meet its user’s needs. Website layout must be simple for everyone to understand. Complex websites becomes difficult for VIUs to access. Voice and video resources are very important for the VIUs to translate text contents into sound for knowledge to be transferred. *“A multimodal presentations of Islamic knowledge where multimedia is well exploited is encouraged. More voice and video resources have to be incorporated whereby less reading is needed to acquire published knowledge” (KP_1: Lecturer).*

KPs – CO-OPERATION

Implementation of Islamic teachings on e-Learning websites should be carried out with love and affections and Islamic preaching on love and affection should be encouraged and impacted in the daily lives of users. Other users on the e-Learning websites should interact and provide assistance for the VIUs on the e-Learning websites. *“Sharing knowledge’s and doing the homework or*

research together. The best way to improve our Islamic knowledge to create groups that include intimate social relationships to assist VIUs to communicate, understand, belong, respect, and share knowledge” (KP_11: Dawah Officer). The table below shows the factors mentioned by the three groups of respondents that influences the transfer of Islamic knowledge through the e-Learning websites for VIUs.

Table 2: Factors that Affect Islamic KT according to VIUs, SPs and KPs

VIUs	SPs	KPs
VIU_F1: Content Quality	SP_F1: Content Quality	KP_F1: Content Quality
VIU_F2: Wisdom	SP_F2: Wisdom	KP_F2: Wisdom
VIU_F3: Gnosis	SP_F4: Gnosis	KP_F3: Co-operation

DISCUSSION

After the factors have been identified from all respondents, the shared factors from the VIUs, SPs and KPs were obtained. These shared factors are Content Quality and Wisdom. Other factors that were mentioned by some group of respondents but not all the different groups of respondents are Co-operation and Gnosis. As reported from extant literature, this finding confirm the findings of researchers like Muhamadul and Yaakub (2011) and Burhan (2012) stressed the importance of ensuring that knowledge is transferred to recipients in the right way and based on their needs as this will ensure that the recipients understand the importance, value and the principle of the knowledge. Lakatos & Borsos (2011) stated that the implementation of e-Learning activities for VIUs should be done with passion and commitment and trust. Alkhatani (2014) likewise stated that a strong community based on high morals can be built by trust and sincerity. So, co-operation and trust is needed to build an online community in an e-Learning environment where VIUs can feel a sense of belonging and be able to learn the knowledge they want to learn.

In addition, these findings confirmed of the study of Ozkan (2009) who cited the factors that affect effective e-Learning to be content quality, students’ perceptions and system quality as the factors he was able to identify. Mohannak (2011) reported that Islam describe all Muslims as brothers and they should have strong cooperation together for any goal that contribute to better life for Muslims including learning acquiring new knowledge. Ordenez (2014) assessed multiple models in determining e-Learning effectiveness in different countries. He found that the factors that are common to them are student satisfaction, technological infrastructures and support of the institution.

CONCLUSION

This paper has reported the data analysis for the factors that affect Islamic KT through e-Learning websites for VIUs. The analysis was drawn upon interviews from three groups of respondents who are SPs, KPs and VIUs. The results included the identification of these factors which are gnosis, quality, wisdom, co-operation and ICT infrastructures. These factors are enjoined to be standardized, reviewed and improved upon by to the government in order for EIKT to the VIUs in Malaysia.

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