

Information Technology Usage in the Islamic Perspective: A Systematic Literature Review

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KEYWORDS Information Technology. Islamic Perspective. Systematic Literature Review

ABSTRACT This paper involves a systematic and organized review of 155 research articles regarding Information Technology (IT) based on the Islamic perspective from 1992 to 2016. An analysis of studies dedicated to IT from the Islamic perspective was carried out on the basis of certain dimensions, namely, journal, country, author, year of publication, research methods, type of respondents, models, and theories. Based on the obtained findings, the use of quantitative and survey research methods (55.5%) dominate this field of study compared to qualitative research methods (23.9%) and mixed methods (20.7%). Furthermore, the findings have shown an increasing trend over recent years. However, to boost and enhance the IT continuance intention, it is important that future studies apply considerable use of theoretical and methodological approaches like the qualitative methods to examine the IT continuance intention based on the Islamic perspective.

INTRODUCTION

Today, the speed of development in the field of Information Technology is such that most thinkers are astounded by it and try to assess, measure, and demarcate its boundaries of influence. Although the impact of this technology is felt in different fields of science and has led to an indescribable improvement in scientific interactions all over the world, it has also led to concerns in different fields of social and human resources (Ameen and Ahmad 2017).

In the context of Malaysia, the pioneering computer system was first introduced in 1966 and ever since its inception, the government has launched different initiatives to bring about ICT adoption and diffusion through the Ministry of Education. More specifically, the Malaysian Ministry of Education has been exerting efforts to include ICT in teaching and learning, considering the increased demand to employ it in the learning environment. Gonzalez et al. (2016) and Al-rahmi et al. (2017) have also used different models comprising various constructs derived from different models or theories. By 2003, Ma-

aysia's K-economy Master Plan was introduced and part of the program involved the government's promotion of ICT use as a culture in teaching and learning environments. Consistent with the country's Vision 2020, the Ministry of Education has come up with different methods to include extensive ICT in the education environment in the hopes of upgrading teaching and learning in schools. The introduction of the Smart School Project is geared towards automating different activities in schools and inculcating ICT in the day-to-day education curriculum, underlining the commitment of the government to incorporate ICT in the education sector. Many researchers (Al-Rahmi and Zeki 2016; Al-Rahmi et al. 2014; Zakaria et al. 2010) have highlighted the lack of ICT studies, especially in the Islamic perspective. Schools, colleges and universities have a unique environment, wherein additional subjects are taught, and emphasis is placed on certain subjects, including Arabic language and Islamic studies; the interest lies in examining ICT integration within them. Accordingly, this research aims to develop a system that combines the findings of past studies in IT based on the Islamic perspective through a systematic literature review.

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Problem Background

The propagation of religious education throughout the Muslim world in the past was curtailed by the lack of communication tools, and Islamic literature was primarily relayed through books. This is because knowledge pertaining to Islamic education (Quranic translation, Tajweed, Hadith, Tafseer, Fiqh, etc.) was available only in written form. Against this background, ICT has made it possible to create an environment wherein Islamic resources can be converted into digital forms that can be distributed more easily around the globe (Hosseini et al. 2014).

During the early 1990s, the commercialization of the Web commenced, and the Web was mainly used for email and file sharing. After several years, some developed nations, such as the U.S., the U.K., and Canada, initiated the distribution of data online for research, education and scientific purposes. Online libraries were organized and filled with e-books of almost every field of interest and made accessible throughout the Muslim world. By the beginning of the 21st century, the Internet has managed to dominate as a medium of communication around the globe. It began with the popularity of messaging and chatting, and it increasingly became a well-known medium for training and education. People were enabled to get access to any information they need in a timely manner. In relation to this, the Muslim world reached a decision a few years ago to use the World Wide Web and the Internet as the primary medium to propagate Islamic literature around the globe.

Additionally, the Muslim world has acknowledged the significance of IT to Islam, and based on the researchers' perspective, it is important for the Muslim world to produce a comprehensive online Islamic library that enables the translation of Islamic literature to every language to serve the whole global citizens. In the current times, IT is considered as a universal tool to improve competitiveness in different fields. This underlines the necessity to understand the determinants of IT adoption and the theoretical models that have cropped up for the purpose of tackling the IT adoption topic. Studies that reviewed literature concerning IT adoption models at the individual level and conducted comparisons among them are still few, and they are even fewer in the Islamic studies perspective.

The present review attempts to fill this notable gap in literature. This is particularly significant as Islamic resources in many developed countries are still limited, with many of the citizens being illiterate or unable to access resources on the subject. Although the goal is to educate such citizens, it is unfortunate that Islamic literature in audio form is quite limited (Hosseini et al. 2014).

Models and Theories

This paper reviews adoption models used by studies that examined Islamic studies in IT literature. According to Wade (2009), there are several theories used in IT research but in this paper, only theories concerning technology adoption are examined. These include the Technology Acceptance Model (TAM) by Davis (Davis 1986, 1989 and Davis et al. 1989), the Theory of Planned Behavior (TPB) by Ajzen (Ajzen 1985, 1991), and the Unified Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh et al. (2003). Others are Roger's (1995) DOI and Tornatzky and Fleischer's (1990) TOE framework.

Several researchers in the IT field revealed that IT is not extensively used in majority of organizations and consequently, many technology acceptance models/theories were developed to examine IT acceptance. The models are the Theory of Reasoned Action by Fishbein et al. (1975), the Technology Acceptance Model by Davis (1989), the extended TAM by Venkatesh and Dais (2000), the Unified Theory of Acceptance and Use of Technology by Venkatesh et al. (2003), the Motivational Model by Davis et al. (1992), the Theory of Planned Behavior by Ajzen (1991), and the combination of TAM and the Theory of Planned Behavior by Taylor and Todd (1995). Others are the Model of PC Utilization by Thompson et al. (1991), the Innovation Diffusion Theory by Rogers (1995), and the Social Cognitive Theory by Bandura (1986).

In the above models/theories, the constructs that have been significantly addressed in IT studies in the education sector are perceived usefulness, relative advantage, students' academic performance, and outcome expectancy (Venkatesh et al. 2003). These factors have been empirically confirmed as the top predictors of technology use (Venkatesh et al. 2003; Jahng and Lee 2007; Lee 2010; El-gayar et al. 2011). An over-

view of the models is provided in the following sub-sections.

Theory of Reasoned Action

The Theory of Reasoned Action (TRA) posits that an individual's behavioral intentions determine his actual behavior, while his attitude towards the behavior along with subjective norms regarding the behavior performance are what determine his behavioral intentions (Fishbein and Ajzen 1975). The assumption underlying the TRA is that individuals as rational beings are constantly calculating and evaluating relevant behavior beliefs while forming their attitude towards the behavior. According to Fishbein and Ajzen (1975), attitude refers to the individual's positive/negative feelings (evaluative effect) regarding the exhibition of a particular behavior. Meanwhile, the TAM is an adaptation of TRA to the field of Information System (IS), and it posits that perceived usefulness and perceived ease of use are the determinants of the intention to use a system, with intention as a mediating variable of actual system use. Moreover, perceived usefulness is also deemed to be directly affected by perceived ease of use. However, students and researchers have simplified TAM by dropping attitude as a construct in TRA (Venkatesh et al. 2003).

Technology Acceptance Model and its Extensions

As mentioned previously, the TAM model is an adaptation of the TRA by Davis (1989) in his quest to determine factors behind an individual's acceptance/rejection of IT (see Figure 2). According to him, perceived usefulness and perceived ease of use are the two top significant individual beliefs regarding IT use. Perceived usefulness refers to the level to which an individual believes that using a specific system would improve his performance on the job (Davis 1989). This definition has its basis on the expectancy value model that underlies the TRA. On the other hand, perceived ease of use refers to the level to which an individual believes that the use of a specific system would be effort-free (Davis 1989). The above two beliefs lead to individual behavior intention as well as actual behavior. Davis (1989) found perceived usefulness to be the top predictor of the intention to use IT.

Theoretical Frameworks and Reference Theories

Previous studies related with information technology (IT) usage in the Islamic field have identified different models. These models include Technology Acceptance Model (TAM), Flow Theory, Social Cognitive Theory (SCT), Theory of Planned Behavior (TPB), Theory of Reasoned Action (TRA), Acceptance and Use of Technology (UTAUT), IS Continuance Model (ISCM), Unified Theory of IS Success Model, Innovation Diffusion Theory (IDT), Motivation Theory, Expectation Disconfirmation Theory (EDT), Task Technology Fit (TTF), Social Capital Theory, and Status Quo Bias (SQB) Theory. Others are Self-determination Theory (SDT), Uses and Gratifications Theory (UGT), Fairness Theory, Technology Readiness (TR), Cognition Change Model (CCM), Decomposed Theory of Planned Behavior (DTPB), Balanced Thinking–feelings Model, Value-based Model, TAM 2, Resistance Theory, Value, Belief Updating Theory, ERG Theory, Social Response Theory, Network Externalities, Individual Characteristics, Interaction Theory, Commitment-trust Theory (CTT), Hertzberg's Two-factor Theory, Social Interaction, Innovation, Cognitive Absorption (CA), and Attribution Theory. Moreover, a number of perspectives have been used to explain the continuance intention, such as habit, trust, service quality, satisfaction and quality. Researchers integrated the IS Continuance Model (ISCM) with complementary theoretical perspectives and different constructs. Lin et al. (2005) proposed an extended ISCM by adding perceived playfulness to investigate website continuance intentions. Tang et al. (2014) suggested an extended ISCM by incorporating experiential learning and perceived self-efficacy to examine blog continuance learning behavioral intentions.

METHODOLOGY

The concept of IT continuance can be understood as a combination of three fields: information technology, service management and marketing (Nabavi et al. 2016). Accordingly, this paper reviewed the literature on IT continuance in databases related to these three fields in the Islamic Perspective, including ScienceDirect, Springer, Emerald Fulltext, Taylor & Francis, Wiley InterScience, and Ingenta Journals. The

Google Scholar search engine was also used to ensure the coverage of publications in other databases. The researchers went backward by reviewing the citations for the articles identified to find more articles. The following criteria were used to search these sources and select the papers:

- Journal papers, conference papers, doctoral dissertations, Master's theses, and unpublished working papers were included because academics and practitioners usually use journals to obtain information and disseminate new findings. Also, journals represent the highest level of research (Nord and Nord 1995);
- Information systems and information technology search terms in the Islamic perspective were employed to search for the titles and abstracts of books and papers.

The present work primarily aims to present an extensive and systematic review of literature concerning IS/IT use from the Islamic perspective. The present situation in the field is determined by identifying the lines of inquiry that are lacking investigative activity, and this necessitates answering the following research questions:

1. What are the research issues that have been addressed in IT literature in the Islamic perspective? Which journal, by whom, where and when was it published?
2. What are the theoretical frameworks/models/theories that have been employed in studies dedicated to the topic?
3. What are the research methods that have been utilized?

For the third question, this paper categorizes the approaches with the help of Orlikowski and Baroudi's (1991) categorization.

RESULTS AND DISCUSSION

The findings of the review are provided in this section. First, the answers to the above research questions are stated. What are the research issues that have been addressed in IT

literature in the Islamic perspective? Since 1992, when Davis et al. developed a Motivational Model (MM) for technology use as well as the Technology Acceptance Model (TAM) (Davis 1989) and the extended TAM (Venkatesh and Davis 2000), the Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al. 2003) noted that there has been a steady rise in research output related to IT and IS. A search resulted in 155 related studies published between 1992 and 2016. Thus, in this research, all articles were selected. The articles were analyzed based on the year of publication, the journal, the country and the author. This particular analysis provides guidelines for pursuing rigorous research on using IT from the Islamic perspective. The details are presented below:

Distribution by the Year of Publication

The distribution of the articles from 1992 to 2016 is shown in Table 1. From the data, it is clear that there is an upward trend in the number of IT continuance studies during this time period. From this trend, it appears that the attention given to IT continuance has risen over time and remains an important area of research. For example, it was found that more than half (86 studies or 55.5%) of the studies were published in the last five years that is, from 2012 to 2016 (See Tables 1 and 2).

Distribution by Country

The distribution of articles by the country where authors collected data is shown in Table 2. At the country level, 30 countries were represented, and the most frequently studied countries were Malaysia (52), Iran (38), Undefined (9), Saudi Arabia (8), United States (8), Canada (7), Pakistan (7), United Kingdom (5), France (4), Spain (4), Sweden (4), Indonesia (3), United Arab Emirates (3), Australia (2), Israel (2), Nigeria (2), Palestine (2), Russian Federation (2), and South Korea (2). Moreover, in Algeria, Bahrain, Bel-

Table 1: Distribution by the year of publication

Year	Article count	Year	Article count	Year	Article count	Year	Article count	Year	Article count
2016	12	2011	13	2006	1	2001	1	1996	0
2015	19	2010	18	2005	1	2000	0	1995	0
2014	18	2009	8	2004	2	1999	0	1994	0
2013	21	2008	10	2003	0	1998	1	1993	1
2012	16	2007	8	2002	3	1997	1	1992	1

Table 2: Distribution by Journal

<i>Journal</i>	<i>Article count</i>	<i>Journal</i>	<i>Article count</i>
International Journal of Environmental Science and Technology	4	International Journal Of Technoethics	1
Turkish Online Journal Of Educational Technology	4	International Journal Of The Book	1
Advances In Environmental Biology	3	International Perspectives On Education And Society	1
Electronic Library	3	Iranian Red Crescent Medical Journal	1
Journal Of Applied Sciences	3	Information Management And Computer Security	1
Life Science Journal		Intercultural Education	1
Malaysian Journal Of Library And Information Science	3	Interlending And Document Supply	1
Applied Physics A Materials Science And Processing	2	International Education Studies	1
Arpn Journal Of Engineering And Applied Sciences	2	International Geoscience And Remote Sensing Symposium IGARSS	1
Electronic Journal Of Information Systems In Developing Countri	2	International Information And Library Review	1
Information Sciences And Technology	2	International Journal Of Disaster Risk Reduction	1
Iranian Journal Of Information Processing Management	2	International Journal Of Information Science And Management	1
Journal Of Environmental Studies	2	International Journal Of Management Education	1
Materials Research Society Symposium Proceedings	2	Information And Communications Technology Law	1
Middle East Journal Of Scientific Research	2	Information And Management	1
Procedia Social And Behavioral Sciences	2	Journal Of Applied Sciences Research	1
AJOB Empirical Bioethics	1	Journal Of Archaeological Science	1
Acta Informatica Medica	1	Journal Of Industrial Engineering And Management	1
American Journal Of Applied Sciences	1	Journal Of Information Technology Research	1
Annals Of The New York Academy Of Sciences	1	Journal Of International Commercial Law And Technology	1
Anthropologica	1	Journal Of Islamic Marketing	1
Asian Journal Of Information Technology	1	Journal Of The Earth And Space Physics	1
Asian Social Science	1	Journal Of Theoretical And Applied Information Technology	1
Australian Journal Of Basic And Applied Sciences	1	Library Review	1
Biosciences Biotechnology Research Asia	1	Media International Australia	1
British Food Journal	1	Museum Management And Curatorship	1
Central Asia And The Caucasus	1	New Horizons In Education	1
Communication Research	1	Pakistan Journal Of Medical Sciences	1
Communications In Computer And Information Science	1	Program	1
Contemporary Islam	1	Research Journal Of Applied Sciences	1
Contemporary Studies In Economic And Financial Analysis	1	Engineering And Technology Science	1
Current Science	1	Scientometrics	1
Eastern Mediterranean Health Journal	1	Serials Review	1
Education And Information Technologies	1	Social Sciences Pakistan	1
Electronic Commerce Research And Applications	1	Telematics And Informatics	1
Family Planning Perspectives	1	Textile History	1
Geological Society Special Publication	1	World Academy Of Science Engineering And Technology	1
Global Journal Al Thaqafah	1	Total	155

gium, Egypt, India, Kazakhstan, Morocco, Singapore, Taiwan, Thailand, and Turkey, one study was found for each country. Cumulatively, re-

search works conducted in Malaysia and Iran accounted for 90 articles or 58.1 percent of the total number of articles, while the rest of the

countries accounted for 65 articles or 41.9 percent of the total number of articles. At the level of geographical regions, most studies dealt with Asia (see Table 3).

Distribution by the Type

Table 4 shows that most of the studies were from articles (84 articles or 54.2%) and conference papers (49 conference papers or 31.6%). The next in line were review papers (9 review papers or 5.8%), followed by conference reviews (6 conference reviews or 3.9%). Further, books were 4 in number (2.6%), book chapters were 2 in number (1.3%), and there was 1 short survey (0.6%). It should be noted that the highest percentages of studies were articles and conference papers.

Distribution by Subject Area

Table 5 shows the distribution by the subject area. The researchers noted that most of the studies were from the computer science area (41 studies or 26.5%) and the social sciences area (28 studies or 18.1%). There were 13 (8.4%) studies in the engineering area and 11 (7.1%) studies in the business, management and accounting area. The number of studies in the arts and humanities area was 10 (6.5%), and that of decision sciences area was also 10 (6.5%). Moreover, agricultural and biological sciences accounted for 8 studies (5.2%), and environmental science and

multidisciplinary area accounted for 7 studies (4.5%). There were 5 medical studies (3.2%), and biochemistry, genetics and molecular biology, earth and planetary sciences comprised of 3 studies (1.9%). Material science comprised of 2 studies (1.3 %), and economics, econometrics and finance area comprised of 2 studies (1.3%). Further, the chemistry and psychology area accounted for 1 study (0.6%), and mathematics and pharmacology as well as toxicology and pharmaceuticals also accounted for 1 study (0.6%). Finally, physics and astronomy area accounted for 1 study (0.6%). The authors understand that most of the studies are from computer science and social sciences areas because these areas of study are more closely related to information technology and information system (See Table 5).

Empirical Research

Our analysis shows that most of the studies were based on quantitative research by survey (49 studies or 31.6%) and online survey (37 studies or 23.9%). Qualitative research by focus group interviews made up 26 studies (16.8%), and individual interviews accounted for 11 studies (7.1%). Finally, the number of studies based on mixed methods approach are as follows: online survey with open-ended questions consisted of 9 studies (5.8%), online survey with interviews consisted of 8 studies (5.2%), experiment with survey consisted of 6 studies (3.9%), on-

Table 3: Distribution by country

Country	Article count	Country	Article count	Country	Article count	Country	Article count
Malaysia	52	France	4	Palestine	2	Kazakhstan	1
Iran	38	Spain	4	Russian Federation	2	Morocco	1
Undefined	9	Sweden	4	South Korea	2	Singapore	1
Saudi Arabia	8	Indonesia	3	Algeria	1	Taiwan	1
United States	8	United Arab Emirates	3	Bahrain	1	Thailand	1
Canada	7	Australia	2	Belgium	1	Turkey	1
Pakistan	7	Israel	2	Egypt	1	Total	155
United Kingdom	5	Nigeria	2	India	1		

Table 4: Distribution by the type

Document Type	Documents	Percentage	Document type	Documents	Percentage
Articles	84	54.2	Book	4	2.6
Conference Papers	49	31.6	Book Chapter	2	1.3
Review Papers	9	5.8	Short Survey	1	0.6
Conference Review	6	3.9	Total	155	100.0

Table 5: Distribution by subject area

S. No.	Subject area	Docu-ments	Perce-ntage
1	Computer Science	41	26.5
2	Social Sciences	28	18.1
3	Engineering	13	8.4
4	Business, Management and Accounting	11	7.1
5	Arts and Humanities	10	6.5
6	Decision Sciences	10	6.5
7	Agricultural and Biological Sciences	8	5.2
8	Environmental Science	7	4.5
9	Multidisciplinary	7	4.5
10	Medicine	5	3.2
11	Biochemistry, Genetics and Molecular Biology	3	1.9
12	Earth and Planetary Sciences	3	1.9
13	Materials Science	2	1.3
14	Economics, Econometrics and Finance	2	1.3
15	Chemistry	1	0.6
16	Psychology	1	0.6
17	Mathematics	1	0.6
18	Pharmacology, Toxicology and Pharmaceutics	1	0.6
19	Physics and Astronomy	1	0.6
	Total	155	100.0

line survey with structured content analysis consisted of 4 studies (2.6%), survey with interviews consisted of 3 studies (1.9%), and survey focus group with card-sorting exercise consisted of 2 studies (1.3%). Thus, the total number of quantitative research was high, with 86 studies. Table 6 shows the results of our classification in empirical research (See Table 6).

The analysis shows that most of the studies involved students (72 studies or 46.5%) and organization users (31 studies or 20.0%). Moreover, public users were involved in 23 studies (14.8%), while the number of studies involving teachers were 11 (7.1%) and those involving customers were 9 (5.8%). Also, citizens were involved in 4 studies (2.6%), and software developers were involved in 3 studies (1.9%). Finally, 2 studies involved nurses (1.3%). Table 7 shows the results of our classification in empirical research.

The aim on this paper was achieved by the review and analysis of 155 peer-reviewed articles, which enabled us to ponder on the most important research trends in information technology usage in the Islamic perspective from 1992 to 2016. The results show that research on IT usage in the Islamic perspective has been growing. Many researchers have tried to promote IT continuance studies by using different theories, such as Technology Acceptance Model (TAM), Flow theory, Social Cognitive Theory (SCT), Theory of Planned Behavior (TPB), Theory of Reasoned Action (TRA), Acceptance and Use of Technology (UTAUT), IS Continuance Model (ISCM), Unified Theory of IS success model, Innovation Diffusion Theory (IDT), Motivation Theory, Expectation Disconfirmation Theory (EDT), Task Technology Fit (TTF), and Social Capital Theory. Others are Interaction the-

Table 6: Empirical research approaches used to study IS continuance intention

Research approach	Methods used	Article count	Percentage
Quantitative Research	Survey	49	31.6
	Online Survey	37	23.9
Qualitative Research	Focus group, Interviews	26	16.8
	Interviews	11	7.1
Mixed methods	Online Survey, Open-Ended Questions	9	5.8
	Online Survey, Interviews	8	5.2
	Experiment, Survey	6	3.9
	Online Survey, Content Analysis	4	2.6
	Survey, Interviews	3	1.9
	Survey, Focus Group, Card-Sorting Exercise	2	1.3
	Total	155	100.0

Table 7: Type of respondents used to study IT

Type of respondents	Article count	Type of respondents	Article count	Type of respondents	Article count
Students	72	Teachers	11	Software Developers	3
Organization Users	31	Customers	9	Nurses	2
Users	23	Citizens	4	Total	155

ory, Satisfaction, Motivation Theory and Innovation Diffusion Theory (IDT).

According to Nabavi et al. (2016), in using TAM as a theoretical backbone in the study of continued IT intention, researchers should sharpen TAM with new research findings on IT continuance intention. Also, in this paper, the researchers believe that TAM is a theoretical backbone of interaction theory. Thus, in this paper, the authors suggest that to a broader extent, current theories, such as ISCM, TAM, and interaction theories, could be used to better understand information technology from the Islamic perspective.

When the authors were analyzing the geographical distribution of the studies, it was observed that more than half of the studies (58.1%) were conducted in Malaysia and Iran, with these two countries accounting for 90 articles. Also, it is noteworthy that in Algeria, Bahrain, Belgium, Egypt, India, Kazakhstan, Morocco, Singapore, Taiwan, Thailand and Turkey, only one study was published in each country? From the analysis, we found that more than half (86 studies or 55.5%) of the studies were published in the last five years from 2012 to 2016. Moreover, the distribution of Journals that published articles in information technology from the Islamic perspective shows that the International Journal of Environmental Science and Technology and Turkish Online Journal of Educational Technology are ahead of other.

The analysis shows that most of the studies were published as journal articles (84 studies or 54.2%), followed by conference papers (49 studies or 31.6%). Furthermore, the distribution by the subject area of authors shows that most of the studies were from the computer science area (41 studies or 26.5%) and social sciences area (28 studies or 18.1%). Thus, the researchers believe that because these areas of study are more closely related to information technology and information system, analyzing the theoretical frameworks used by these papers demonstrates a large and mixed set because various theoretical frameworks provided bases for the investigations of information technology usage in the Islamic field.

In addition, the remaining studies (Al-rahmi and Zeki 2016; Gonzalez et al. 2016; Al-rahmi et al. 2016; Ameen and Ahmad 2011) also used different models comprised of various constructs derived from different models or theories. For

example, while exploring the relationships of a model of using social media for collaborative learning to enhance learners' performance on learning, Chang (2013) demonstrated that perceived value and satisfaction determines users' continuance intentions of using e-learning systems in academic libraries.

Researchers could benefit from this paper because it shows a comprehensive picture of various factors of different Information Technology used in the Islamic Perspective. Moreover, researchers could understand key factors that determine the continuance intention. In addition, researchers should know the method of modeling for IT use to understand online interaction. In all of these studies, the survey methodology was extensively and frequently used. A few studies used unobtrusive data, interviews and a mix of interviews, surveys, structured content analysis, card-sorting exercise, and focus groups. Thus, our analysis shows that most of the studies were based on quantitative research by survey (49 studies or 31.6%) and online survey (37 studies or 23.9%); while qualitative research such as focus group and interviews accounted for 16.8%. Based on the list of the respondents, it is clear that most of the studies involved students (72 studies or 46.5%). Thus, students dominated the selection criteria. Furthermore, most of the research included in this review was published from 2012 to 2016. The systematic review of 155 research publications on IT from the Islamic perspective between 1992 and 2016 are attached in the references. Based on the obtained findings, the use of quantitative methods and survey research methods (55.5%) dominate the field of research compared to qualitative research methods (23.9%) and mixed methods (20.7%). This highlights the need to conduct research and publish articles that make use of qualitative research methods. It also opens up avenues for conceptual studies to enhance IT use from the Islamic perspective.

Future Research

Future studies should consider this information to extend the existing literature. This study also suggests the development of a review of IT system in the Islamic perspective known as the systematic literature review, as this facilitates easy access to the required complete information.

CONCLUSION

This paper provided a general picture of the present state of IT from the Islamic perspective by conducting a systematic review of 155 papers from 74 journals from 1992 to 2016. The researchers specifically conducted an analysis of contributions in light of the research questions developed that covered the year of publication, research methods, journals, authors, countries, type of respondents, study area and the theories employed. The contributions were classified in a systematic manner to provide a general picture of the IT status from the Islamic perspective and to assist researchers in searching for important studies in this area. This study contributes to the materials required by readers who are interested in different aspects related to the literature pertaining to IT use on the Islamic perspective. Readers may also leverage the searched information concerning the way different research methods match various models, constructs and theories. This is the first paper, to the best of the researchers knowledge, that conducted a systematic review of the topic of IT in the Islamic perspective and as such, future studies should explore additional issues to enhance the understanding of this particular topic.

ACKNOWLEDGMENTS

We would like to thank the Research Management Centre (RMC) at Universiti Teknologi Malaysia (UTM) for funding this project under grant number PY/2015/05399 / R.J130000.7826.4F795. We also would like to thank the Ibnu Sina Institute for Scientific and Industrial Research (ISI-SIR), Faculty of Science, Universiti Teknologi Malaysia. Moreover, we would like to thank the Research Management Center and Faculty of Information and Communication Technology, International Islamic University Malaysia for supporting this research.

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