A NEW CONCEPTUAL FRAMEWORK OF TAWHIDIC BASED ISLAMIC MOBILE APPLICATION FOR DEVELOPERS (T-iMAD)

MOHD FITRI BIN YUSOFF

DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
2022

**Awang Had Salleh
Graduate School
of Arts And Sciences**

Universiti Utara Malaysia

PERAKUAN KERJA TESIS / DISERTASI
(Certification of thesis / dissertation)

Kami, yang bertandatangan, memperakukan bahawa
(We, the undersigned, certify that)

MOHD FITRI YUSOFF

calon untuk Ijazah   **PhD**
(candidate for the degree of)

telah mengemukakan tesis / disertasi yang bertajuk:
(has presented his/her thesis / dissertation of the following title):

"A NEW CONCEPTUAL FRAMEWORK OF TAWHIDIC BASED ISLAMIC MOBILE APPLICATION FOR DEVELOPERS (T-iMAD)"

seperti yang tercatat di muka surat tajuk dan kulit tesis / disertasi.
(as it appears on the title page and front cover of the thesis / dissertation).

Bahawa tesis/disertasi tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan, sebagaimana yang ditunjukkan oleh calon dalam ujian lisan yang diadakan pada : **14 April 2022.**
That the said thesis/dissertation is acceptable in form and content and displays a satisfactory knowledge of the field of study as demonstrated by the candidate through an oral examination held on:
14 April 2022.

|		
Pengerusi Viva: *(Chairman for VIVA)*	**Dr. Ahmad Hisham Zainal Abidin**	Tandatangan *(Signature)*
Pemeriksa Luar: *(External Examiner)*	**Prof. Dr. Mohd Shafry Mohd Rahim**	Tandatangan *(Signature)*
Pemeriksa Luar: *(External Examiner)*	**Prof. Dr. Haslina Arshad**	Tandatangan *(Signature)*
Nama Penyelia/Penyelia-penyelia: *(Name of Supervisor/Supervisors)*	**Assoc. Prof. Ts. Dr. Juliana Aida Abu Bakar**	Tandatangan *(Signature)*
Nama Penyelia/Penyelia-penyelia: *(Name of Supervisor/Supervisors)*	**Assoc. Prof. Gs. Dr. Ruzinoor Che Mat**	Tandatangan *(Signature)*

Tarikh:
(Date) **14 April 2022**

Permission to Use

In presenting this thesis in fulfilment of the requirements for a postgraduate degree from Universiti Utara Malaysia, I agree that the Universiti Library may make it freely available for inspection. I further agree that permission for the copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor(s) or, in their absence, by the Dean of Awang Had Salleh Graduate School of Arts and Sciences. It is understood that any copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Requests for permission to copy or to make other use of materials in this thesis, in whole or in part, should be addressed to:

Dean of Awang Had Salleh Graduate School of Arts and Sciences

UUM College of Arts and Sciences

Universiti Utara Malaysia

06010 UUM Sintok
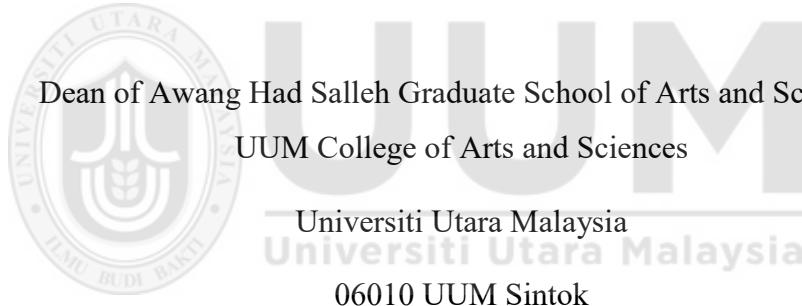
Abstrak

Terdapat pelbagai aplikasi mudah alih yang berkaitan dengan kandungan Islamik telah dibangunkan dan berada di pasaran. Memandangkan kandungan Islamik sangat sensitif, maka isu untuk memelihara kesuciannya menjadi perhatian utama. Namun begitu, perkara ini kurang diberi perhatian dan tiada garis panduan atau kerangka kerja sedia ada yang betul untuk pembangun menghasilkan aplikasi mudah alih Islamik yang berkualiti. Oleh itu, kajian ini mencadangkan satu kerangka kerja konsep baharu untuk pembangunan aplikasi mudah alih Islamik berdasarkan paradigma *Tauhid*. Berkaitan dengan paradigma Tauhid, kerangka kerja tersebut mengadaptasi daripada tiga sumber iaitu Model Fitrah Manusia Al-Ghazali, intipati tujuh ayat dalam Surah Al-Fatihah, dan empat etika kerja Islam: *Taqwa*, *Ihsan*, *Al-Birr*, dan *Masuliyyah*. Melalui tinjauan literatur dan temu bual pakar, satu set kriteria dan huraian daripada Surah Al-Fatihah dan garis panduan pembangunan telah dikenalpasti; diikuti dengan ulasan pakar untuk menambah baik kerangka kerja tersebut. Kemudian, tinjauan di kalangan pembangun Islamik telah dijalankan untuk mengesahkan kerangka kerja tersebut. *Structural Equation Modelling* (SEM) menggunakan kaedah *Partial Least Squares* (PLS) telah digunakan untuk analisis data melalui *SmartPLS*. Analisis Faktor Penerokaan (EFA) dan Analisis Faktor Pengesahan (CFA) telah dilaksanakan untuk mengkaji kepelbagaian dimensi kriteria serta menganalisis signifikasi kriteria terhadap niat pembangun untuk menggunakannya. Kajian ini telah berjaya mencadangkan satu kerangka kerja konsep baharu bagi Aplikasi Mudah Alih Islamik berasaskan Tauhid untuk Pembangun (T-iMAD). Kerangka kerja ini terdiri daripada aspek dalaman dan luaran. Aspek dalaman berpandukan Al-Fatihah: (i) Taqwa – niat, syukur, ikhlas, sabar, dan tawakal; dan (ii) Ihsan – merendah diri, dan suci. Sementara itu, aspek luaran pula terdiri daripada kriteria penglibatan, fungsi, dan maklumat yang diperoleh daripada aspek *Al-Birr* dan *Masuliyyah*. Keputusan daripada SEM-PLS menunjukkan model yang dinilai adalah sesuai dengan kerangka kerja, seterusnya mengesahkan kerangka kerja tersebut. Sumbangan utama kajian ini ialah kerangka kerja yang berfungsi sebagai garis panduan kepada pembangun aplikasi mudah alih dalam menghasilkan aplikasi mudah alih Islamik yang berkualiti. Kajian ini juga menyediakan analisis empirikal tentang kepentingan kriteria terhadap niat pembangun untuk digunakan.

Kata Kunci: Aplikasi mudah-alih, Pembangun, Al-Fatihah, Kerangka kerja, Garis panduan

Abstract

There are various mobile applications related to Islamic contents have been developed and available on the shelf. As Islamic content is extremely sensitive, therefore, issues to preserve its holiness are of major concern. Nevertheless, little attention is given on this matter and neither proper framework nor guidelines is available for developers to produce quality Islamic mobile apps. Therefore, this study proposes a new conceptual framework for Islamic mobile apps development based on *Tawhidic* paradigm. In relation to the *Tawhidic* paradigm, the framework adapted external and internal aspects from three sources which are Al-Ghazali Model of Human Nature, the essence of seven verses in Surah Al-Fatihah, and four Islamic working ethics: *Taqwa*, *Ihsan*, *Al-Birr*, and *Masuliyyah*. Through literature reviews and experts interview, a set of criteria and descriptions of Surah Al-Fatihah and the development guidelines were determined; followed by expert reviews to improve the framework. Then, a survey among Islamic developers was carried out to validate the framework. The Structural Equation Modelling (SEM) using Partial Least Squares (PLS) method was utilized for data analysis via SmartPLS. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were employed to examine the multidimensionality of the criteria and to analyze their significance towards the developer intention to use. This study has successfully proposed a new conceptual framework of Tawhidic based Islamic Mobile Application for Developers (T-iMAD). The framework consists of internal and external aspects. The internal aspects are driven by Al-Fatihah: (i) *Taqwa* – intention, gratitude, sincerity, patience, and trust; and (ii) *Ihsan* – humility, and pure. Meanwhile, external aspects include engagement, functionality, and information criteria which derived from *Al-Birr* and *Masuliyyah*. The results from SEM-PLS show that the evaluated model fits the framework, further validating the framework. The main contribution this study is a framework that serves as a guideline for mobile apps developers in producing quality Islamic mobile apps. This study also provides empirical analysis on the significance of criteria towards developer intention to use.

Keywords: Mobile apps, Developer, Al-Fatihah, Framework, Guidelines
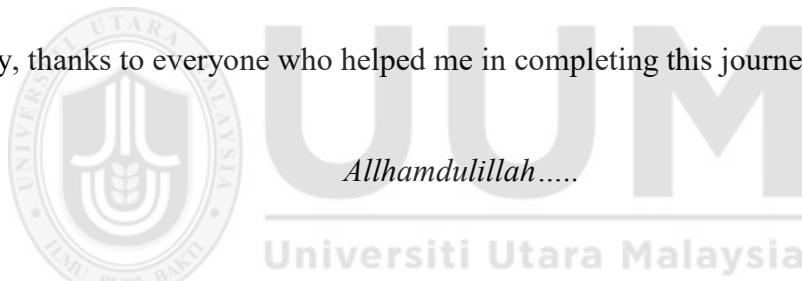
Acknowledgement

Bissmillahirahmanirrahim…

Thank you to Allah SWT, the One and Only God for His strength, love, and guidance in granting me to complete this PhD study. Without His compassion and mercy, I will not have the ability to finish this journey.

My deep gratitude goes to my supervisors, Assoc. Prof. Dr. Juliana Aida binti Abu Bakar and Assoc. Prof. Ruzinoor bin Che Mat, for the patience, supports, guidance, and advices given to me in all these years. My deep gratitude also goes to Dr. Nurakmal Ahmad Mustaffa and Assoc. Prof. Dr. Ustaz Khadafi Haji Rofie, who guided and helped me in completing the research phases in this journey.

I will be always in debt to my parent, Yusoff bin Desa and Latipah binti Kassim for their prayers, not only for this journey, but starting from day one of my born.

Last but not least, to my wife, Nurtihah binti Mohamed Noor. Thank you for the unconditional supports and the willingness to lend ears and hands when I need them the most.

 Finally, thanks to everyone who helped me in completing this journey.

Allhamdulillah…..

Sincerely,
Mohd Fitri Yusoff

v

Table of Contents

List of Tables

List of Figures

List of Abbreviations

GFI	Adjusted Goodness-of-Fit Index
AVE	Average Variant Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
Chisq	Chi-Square
CVI	Content Validity Index
CVR	Content Validity Ratio
Df	Degrees of Freedom
EFA	Exploratory Factor Analysis
E-mail	Electronic Mail
GFI	Goodness-of-Fit Index
GPS	Global-Positioning System
HCI	Human-Computer Interaction
HCMA	Halal Complaint Mobile Application
I-CVI	Items-Content Validity Index
iOS	iPhone Operating System
IR 4.0	Industrial Revolution 4.0
IT	Information Technology
KMO	Kaiser-Meyer-Olkin
MARS	Mobile Application Rating Scales
NFI	Normed Fit Index
PBUH	Peace Be Upon Him
PC	Principal Component
PhD	Philosophy Doctor
PR	Proportion Relevance
RMSEA	Root Mean Square Error of Approximation
S-CVI/Ave	Scale-Content Validity Index/Average
S-CVI/UA	Scale-Content Validity Index/Universal Agreement
S-CVR	Scale- Content Validity Ratio
SEM	Structural Equation Model
SPSS	Statistical Package for Social Science
STEM	Science, Technology, Engineering, and Mathematics
SWT	Subhana wa Taala
T-iMAD	*Tawhidic* Based Islamic Mobile Apps for Developers
UA	Universal Agreement
UIAM	Universiti Islam Antarabangsa Malaysia
UITM	Universiti Teknologi MARA
UKM	Universiti Kebangsaan Malaysia
UM	Universiti Malaya
UMK	Universiti Malaysia Kelantan
UMP	Universiti Malaysia Pahang
UMT	Universiti Malaysia Terengganu
UNIMAP	Universiti Malaysia Perlis
UNISZA	Universiti Islam Sultan Zainal Abidin
UPM	Universiti Putra Malaysia
UPNM	Universiti Pertahanan Nasional Malaysia
UPSI	Universiti Perguruan Sultan Idris
USIM	Universiti Sains Islam Malaysia

USM	Universiti Sains Malaysia
UTEM	Universiti Teknikal Malaysia Melaka
UTHM	Universiti Tun Hussein Onn Malaysia
UTM	Universiti Teknologi Malaysia
UUM	Universiti Utara Malaysia

List of Appendices

CHAPTER ONE

INTRODUCTION

1.1   Preamble

This chapter provides deliberations on the matters that underlie the foundations of the study, the statement of the research problem, research questions, research objectives, hypotheses, research scope and the significances of the study.

1.2   Background

Islam is the second-largest religion in the world and known as a religion at its core teaches there is no God except Allah and Muhammad is the final prophet. With more than 1.8 billion believers, Islam is believed to cover all of the life guides including in worship *(ibadah)*, business *(muamalat)*, marriage *(munakahat)*, social, learning and education, and many more.

In Islam, learning and education is crucial as a process to increase knowledge, maturity, and the development of good manners (Huda et al., 2017). Even though Islam encourages other knowledge learning such as science, technology, mathematics, engineering, health, and others; acquire knowledge related to the religion is also highly demanded in Islam. Since beginning, the learning processes have developed and expanded in *kuttab* (place of writing or *maktab*), mosque, and *madrasa* (Kadi, 2006) which covered various Islamic knowledge. All the knowledge, learning, or education processes will finally bring "*recognition and acknowledgement, progressively instilled into man, of the proper places of things in the order of creation, such that it leads to the recognition and acknowledgement of the proper place of God in the order of being and existence*", which is more accurate to define

1

REFERENCES

Ab Kadir, K., Ashaari, N. S., & Salim, J. (2018). Credibility dimensions for Islamic information in social media. *International Journal on Advanced Science, Engineering and Information Technology*, *8*(5), 1864–1872. https://doi.org/10.18517/ijaseit.8.5.6434

Abd Raof, S. F., Hashim, N. A., & Zainuddin, N. A. (2019). An evaluation of Quran memorization mobile app among middle-aged adults and early elderly. *Journal of Computing Research & Innovation*, *4*(1), 1–7.

Abdul Baqi, M. F. (1991). *Mu'jam mufahras li al-faz al-quran al-karim*. Dar al-Ma'arif.

Abdul Manaf, S. Z., Mohamad Zaid, A. S., Din, R., Hamdan, A., Mat Salleh, N. S., Kamsin, I. F., Abdul Karim, A., & Lubis, M. A. (2015). Aplikasi mudah alih panduan solat dan pengunaannya. *Ulum Islamiyyah Journal*, *16*, 43–61.

Abdul Sukor, A. H. (1995). Kewujudan Allah menurut pendekatan Al Quran. *Jurnal Usuluddin*, *1*(9), 23–31.

Abdullah, A. H., Adnan, A. A., Baru, R., & Che Zahari, A. A. I. (2016). Principles of Islamic management based on surah Al-Fatihah. *The Social Sciences*, *22*, 5467–5476. Retrieved from https://www.researchgate.net/profile/Abdul-Hakim-Abdullah.pdf

Abdullah, M. H., Abd Aziz, Z., Abd Rauf, R. H., Shamsudin, N., & Abd Latiff, R. (2019). TeBook: A mobile holy Quran memorization tool. *Proceedings of the 2nd International Conference on Computer Applications and Information Security, ICCAIS 2019*, 1-6. https://doi.org/10.1109/CAIS.2019.8769472

Afthanorhan, W. (2014). Hierarchical component using reflective-formative measurement model in Partial Least Square Structural Equation Modeling (PLS-

SEM). *International Journal of Mathematics and Statistics Invention (IJMSI)*, *2*(2), 33–49. http://www.ijmsi.org/Papers/Volume.2.Issue.2/Version-1/H0221055071.pdf

Agustian, A. G. (2005). *The Islamic guide to developing emotional spiritual quatient*. Jakarta: Arga Publishing.

Ahmad Mustaffa, N., Yusoff, M. F., Rofie, M. K., Abu Bakar, J. A., Che Mat, R., & Zainol Abidin, N. A. (2020). Modeling the structural of intention and attitude of muslim software developer to use Islamic work ethic in developing Islamic content mobile apps. *Proceeding of 6th International Conference on Interactive Digital Media*, 1–6. https://doi.org/10.1109/ICIDM51048.2020.9339606.

Ahmad, N. A., & Razak, F. H. A. (2013). On the emergence of techno-spiritual: The concept and current issues. *Computer and Mathematical Sciences Graduates National Colloquium 2013*, *2013*, 1–8.

Ahmad, N. A., Zainal, A., Kahar, S., Abu Hassan, M. A., & Abd Rauf, M. F. (2018). M-Ibadah: An Android Application to Assist Older Adult Users in Performing Islamic Religious Practices. *Industrial Revolution 4.0*, *2*(2), 9–18. Retrieved from http://sester.journals.unisel.edu.my/ojs/index.php/sester/article/view/35.

Ahmad, N. A, Noordin, N., & Sulaiman, M. Z. M. (2019). An analysis of user requirement for halal compliant mobile application (HCMA). *Contemporary Management and Science Issues in the Halal Industry*, 323–334. https://doi.org/10.1007/978-981-13-2677-6_27

Ahmad, Shukri, & Mat Zin, R. (2001). *Adab dan etika kerja dalam organisasi.* Kedah: Universiti Utara Malaysia.

Ahmad, Syarbaini, Rahman, K. N. A., Basri, M., & Masrup, N. A. M. (2018). Development of mobile fatwa application for the Selangor state of Mufti

department. *International Research Journal of Electronics and Computer Engineering*, *4*(1), 7–10. https://doi.org/10.24178/irjece.2018.4.1.07

Ajmain @ Jima'ain, M. T., Hehsan, A., & Mohamad, A. M. (2019). Learning and facilitation (PdPc) Islamic education in industrial revolution 4.0. *Journal of Research in Psychology*, *1*(3), 13–17. https://doi.org/10.31580/jrp.v1i3.975

Al-Aidaroos, A. S. A. (2017). *Conceptual model for usable multi-modal mobile assistance during Umrah* (Doctoral thesis). College of Arts and Sciences, Universiti Utara Malaysia.

Al-Aidaroos, A. S., Mutalib, A. A., Zulkifli, A. N., & Abuhassira, M. M. O. (2013). Users ' perceptions and usability of mobile dua and zikr for Hajj (MDZ4H). *Proceedings of The First International Conference on Applied Sciences Gaza-Palestine*, 24–26.

Al-Ghazali, A. H. M. (1990). *Ihya 'ulumiddin*. Dar al-Fikr.

Al-Gumaei, G. S., Alzouebi, K., & Abdelaziz, H. A. (2019). The Islamic Studies Teachers' Perception of Integrating ICT into the teaching and learning in the UAE public schools. *International Journal of Technology Diffusion*, *10*(2), 69–82. https://doi.org/10.4018/ijtd.2019040104

Al-Habsyi, S. O. (1994). Islam sebagai perangsang terhadap prestasi kerja. *Ilmu dan kecemerlangan dari perspektif Islam.* Kuala Lumpur: Institut Kemajuan Islam Malaysia.

Al-Najjar, G. (2012). *Mobile information systems: An empirical anlaysis of the determinants of mobile commerce acceptance in Jordan* (Doctoral thesis). College of Arts and Sciences, Universiti Utara Malaysia.

Al-Qahtani, A. A. Y. (2019). The use of mobile learning by Islamic subject students during their educational preparation program. *Iraqi Academic Scientific*

Journals, *43*, 544–559. Retrieved from https://www.iasj.net/iasj?func=fulltext&aId=162924

Al-Qodsi, A. S. A., Bidin, S. N. B. S., al-Shafi', M. M. O. i, & Teh, K. S. M. (2018). Need analysis of the mobile application development related to Al-Aqsa mosque and Islamic Jerusalem (Baitul Maqdis) as a m-learning medium. *International Journal of Academic Research in Business and Social Sciences*, *8*(7), 1011–1017. https://doi.org/10.6007/ijarbss/v8-i7/4527.

Al-Rahmi, W. M., Zeki, A. M., Alias, N., & Saged, A. A. (2017). Information technology usage in the Islamic perspective: A systematic literature review. *The Anthropologist*, *29*(1), 27–41. https://doi.org/10.1080/09720073.2017.1335758.

Al-Ratrout, S., Husain Tarawneh, O., HusniAltarawneh, M., & Yosef Altarawneh, M. (2019). Mobile application development methodologies adopted in Omani market: A comparative study. *International Journal of Software Engineering & Applications*, *10*(2), 13–22. https://doi.org/10.5121/ijsea.2019.10202.

Albaqami, N. N., Allehaibi, K. H., & Basori, A. H. (2018). Augmenting pilgrim experience and safety with geo-location way finding and mobile augmented reality. *International Journal of Computer Science and Network Security*, *18*(2), 23–32.

Ali, M. S., Ismail, M. S., Jusoh, W. H. W., Omar, S. H. S., Abdullah, M. S., & Razak, R. A. (2018). Anxiety therapy by practising and reciting Al-Fatiha Sura : An alternative remedy. *International Journal of Academic Research in Business and Social Sciences*, *8*(7). https://doi.org/10.6007/ijarbss/v8-i7/4519.

Aliff, N., Mohd Isa, I., & Surina Akmal, A. S. (2014). Potensi penggunaan aplikasi mudah alih (mobile apps) dalam bidang pendidikan Islam. *Online Journal of Islamic Education*, *2*(2), 26–35.

Aliyu, M., Mahmud, M., & Md Tap, A. O. (2012). Exploring Islamic website features that influence user satisfaction: A conceptual model. *Procedia - Social and Behavioral Sciences*, *65*, 656–661. https://doi.org/10.1016/j.sbspro.2012.11.180.

Aliyu, M., Mahmud, M., Tap, A. O. M., & Nassr, R. M. (2013). A preliminary investigation of Islamic website's design features that influence use: A proposed model. *The Electronic Journal of Information Systems in Developing Countries*, *58*(1), 25–32. https://doi.org/https://doi.org/10.1002/j.1681-4835.2013.tb00412.x.

Alqahtani, M., & Fayyoumi, A. (2015). Mobile application development for quran verse recognition and interpretations. *International Journal of Interactive Mobile Technologies*, *9*(1), 19–22. https://doi.org/10.3991/ijim.v9i1.4171.

Alquwayfili, N., Alromi, N., Alzakari, N., & Al-Khalifa, H. S. (2013). Towards classifying applications in mobile phone markets: The case of religious apps. *Proceedings of the 2013 International Conference on Current Trends in Information Technology, CTIT 2013*, 177–180. Dubai, United Arab Emirates. https://doi.org/10.1109/CTIT.2013.6749498.

An-Nadwi, M. S. (1994). *Al-Fatihah dan roh*. Kuala Lumpur, Darul Nu'man.

Ankem, K., Uppala, V., & Durst, A. (2017). Improving the design of medication safety apps: The influence of value-in-experience on perceived impact. *Issues in Information Systems*, *18*(2), 182–195.

Askomi, A. H., Yusop, F. D., & Kamarulzaman, Y. (2018). Combating halal misconceptions in Malaysia: Review of halal online information media. In N. Muhammad Hashim, N. Md Shariff, S. Mahamood, H. Fathullah Harun, M. Shahruddin, & A. Bhari (Eds.), *Proceedings of the 3rd International Halal Conference (INHAC 2016)* (pp. 363–372). Singapore.

https://doi.org/10.1007/978-981-10-7257-4_33

Atmowardoyo, H. (2018). Research methods in TEFL studies : Descriptive research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, *9*(1), 197–204. http://dx.doi.org/10.17507/jltr.0901.25.

Awang, Z. (2012). *Structural equation modeling using AMOS graphic*. Selangor: Penerbit Universiti Teknologi MARA.

Ayre, C., & Scally, A. J. (2014). Critical values for Lawshe's content validity ratio: Revisiting the original methods of calculation. *Measurement and Evaluation in Counseling and Development*, *47*(1), 79–86. https://doi.org/10.1177/0748175613513808.

Azan, Z., Hamid, Z., & Sarif, S. M. (2019). Factors sustaining social enterprises from the Tawhidic paradigm in Malaysia. *International Journal of Islamic Business*, *4*(2), 51–60.

Aziz, S. A., Ahya, F., Isa, M., & Asuhaimi, F. A. (2018). An analysis of mobile applications for Hadith 40 Imam Nawawi. *Proceedings of the International Conference on Information Technology & Society*, 34–37. Selangor.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*(1), 74–94. https://doi.org/10.1007/BF02723327.

Baran, E., Uygun, E., & Altan, T. (2017). Examining preservice teachers' criteria for evaluating educational mobile apps. *Journal of Educational Computing Research*, *54*(8), 1117–1141. https://doi.org/10.1177/0735633116649376.

Bardus, M., Beurden, S. B. Van, Smith, J. R., & Abraham, C. (2016). A review and content analysis of engagement , functionality , aesthetics , information quality , and change techniques in the most popular commercial apps for weight

187

management. *International Journal of Behavioral Nutrition and Physical Activity*, *13*(35), 1–9. https://doi.org/10.1186/s12966-016-0359-9.

Bayyumi, M. A. M. (1978). *The Islamic ethic of social justice and the spirit of modernization: An application of weber's thesis of the relationship between religious values and social change in modern Egypt.* Egypt: Temple University.

Becker, M., Kolbeck, A., Matt, C., Hess, T., Munchen, L., Becker, M., Kolbeck, A., & Hess, T. (2017). Understanding the continuous use of fitness trackers : A Thematic Analysi*s. Proceedings of the Pacific Asia Conference on Information System, 1*–13. Langkawi, Kedah.

Belanche, D., Flavi, M., & Pérez-Rueda, A. (2020). Mobile apps use and WOM in the food delivery sector : The role of planned behavior , perceived security and customer lifestyle compatibility. *Sustainability*, *12*(10), 4275 (1-21). https://doi.org/10.3390/su12104275.

Bellar, W. R. (2017). *iPRAY: Understanding the relationship between design and use in Catholic and Islamic mobile prayer applications* (Doctoral dissertation). Texas A & M University. https://doi.org/10.1017/CBO9781107415324.004.

Bensaid, B., & Machouche, S. B. T. (2013). Exploring the relationship between Islamic religious learning and community: Special reference to 'Abdul Rahman Ibn Khaldun and Mohammad Tahir Ben Achour. *Multicultural Education and Technology Journal*, *7*(4), 317–332. https://doi.org/10.1108/METJ-03-2013-0013.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Quantitative Methods in Psychology*, *107*(2), 238–246. https://doi.org/10.1037/0033-2909.107.2.238.

Bollen, K. A. (1989). A new incremental fit index for general structural equation

models. *Sociological Methods & Research*, *17*(3). https://doi.org/10.1177/0049124189017003004.

Boon-itt, S. (2019). Quality of health websites and their influence on perceived usefulness , trust and intention to use : an analysis from Thailand. *Journal of Innovation and Entrepreneurship*, *8*(4), 1–18. https://innovation-entrepreneurship.springeropen.com/articles/10.1186/s13731-018-0100-9.

Boon, O. K. (2013). *Total quality management and knowledge management in malaysian manufacturing and service firms : A structural equation modeling approach* (Doctoral thesis). Faculty of Economics and Admininstration, University of Malaya, Kuala Lumpur.

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper (Ed.), *APA Handbook of Research Methods in Psychology* (Vol. 2, pp. 57–71). American Psychological Association. https://doi.org/10.1037/13620-004.

Brooks, J., McCluskey, S., Turley, E., & King, N. (2015). The utility of template analysis in qualitative psychology research. *Qualitative Research in Psychology*, *12*(2), 202–222. https://doi.org/10.1080/14780887.2014.955224.

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sociological Methods & Research,* 21*(2)*, 136–162. https://doi.org/10.1177/0049124192021002005.

Buie, E., & Blythe, M. (2013). Spirituality: There's an app for that! (But not a lot of research). *Proceedings of the Conference on Human Factors in Computing Systems - 2013-April*, 2315–2324. https://doi.org/10.1145/2468356.2468754.

Byrne, B. M. (1994). *Strtuctural equation modeling with EQS and EQS/Windows.* New York: Taylor & Francis.

Campbell, H. A., Altenhofen, B., Bellar, W., & Cho, K. J. (2014). There's a religious

app for that! A framework for studying religious mobile applications. *Mobile Media and Communication*, *2*(2), 154–172. https://doi.org/10.1177/2050157914520846.

Chao, C. M. (2019). Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model. *Frontiers in Psychology*, *10*(JULY), 1–14. https://doi.org/10.3389/fpsyg.2019.01652.

Charter GlobalTM. (2019). *Understanding the 3 types of apps*. Retrieved from https://www.charterglobal.com/mobile-app-development/.

Che Omar, A. (2001). *Pengurusan di Malaysia dari perspektif Islam*. Kuala Lumpur: Dewan Bahasa dan Pustaka.

Chee, K. N., Yahaya, N., & Ibrahim, N. H. (2017). Effectiveness of mobile learning application in improving reading skills in Chinese language and towards post-attitudes. *International Journal of Mobile Learning and Organisation*, *11*(3), 210–225. https://doi.org/10.1504/IJMLO.2017.085347.

Child, D. (2006). *The essentials of factor analysis* (3rd ed). New York: Continuum International Publishing Group.

Ciolacu, M. I., Binder, L., Svasta, P., Tache, I., & Stoichescu, D. (2019). Education 4.0 - Jump to Innovation with IoT in Higher Education. *Proocedings of the 2019 IEEE 25th International Symposium for Design and Technology in Electronic Packaging*, *October*, 135–141. https://doi.org/10.1109/SIITME47687.2019.8990825.

Crompton, H., & Burke, D. (2018). The use of mobile learning in higher education: A systematic review. *Computers and Education*, *123*(September 2017), 53–64. https://doi.org/10.1016/j.compedu.2018.04.007.

Daniels, M. (2004). *Online Islamic Organizations and Measuring Web Effectiveness*

(Master's thesis). Naval Postgraduare School, Monterey, CA.

Dansereau, D. F., & Simpson, D. D. (2009). A Picture Is Worth a Thousand Words : The Case for Graphic Representations. *Professional Psychology: Research and Practice*, *40*(1), 104–110. https://doi.org/10.1037/a0011827.

Daud, M. (1994). *Pekerjaan dan pengurusan menurut Islam*. Kuala Lumpur: Utusan Publications & Distributors.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, *35*(8), 982–1003. http://www.jstor.org/stable/10.2307/2632151.

Davis, L. L. (1992). Instrument review: Getting the most from a panel of experts. *Applied Nursing Research*, *5*(4), 194–197. https://doi.org/10.1016/S0897-1897(05)80008-4.

De Vaus, D. A. (2002). *Surveys in social research* (5 ed). New York: Routledge.

Domingo, M. G., & Garganté, A. B. (2016). Exploring the use of educational technology in primary education: Teachers' perception of mobile technology learning impacts and applications' use in the classroom. *Computers in Human Behavior*, *56*, 21–28. https://doi.org/10.1016/j.chb.2015.11.023.

Dwi, F. R. (2016). Ios Application for Finding Halal Food, Mosque, Qibla Direction and Prayer Time. *Jurnal Informatika*, *13*(2), 63–69. https://doi.org/10.9744/informatika.13.2.63-70.

El-Khalil Ghembaza, M. I., Tayan, O., & Aloufi, K. S. (2018). Qurani Rafiqui: An Interactive Context-Aware Quranic Application for Smartphones. *1st International Conference on Computer Applications and Information Security, ICCAIS 2018*, *April 2019*, 1–6. https://doi.org/10.1109/CAIS.2018.8441971.

El-Muhammady, M. U. (1994). Etika pengurusan dalam Islam. *Proceeding of*

Seminar Pengurusan Abad 21 Peringkat Kebangsaan, 1-7. Retrieved from http://repo.uum.edu.my/2220/1/Ustaz_Uthman_El-Muhammady_1.pdf

Elazhary, H. (2017). Cloud-based Context-aware Mobile Applications and Framework for Hajj and Umrah Management. *International Journal of Computer Trends and Technology*, *47*(2), 106–115. https://doi.org/10.14445/22312803/ijctt-v47p115.

Eppard, J., Nasser, O., & Reddy, P. (2016). The next generation of technology: Mobile apps in the English language classroom. *International Journal of Emerging Technologies in Learning*, *11*(4), 21–27. https://doi.org/10.3991/ijet.v11i04.5293.

Fajarianto, O., & Sensuse, D. I. (2013). Prototype aplikasi mobile belajar Tajwid berbasis collaborative learning. *Jurnal Program Studi Magister Ilmu Komputer Universitas Budi Luuhur*, *2*(1), 28-35. Retrieved from https://www.neliti.com/publications/93383/prototype-aplikasi-mobile-belajar-tajwid-berbasis-collaborative-learning.

Fard, M. H., & Marvi, R. (2019). Viral marketing and purchase intentions of mobile applications users. *International Journal of Emerging Markets*, *15*(2), 287–301. https://doi.org/10.1108/IJOEM-06-2018-0291.

Fauzi, N. B., & Wan Khairuldin, W. M. K. F. (2017). The readiness of usage mobile learning (m-learning) towards the Qur'an learning in Islamic Studies course among the students in Unisza, Terengganu. *International Journal of Academic Research in Business and Social Sciences*, *7*(4), 32–43. https://doi.org/10.6007/ijarbss/v7-i4/2777.

Fitriansyah, N., & Tsuraya, R. V. (2020). Tauhidic paradigm sebagai basis dalam mewujudkan umat beragama yang toleran dan moderat. *Al-Mada; Jurnal Agama,*

Sosial Dan Budaya, *3*(1), 50–63.

Floyd, F. J., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment*, *7*(3), 286–299. https://doi.org/10.1037/1040-3590.7.3.286.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39. https://doi.org/10.2307/3151312.

George, D., & Mallery, P. (2003). *SPSS for Windows step-by-step: A simple guide and reference* (4th Edition). Retrieved from https://wps.ablongman.com/wps/media/objects/385/394732/george4answers.pdf.

Ghembaza, M. I. E.-K., Tayan, O., & Aloufi, K. S. (2018). Qurani Rafiqui: An interactive context-aware Quranic application for smartphones. *Proceeding of the 1st International Conference on Computer Applications and Information Security*, *April 2019*, 1–6. Riyadh, Saudi Arabia. https://doi.org/10.1109/CAIS.2018.8441971.

Giladi, A. (1988). Islamic educational theories in the middle ages: Some methodological notes with special reference to Al-Ghazali. *British Society for Middle Eastern Studies*, *14*(1), 3–10. https://doi.org/10.1080/13530198808705448.

Godwin-Jones, R. (2011). Emerging technologies: Mobile apps for language learning. *Language Learning and Technology*, *15*(2), 2–11.

Goh, T. T., Suki, N. M., & Fam, K. (2014). Exploring a consumption value model for Islamic mobile banking adoption. *Journal of Islamic Marketing*, *5*(3), 344–365. https://doi.org/10.1108/JIMA-08-2013-0056.

Gunawan, T., Kartiwi, M., & Omar, A. (2012). *Development of web application for*

193

Muslim traveller with emphasis on social networking. Retrieved from http://irep.iium.edu.my/27188/1/FinalPaperPageNumbered1569518831.pdf.

Hair, J. F., Andersen, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (5th ed). Upper Saddle River: Prentice-Hall.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed). Upper Saddle River: Prentice-Hall.

Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management and Data Systems*, *117*(3), 442–458. https://doi.org/10.1108/IMDS-04-2016-0130.

Hair, J. F., Celsi, M. W., Money, A. H., Samouel, P., & Page, M. J. (2015). *Essentials of business research methods* (1st ed). New York: Routledge.

Hair, J. F., Celsi, M. W., Ortinau, D., & Bush, R. (2010). *Essentials of marketing research* (Vol 2). New York: McGraw-Hill.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, *46*(1–2), 1–12. https://doi.org/10.1016/j.lrp.2013.01.001.

Hair, J. F., Money, A., Page, M., & Samouel, P. (2007). *Research methods for business*. New York: John Wiley & Sons.

Hakak, S., Kamsin, A., Tayan, O., Idna Idris, M. Y., Gani, A., & Zerdoumi, S. (2017). Preserving content integrity of digital holy Quran: Survey and open challenges. *IEEE Access*, *5*, 7305–7325. https://doi.org/10.1109/ACCESS.2017.2682109.

Hameed, A., Ahmed, H. A., & Bawany, N. Z. (2019). Survey, analysis and issues of islamic android apps. *Elkawnie: Journal of Islamic Science and Technology*, *5*(1), 1. https://doi.org/10.22373/ekw.v5i1.4541.

Hamisan@Khair, N. S., Yama, P., Masrop, N. A. M., Nasir, M. N., Awang, A. H., & Kechik, A. A. A. (2019). Mobile learning in the study of hadith : A study on students ' understanding on the arrangement of sanad with specific symbol. *International Journal of Modern Trends in Social Sciences*, *2*(6), 100–114. Retrieved from http://www.ijmtss.com/PDF/IJMTSS-2019-06-03-09.pdf.

Hamzah, N., Abd Halim, N. D., Hassan, M. H., & Ariffin, A. (2019). Android application for children to learn basic solat. *International Journal of Interactive Mobile Technologies*, *13*(7), 69–79. https://doi.org/10.3991/ijim.v13i07.10758.

Hassan, A., & Khairuldin, W. M. K. F. W. (2019). Smart Quran application: Authority of digital mushaf usage in Malaysia. *International Journal of Civil Engineering and Technology*, *10*(03), 3315–3322. Retrieved from https://d1wqtxts1xzle7.cloudfront.net/59408589/IJCIET_10_03_33220190527.

Heflin, H., Shewmaker, J., & Nguyen, J. (2017). Impact of mobile technology on student attitudes, engagement, and learning. *Computers and Education*, *107*, 91–99. https://doi.org/10.1016/j.compedu.2017.01.006.

Hongsanun, W., & Insuk, S. (2016). Quality criteria for health apps : A systematic review. *Walailak Journal Science & Technology*, *17*(8), 745–759.

Huda, M., Jasmi, K. A., Mustari, I., Basiron, B., & Sabani, N. (2017). Traditional wisdom on sustainable learning: An insightful view from Al-Zarnuji's Ta'lim al-Muta'allim. *SAGE Open*, *7*(1). https://doi.org/10.1177/2158244017697160.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic Management Journal*, *20*(2), 195–204. https://doi.org/10.1002/(sici)1097-0266(199902)20:2<195::aid-smj13>3.0.co;2-7.

Huraimel, A., Zemerly, M. J., & Al-hammadi, A. (2007). *Islamic Zakah Application*

for   Mobile   Devices.   Retrieved   from
https://www.zuj.edu.jo/conferences/ICIT07/PaperList/Papers/314Ahmed .pdf.

Hussain, S., Fangwei, Z., Siddiqi, A. F., Ali, Z., & Shabbir, M. S. (2018). Structural
Equation Model for Evaluating Factors Affecting Quality of Social Infrastructure
Projects. *Sustainability*, *10*, 1–25. https://doi.org/10.3390/su10051415.

Ibn Hajar, A. 'Ali bin H. al-A. (1991). *Fath al-bari bi-sharh sahih al-Bukhari*. Dar al-
Kutub al-'Ilmiyyah.

Ibn Kathir. (1994). *Tafsir al-Quran al-'Azim*. Maktabah al-Asriyah.

Ibrahim, I. (1994). Nilai pekerjaan dalam Islam. *Kecemerlangan pentadbiran, dasar
dan amalan dalam Islam.* Kuala Lumpur: INTAN.

Ibrahim, N. J., Razak, Z., Idris, M. Y. I., Mohd Yusoff, Z., & Mohamed Noor, N.
(2013). Mobile application of Al-Quran and Arabic language for interactive and
self learning assistant for support in j-QAF learning: A Survey. *Seminar
Kebangsaan   Penyelidikan   J-QAF*,   205–218.
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.981.3411&rep=rep1&t
ype=pdf.

Ibrahim, N. K., Noordin, M. F., Samsuri, S., Seman, M. S. A., & Ali, A. E. M. B.
(2017). Isnad al-hadith computational authentication: An analysis hierarchically.
*Proceedings - 6th International Conference on Information and Communication
Technology for the Muslim World, ICT4M 2016*, 344–349. Jakarta, Indonesia.
https://doi.org/10.1109/ICT4M.2016.68.

Ishak, S. F., Zaki, Z. M., Mohamad, K. A., Bahrin, M. A. M., Roni, N. H. A., &
Musa, M. A. (2017). MyQiraat: An interactive Qiraat mobile application.
*Proceedings - 2016 4th International Conference on User Science and
Engineering,   i-USEr   2016*,   *2*,   35–39.   Shah   Alam,   Selangor.

https://doi.org/10.1109/IUSER.2016.7857930.

Ishak, S. F., Zaki, Z. M., Mohamad, K. A., Sayuti, M. N. S. M., Bahrin, M. A. M., Roni, N. H. A., & Musa, M. A. (2018). Formative evaluation of an educational mobile application: An interactive myqiraat application. *International Journal of Engineering and Technology (UAE)*, *7*(4), 75–79. https://doi.org/10.14419/ijet.v7i4.15.21375.

Ismail, R., & Ibrahim, R. (2018). Teachers perception on digital game: A preliminary investigation towards educational game application for Islamic religious primary schools. *Proceedings of the International Conference on Information and Communication Technology for the Muslim World 2018, ICT4M 2018*, 36–41. Kuala Lumpur, Malaysia. https://doi.org/10.1109/ICT4M.2018.00016.

Jabatan Kemajuan Islam Malaysia (JAKIM). (2019). *Smart Quran*. Government of Malaysia. Retrieved from https://play.google.com/store/apps/details?id=com.madcatworld.qurantestbed&hl =en&gl=US

Johnston, A., & Pickrell, M. (2016). Designing for technicians working in the field: 8 usability heuristics for mobile application design. *Proceedings of the 28th Australian Computer-Human Interaction Conference, OzCHI 2016*, 494–498. Australia. https://doi.org/10.1145/3010915.3011003.

Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language.* USA: Scientific International Software Inc.

Julianto, V. (2019). The effect of Al-Fatihah reflective intuitive reading to decrease stress and increase immunity. *Advances in Social Science, Education and Humanities Research*, *339*, 89–94. https://doi.org/10.2991/aicosh-19.2019.18.

Julianto, V., & Subandi. (2015). Membaca Al-Fatihah reflektif intuitif untuk

menurukan depresi dan meningkatkan imunitas. *Jurnal Psikologi*, *42*(1), 34. https://doi.org/10.22146/jpsi.6941.

Kadi, W. (2006). Education in Islam — Myths and Truths. *Comparative Education Review*, *50*(3), 311–324.

Kay, R., & Lauricella, S. (2018). Exploring the use of mathematics apps for elementary school students. *Proceedings of the EdMedia: World Conference on Educational Media and Technology*, *November*, 206–211. Amsterdam. https://www.explorelearning.com.

Kearney, M., & Maher, D. (2013). Mobile learning in maths teacher education: Using ipads to support pre-service teachers' professional development. *Australian Educational Computing*, *27*(3), 76–84. https://search.informit.org/doi/abs/10.3316/aeipt.196906.

Khalid, A. (2004). *Khowatir Qur'aniyah: Kunci Memahami Tujuan Surat-Surat Al-Qur'an* (K. Abu Faqih (ed.); 1st ed.). Jakarta: Ad-Darul Arabiyyah Lil'uluum.

Khan, B. U. I., Rasool, B., Mattoo, M. M. U. I., Hurrah, A. A., Ajayi, B. A., & Olanrewaju, R. F. (2017). Linking software engineering paradigms to Islamic values. *Journal of Theoretical and Applied Information Technology*, *95*(7), 1405–1417. Retrieved from http://www.jatit.org/volumes/Vol95No7/10Vol95No7.pdf.

Khan, E. A., & Shambour, M. K. Y. (2017). An analytical study of mobile applications for Hajj and Umrah services. *Applied Computing and Informatics*, *14*(1), 37–47. https://doi.org/10.1016/j.aci.2017.05.004.

Khoshravesh, S., Karimi-Shahanjarini, A., Poorolajal, J., Barati, M., Bashirian, S., Hamidi, M., & Khalili, S. (2021). Development and psychometric testing of the signed donor card (SDC) scale in an Islamic society. *Health Communication*,

36(8), 1029–1038. https://doi.org/10.1080/10410236.2020.1731912.

Kim, S., & Baek, T. H. (2017). Examining the antecedents and consequences of mobile app engagement. *Telematics and Informatics*, *35*(1), 148–158. https://doi.org/10.1016/j.tele.2017.10.008.

Klímová, B., & Berger, A. (2018). Evaluation of the use of mobile application in learning English vocabulary and phrases – A case study. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *11284 LNCS*, 3–11. https://doi.org/10.1007/978-3-030-03580-8_1.

Koole, M. L. (2009). Mobile learning - A model for framing mobile learning. In Ally, M., *Mobile Learning: Transforming the Delivery of Education and Training*, (Vol *1* (issue 2), pp. 25–47). Canada: AU Press.

Kumar, B. A., & Mohite, P. (2018). Usability of mobile learning applications: a systematic literature review. *Journal of Computers in Education*, *5*(1), 1–17. https://doi.org/10.1007/s40692-017-0093-6.

Kumar, N. A., Krishna, K. T. H., & Manjula, R. (2016). Challenges and best practices in mobile application development. *Imperial Journal of Interdisciplinary Research*, *2*(12), 2454–1362.

Kumar, R. (2006). *Research methodology - A step-by-step guide for beginners* (2nd Edition). Malaysia: Pearson Education Australia.

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology*, *28*(4), 563–575. https://doi.org/10.1111/j.1744-6570.1975.tb01393.x

Lestaril, W. A., Sugiarso, B. A., & Sompie, S. R. U. (2019). Aplikasi mobile learning interaktif bacaan doa sehari-hari dan dzikir pagi & petang. *Jurnal Teknik Informatika*, *14*(1), 99–108. https://doi.org/10.35793/jti.14.1.2019.23982.

Lewis, M. H. (1996). *Surah Al-Fatihah*. Retrieved from http://www.marshallhlewis.net/papers/al-fatihah.pdf.

Li, K. C., Lee, L. Y. king, Wong, S. lai, Yau, I. S. yu, & Wong, B. T. Ming. (2019). Evaluation of mobile learning for the clinical practicum in nursing education: application of the FRAME model. *Journal of Computing in Higher Education*, *31*, 290–310. https://doi.org/10.1007/s12528-019-09213-2.

Liew, M. S., Zhang, J., See, J., & Ong, Y. L. (2019). Usability challenges for health and wellness mobile apps: Mixed-methods study among mHealth experts and consumers. *JMIR MHealth and UHealth*, *7*(1), 1–21. https://doi.org/10.2196/12160.

Lin, C. F., & Chang, Y. J. (2018). The application of IS success model on continuous intention and information sharing for caller ID apps usage. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *10923 LNCS*, 91–105. https://doi.org/10.1007/978-3-319-91716-0_8.

Lohmöller, J. B. (1989). Predictive vs . Structural modeling : PLS vs . ML. In *Latent variable path modeling with partial least square* (pp. 199–226). Physica, Heidelberg. https://doi.org/10.1007/978-3-642-52512-4_5.

Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research*, *35*(6), 382–386. https://doi.org/10.1097/00006199-198611000-00017.

MacMillan, S., Steele, J., Austin, S., Kirby, P., & Robin Spence. (2001). Development and verification of a generic framework for conceptual design. *Design Studies*, *22*(2), 169–191. https://doi.org/10.1016/S0142-694X(00)00025-9.

Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Teaching*

and Learning in Higher Education, *8*(3), 335:1-335:14.

Mahzan, S., Fairuz, S., Sadikan, N., Ab, M., Shah, M., & Sembilan, C. N. (2019). Aplikasi didik hibur Tajwid al-Quran (Teroka Tajwid): Kajian awal persepsi pengguna (edutainment application of al-Quran Tajweed (Teroka Tajwid) : A purview study on the users ' perception). *Jurnal Inovasi Malaysia*, 1–16.

Malone, T. W. (1981a). Toward a theory of intrinsically motivating instruction. *Cognitive Science*, *4*, 333–369. https://doi.org/10.1016/S0364-0213(81)80017-1.

Malone, T. W. (1981b). Heuristics for designing enjoyable user interfaces' lessons from computer games. *CHI '82 Proceedings of the 1982 Conference on Human Factors in Computing Systems*, 63–68. https://doi.org/10.1145/800049.801756.

Malone, T. W., & Lepper, M. R. (1987). Making learning fun: A taxonomy of intrinsic motivations for learning. In R. E. Snow & M. J. Farr (Eds.), *Aptitude, Learning and Instruction Volume 3: Conative and Affective Process Analyses* (pp. 223–253). Hillsdale: Routledge.

Maropoulos, P. G., & Ceglarek, D. (2010). Design verification and validation in product lifecycle. *CIRP Annals - Manufacturing Technology*, *59*(2), 740–759. https://doi.org/10.1016/j.cirp.2010.05.005.

Mat Sharif, E. A. (2019). E-Talaqqi : An analysis of technology acceptance model 3 (TAM3) on the understanding of digital Quran usage and implications among senior citizens in Malaysia. *Journal of Islamic, Social, Economics and Development (JISED)*, *4*(16), 66–81.

Mclean, G. (2018). Computers in human behavior examining the determinants and outcomes of mobile app engagement - A longitudinal perspective. *Computers in Human Behavior*, *84*, 392–403. https://doi.org/10.1016/j.chb.2018.03.015.

Mhd Sarif, S. (2017). Society 5.0: Qalb with Tawhidic paradigm. *Journal of*

Education and Social Sciences, *8*(1), 208–217.

Missen, M. M. S., Javed, A., Asmat, H., Nosheen, M., Coustaty, M., Salamat, N., & Prasath, V. B. S. (2019). Systematic review and usability evaluation of writing mobile apps for children. *New Review of Hypermedia and Multimedia*, *25*(3), 137–160. https://doi.org/10.1080/13614568.2019.1677787.

Mohamed Noor, N. (2012). *AL-ADAB : Islamic Sex Education Courseware Using Cognitive Theories* (Master's thesis). Faculty of Information Technology, Universiti Utara Malaysia, Sintok.

Mohamed Noor, N. (2021). *Gamification and augmented reality design model for enjoyment in Tajweed learning* (Doctoral thesis). Universiti Teknologi MARA, Shah Alam, Selangor.

Mohd. Fathi, N. A., Hashim, M., Ibrahim, N., & Syed Hassan, S. N. (2019). *Applying mobile application development life cycle in the development of fasting tracker android application*. *53*(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004.

Morgan, G. A., Gliner, J. A., & Robert, J. (2005). *Understanding and evaluating research in applied and clinical settings.* London: Lawrence Erlbaum Associates Inc.

Moumane, K., Idri, A., & Abran, A. (2016). Usability evaluation of mobile applications using ISO 9241 and ISO 25062 standards. *SpringerPlus*, *5*(1). https://doi.org/10.1186/s40064-016-2171-z.

Muccini, H., Di Francesco, A., & Esposito, P. (2012). Software testing of mobile applications: Challenges and future research directions. *Proceedings of the 7th International Workshop on Automation of Software Test*, 29–35. Switzerland. https://doi.org/10.1109/IWAST.2012.6228987.

Muda, T. Z. T., Hamzah, H. I., & Saad, M. N. (2017). Development of daily prayer for children. *International Conference on Human & Multimedia Creativity 2017*, *5*(1), 26–30. Retrieved from https://ihumen.utm.my/ijidm/wp-content/uploads/sites/6/CR63-IJIDMEditbyrCm1.pdf.

Muhammad, A. Y. (2017). Al-Qur'an as a remedy for human physical and spiritual illnesses, and social vices: Past, present and future. *Journal of Islamic Studies and Culture*, *5*(2), 28–32. https://doi.org/10.15640/jisc.v5n2a3.

Muñoz-Arteaga, J., Ortiz Esparza, M. Á., Guzmán Mendoza, J. E., & Canul Reich, J. (2017). An architectural model to design graphical user interfaces of mobile applications for learning problems in basic Mathematics. In J. Guerrero-Garcia, J. González-Calleros, J. Muñoz-Arteaga, & C. Collazos (Eds.), *HCI for Children with Disabilities* (pp. 31–51). Springer, Cham. https://doi.org/10.1007/978-3-319-55666-6_2.

Musa, M. G. Bin, Yusop, M. H. N., Sopee, M. M. B. M., & Ali, N. A. M. (2018). I-Tasmik mobile platform – Enabling tahfiz student to memorize Al-Quran independently. *Proceedings of the International Conference on Information and Communication Technology for the Muslim World 2018, ICT4M 2018*, 24–29. Kuala Lumpur, Malaysia. https://doi.org/10.1109/ICT4M.2018.00014.

Naquib Al-Attas, S. M. (1977). The Concept of Education in Islam. *First World Conference on Muslim Education (Keynote Speech)*, 1–19. Retrieved from http://mef-ca.org/files/attas-text-final.pdf.

Nawawi, M. N. (1991). *Islam, disiplin dan etos kerja.* Jakarta: Gateway Publishing.

Nayebi, M., Adams, B., & Ruhe, G. (2016). *Release practices for mobile apps - What do users and developers think?* 552–562. https://doi.org/10.1109/saner.2016.116.

Nguyen, T. Q., Dang, T. N., Hoang, C. L., Truong, D. T. N., & Nguyen, V. A. (2019).

Educational mobile apps for negotiation: Evaluation and design criteria for curriculum designers and developers. *Proceedings of the 2019 IEEE Canadian Conference of Electrical and Computer Engineering, CCECE 2019*, 1-4. Canada. https://doi.org/10.1109/CCECE.2019.8861740.

Noordin, M. F. (2013). Application of privacy, security and ethics in islamic concerned ICT. *Middle East Journal of Scientific Research*, *14*(11), 1548–1554. https://doi.org/10.5829/idosi.mejsr.2013.14.11.2035.

Norris, M., & Lecavalier, L. (2010). Evaluating the use of exploratory factor analysis in developmental disability psychological research. *Journal of Autism and Developmental Disorders*, *40*(1), 8–20. https://doi.org/10.1007/s10803-009-0816-2.

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

Omar, M. N. (1996). Miskawayh on social ethic: Love and friendship. *Jurnal IKIM*, *4*(1), 37–48.

Peterson, R. A., & Kim, Y. (2013). On the relationship between coefficient alpha and composite reliability. *Journal of Applied Psychology*, *98*(1), 194–198. https://doi.org/10.1037/a0030767.

Polit, D. F., & Beck, C. T. (2006). The content validity index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing and Health*, *29*(5), 489–497. https://doi.org/10.1002/nur.20147.

Pradhana, F. R., Musthafa, A., Harmini, T., & Dedy Setiawan, M. (2019). Elayah: Mobile based media for Al-Qur'an memorization using takrar method. *Journal of Physics: Conference Series*, *1381*(1). https://doi.org/10.1088/1742-6596/1381/1/012025.

Punch, K. F. (2000). *Developing effective research proposals*. London: SAGE

Publications.

Rahim, N. N., Khidzir, N. Z., Yusof, A. M., & Saidin, A. Z. (2018). An Expert Evaluation on Islamic animated infographic prototype as an alternative in da ' wah dissemination. *Maltesas Journal in Islamic Studies for Science and Technology*, *1*(1), 1–9. Retrieved from https://maltesas.my/msys/explore/docs/2018/31_1530523031.pdf.

Rahman, Z. A., & Shah, I. M. (2015). Measuring Islamic spiritual intelligence. *Procedia Economics and Finance*, *31*(15), 134–139. https://doi.org/10.1016/s2212-5671(15)01140-5.

Ramadhan, S., Purwandari, B., Sandhyaduhita, P. I., Kumaralalita, L., & Ansori, M. S. Z. (2018). Factor analysis of intention to use Garuda Indonesia mobile application. *Proceeding of the International Conference on Advanced Computer Science and Information Systems (ICACSIS)*, 157–162, Yogyakarta. https://doi.org/10.1109/ICACSIS.2018.8618257.

Reinard, J. C. (2006). *Communication research statistics*. USA: SAGE Publications.

Rodrigues, I. B., Adachi, J. D., Beattie, K. A., & MacDermid, J. C. (2017). Development and validation of a new tool to measure the facilitators, barriers and preferences to exercise in people with osteoporosis. *BMC Musculoskeletal Disorders*, *18*(540). https://doi.org/https://doi.org/10.1186/s12891-017-1914-5.

Rofie, M. K. (2015). *Prinsip etika kerja Islam menurut Al-Quran dan Al-Sunnah: Satu penilaian terhadap karya penulis etika kerja Islam di Malaysia* (Doctoral thesis). College of Arts and Sciences, Universiti Utara Malaysia, Sintok.

Rosell-Aguilar, F. (2017). State of the app: A taxonomy and framework for evaluating language learning mobile applications. *CALICO Journal*, *34*(2), 243–258. https://doi.org/10.1558/cj.27623.

Rosmani, A. F., Ahmad, H., Mazlan, U. H., Zainuddin, N. A., & Ibrahim, A. (2014). I-Wirid: Construction of digital wirid via mobile platform. *I4CT 2014 - 1st International Conference on Computer, Communications, and Control Technology, Proceedings*, *I4ct*, 348–352. https://doi.org/10.1109/I4CT.2014.6914203.

Rosmani, A. F., Ismail, A., & Kamarudin, N. A. (2016). Article 7 Construction of Mobile Fidyah Calculator. *Journal of Computing Research and Innovation*, *1*(1), 44–52.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54–67. https://doi.org/10.1006/ceps.1999.1020.

Saad Missen, M. M., Javed, A., Asmat, H., Nosheen, M., Coustaty, M., Salamat, N., & Surya Prasath, V. B. (2019). Systematic review and usability evaluation of writing mobile apps for children. *New Review of Hypermedia and Multimedia*. https://doi.org/https://doi.org/10.1080/13614568.2019.1677787

Sahrir, M. S., Yahaya, M. F., Ismail, T., Zubir, M. A., & Ahmad, W. R. W. (2018). Development and evaluation of i-Mutawwif: A mobile language traveller guide in Arabic for Mutawwif (Umrah Tour Guide). *International Journal of Interactive Mobile Technologies*, *12*(2), 54–68. https://doi.org/10.3991/ijim.v12i2.7708.

Saidin, A. Z. (2012). *Islamic values for ICT development with reference to Malaysian context* (Doctoral thesis). Universiti Malaya, Kuala Lumpur, Malaysia.

Saidin, Aeni Zuhana, Mohamed, K. S., Adzmi, Z. H., & Azhar, N. W. (2015). Q-Ibadah mobile application: A usability pilot testing. *Jurnal Teknologi (Sciences and Engineering)*, *1*, 49–54. https://doi.org/10.11113/jt.v77.6812.

Sanjeev, M. A., & Surya, A. V. (2016). Two factor theory of motivation and satisfaction: An empirical verification. *Annals of Data Science*, *3*(2), 155–173. https://doi.org/10.1007/s40745-016-0077-9.

Sarif, S. M. (2011). *Conceptual design model of computerized personal-decision aid (ComPDA)* (Doctoral thesis). Universiti Utara Malaysia, Sintok.

Sarif, S. M. (2018). The effects of Qalb with Tawhidic paradigm in strategic planning of higher education institutions. *Tinta Artikulasi Membina Ummah*, *4*(1), 34–46.

Sarmani, Y., & Ninggal, M. T. (2008). *Teori kaunseling Al-Ghazali*. Selangor: PTS Islamika.

Sayyid Qutb. (2012). *Tafsir Fizilalil Quran (Juzuk pertama)*. Retrieved from https://tafsirzilal.wordpress.com/.

Schumacker, R. E., & Lomax, R. G. (1996). *A beginner's guide to structural equation modeling*. London: Lawrence Erlbaum Associates Inc.

Sekaran, U., & Bougie, R. (2016). *Research methods for business - A skill building approach* (7th ed.). USA: John Wiley & Sons, Inc. https://doi.org/10.1017/CBO9781107415324.004.

Shafie, F., Wan Yusoff, W. Z., & Al-Edrus, S. M. (2014). Pengurusan harta tanah di Malaysia menurut perspektif Islam: Isu dan cabaran bagi pewarisan harta dalam konteks pembangunan modal insan. *Proceedings of the Seminar Antarabangsa Kelestarian Insan 2014 (INSAN 2014)*. Batu Pahat, Johor.

Shafriri, Y., & Levy, D. (2018). Uniqueness profile of mobile applications for learning. In P. Zaphiris & A. Ioannou (Eds.), *Lecture Notes in Computer Science* (Vol. 10925, pp. 376–390). Springer, Cham.

Shahroom, A. A., & Hussin, N. (2018). Industrial revolution 4.0 and education. *International Journal of Academic Research in Business and Social Sciences*,

8(9), 314–319. https://doi.org/10.6007/ijarbss/v8-i9/4593.

Shaout, A., & Oman, M. (2017). Towards developing an intelligent Hajj guide system. *Proceedings of the 8th International Conference on Information Technology*, 280–285. Amman, Jordan. https://doi.org/10.1109/ICITECH.2017.8080013.

Shroff, R. H., & Keyes, C. J. (2020). A proposed framework to understand the intrinsic motivation factors on university student's behavioural intention to use a mobile application for learning. *Journal of Information Technology Education: Research*, *16*, 1–15. Retrieved from https://jite.org/documents/Vol16/JITEv16ResearchP143-168Shroff3108.pdf.

Stoyanov, S. R., Hides, L., Kavanagh, D. J., Zelenko, O., Tjondronegoro, D., & Mani, M. (2015). Mobile app rating scale: A new tool for assessing the quality of health mobile apps. *JMIR MHealth and UHealth*, *3*(1), 1–9. https://doi.org/10.2196/mhealth.3422.

Sugiyanto, S., & Purwanto, L. A. (2017). Aplikasi tata cara wudhu dan tayamum berbasis mobile di sekolah dasar Universitas Muhammadiyah Purwokerto (Mobile-based application on procedures of wudhu and tayamum in elementary school of Universitas Muhammadiyah Purwokerto). *Juita*, *V*(1), 23.

Suib, F. H., & Said, M. F. (2018). A review of Islamic work ethics and spirituality concepts in service industry. *Journal of Nusantara Studies*, *2*(2), 32–40.

Suliaman, I., Zulkipli, S. N., Muhamad Ramlan, A. N., Anas, N., Ahmat, A. C., Aziz, N. H., & Zaki Yaakob, M. A. (2018). The convenience of takhrij al-hadith through ICT apps: An exploratory analysis on selected hadith website and mobile apps. *International Journal of Civil Engineering and Technology*, *9*(11), 2649–2660.

Tahir, R., & Arif, F. (2014). A measurement model based on usability metrics for mobile learning user interface for children. *The International Journal of E-Learning and Educational Technologies in the Digital Media*, *1*(1), 16–31. https://doi.org/10.17781/p001503.

Talib, S., Mahmud, M., Sarah, E., Rahman, A., Suraya, A., & Abubakar, A. (2015). Mobile Quran app security vulnerabilities. *Proceedings of the 5th International Conference on Computing and Informatics (ICOCI 2015)*, *198*, 447–455. Instanbul, Turkey.

Tam, C., Santos, D., & Oliveira, T. (2020). Exploring the influential factors of continuance intention to use mobile apps : Extending the expectation confirmation model. *Information System Frontiers*, *22*, 243–257. https://link.springer.com/article/10.1007/s10796-018-9864-5.

Tayan, O. (2014). *The role of information security in digital Quran multimedia content*. Retrieved from https://qprint.qurancomplex.gov.sa/wp-content/uploads/project_files/141/965b09209fba0968.pdf.

Tayan, O., Ibrahim, M., & Al-Oufi, K. (2017). Design and architecture of a location and time-based mobile-learning system: A case-study for interactive islamic content. *International Journal of Advanced Computer Science and Applications*, *8*(3), 302–308. https://doi.org/10.14569/ijacsa.2017.080342.

ThinkMobiles. (2017). *What are the popular types and categories of apps*. Retrieved from https://thinkmobiles.com/blog/popular-types-of-apps/.

Truong, Y., & McColl, R. (2011). Intrinsic motivations, self-esteem, and luxury goods consumption. *Journal of Retailing and Consumer Services*, *18*(6), 555–561. https://doi.org/10.1016/j.jretconser.2011.08.004.

Tseng, S., & Fogg, B. J. (1999). Credibility and computing technology.

Communications of the ACM, *42*(5), 39–44. https://dl.acm.org/doi/fullHtml/10.1145/301353.301402?casa_token.

Wahid, H., Ahmad, S., Nor, M. A. M., & Rashid, M. A. (2017). Prestasi kecekapan pengurusan kewangan dan agihan zakat: perbandingan antara majlis agama islam negeri di Malaysia. *Jurnal Ekonomi Malaysia*, *51*(2), 39–54.

Wan Khairuldin, W. M. K. F., Embong, A. H., Anas, W. N. I. W. N., Mohd, H., & Ismail, D. (2018). The application of technology in the dissemination of fatwas: A study on religious institutions in Malaysia. *International Journal of Civil Engineering and Technology*, *9*(7), 1590–1596.

Wang, J. Y., Wu, H. K., & Hsu, Y. S. (2017). Using mobile applications for learning: Effects of simulation design, visual-motor integration, and spatial ability on high school students' conceptual understanding. *Computers in Human Behavior*, *66*, 103–113. https://doi.org/10.1016/j.chb.2016.09.032.

Wang, S. (2018). *Factors impacting the uptake of mobile banking in china : integrating UTAUT , TTF and ECM models* (Doctoral thesis). University of Manchester.

Widodo, S. A., & Triana, J. (2020). Al-Fatihah Reflection Therapy (art) sebagai upaya peningkatan resiliensi penyandang disabilitas. *Journal Psycho Idea*, *1076*(1), 26–32. https://doi.org/10.30595/psychoidea.v18i1.6135.

Wu, L. (2015). Factors of continually using branded mobile apps : the central role of app engagement. *International Journal of Internet Marketing and Advertising*, *9*(4), 303–320. https://doi.org/10.1504/IJIMA.2015.072884.

Wu, S., Ren, M., Pitafi, A. H., & Islam, T. (2020). Self-image congruence , functional congruence , and mobile app intention to use. *Mobile Information System*, 1–17. Retrieved from https://www.hindawi.com/journals/misy/2020/5125238/.

Wyche, S. P., Caine, K. E., Davison, B. K., Patel, S. N., Arteaga, M., & Grinter, R. E. (2009). Sacred imagery in techno-spiritual design. *Proceedings of the Conference on Human Factors in Computing Systems*, 55–58. https://doi.org/10.1145/1518701.1518710.

Xanthopoulos, S., & Xinogalos, S. (2013). A comparative analysis of cross-platform development approaches for mobile applications. *ACM International Conference Proceeding Series*, 213–220. https://doi.org/10.1145/2490257.2490292.

Yahaya, H., Sardi, J., Radzi, M., Abdelhamid, I. Y., & Islam, F. P. (2019). Development of a mobile application in Arabic language learning in Malaysia: An Overview. *International Journal of Academic Research in Business and Social Sciences*, *9*(7), 1366–1376. https://doi.org/10.6007/ijarbss/v9-i7/6403.

Yakan, F. (1987). *Bagaimana kita menyeru kepada Islam* (T. I. Q. dan A. M. Baqir (ed.)). Malaysia: Dewan Pustaka Fajar.

Yavuz, F., & Celik, O. (2018). Teaching vocabulary through mobile applications: A methodological classification of vocabulary applications on Google Play. *New Trends and Issues Proceedings on Humanities and Social Sciences*, *5*(1), 107–114. https://doi.org/10.18844/prosoc.v5i1.3391.

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, *9*(2), 79–94. https://doi.org/10.20982/tqmp.09.2.p079.

Young and Well Cooperative Research Centre. (2015). *Mobile Application Rating Scale (MARS) app classification*. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4376132/.

Yusliza, M. Y., & Ramayah, T. (2011). Explaining the intention to use electronic HRM among HR professionals : Results from a pilot study. *Australian Journal of*

Basic and Applied Sciences, *5*(8), 489–497. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1054.3956&rep=rep1 &type=pdf.

Yusoff, M. F. (2012). *Virtual Hajj (V-Hajj): A persuasive Hajj learning procedures courseware* (Master's thesis). Universiti Utara Malaysia, Sintok.

Yusoff, M. N., Dehghantanha, A., & Mahmod, R. (2017). Forensic investigation of social media and instant messaging services in Firefox OS: Facebook, Twitter, Google+, Telegram, OpenWapp, and Line as case studies. In K.-K. R. Choo & A. Dehghantanha (Eds.), *Contemporary Digital Forensic Investigations of Cloud and Mobile Applications* (pp. 41–62). Elsevier Inc. https://doi.org/10.1016/B978-0-12-805303-4.00004-6.

Yusoff, M. S. B. (2019). ABC of content validation and content validity index calculation. *Education in Medicine Journal*, *11*(2), 49–54. https://doi.org/10.21315/eimj2019.11.2.6.

Zaibon, S. B. Z. (2011). *Mobile Game-Based Learning (mGBL) engineering model* (Doctoral thesis). College of Arts and Sciences, Universiti Utara Malaysia, Kedah, Malaysia.

Zainal Abidin, D. (2005). *Tip-tip cemerlang daripada Al-Quran*. Kuala Lumpur: PTS Publication.

Zakaria, G. A. N., & Nawi, A. (2020). Design and development of a PBL mobile application in Islamic education: A conceptual framework. *International Journal of Information and Education Technology*, *10*(1), 26–30. https://doi.org/10.18178/ijiet.2020.10.1.1334

Zalikha, S. (2016). Pendistribusian zakat produktif dalam perspektif Islam. *Jurnal Ilmiah Islam Futura*, *15*(2), 304. https://doi.org/10.22373/jiif.v15i2.547

Zamanzadeh, V., Ghahramain, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A.-R. (2015). Design and implementation content validity study: Development of an instrument for measuring patient-centered communication. *Journal of Caring Sciences*, *4*(2), 165–178. https://doi.org/https://doi.org/10.15171/jcs.2015.017

Zoski, K., & Jurs, S. (1996). An objective counterpart to the visual scree test for factor analysis: The standard error scree. *Educational and Psychological Measurement*, *56*(3), 443–451.

Zulkifli, A. N., Batiha, Q. A., & Qasim, M. M. (2018). Design and development of M-Faraid: An Islamic inheritance mobile app. *Journal of Advanced Research in Dynamical and Control Systems*, *10*(10 Special Issue), 1569–1575.

Zydnet, J. M., & Warner, Z. (2016). Mobile apps for science learning: Review of research. *Computers & Education*, *94*, 1–17. https://doi.org/10.1016/j.compedu.2015.11.001.

213

Appendix A

Questionnaire for Experts Review

SOAL SELIDIK PAKAR:
Garis Panduan Penilaian Aplikasi Untuk Kandungan Pembelajaran Islamik

Assalamualaikum W.B.T. dan Salam Sejahtera, terima kasih kerana bersetuju untuk menyertai kajian ini. Borang soal selidik ini dibina berdasarkan beberapa rujukan yang telah dipilih seperti Tafsir Al-Fatihah Syed Qutb untuk Faktor Dalaman dan beberapa rujukan untuk Faktor Luaran.

Borang soal selidik ini dikemukakan bertujuan untuk mendapatkan kesepakatan pembangun aplikasi dan responden dalam bidang multimedia dan teknologi terhadap garis panduan penilaian aplikasi untuk kandungan pembelajaran Islamik.

Data responden tidak akan diambilkira sekiranya responden berhenti atau hanya menjawab sebahagian daripada soal selidik. Responden juga dilarang mengambil mana-mana bahagian daripada soal selidik ini tanpa kebenaran penyelidik.

Adalah diharapkan Professor/Dr./Tuan/Puan/Encik/Cik dapat menjawab borang soal selidik ini dengan jujur dan lengkap. Segala maklumat yang diberikan adalah sulit dan akan hanya digunakan untuk tujuan kajian ini.

Saya amat berbesar hati dan berterima kasih kerana sudi meluangkan masa (5 - 10 minit) untuk menjawab borang kaji selidik ini. Kerjasama yang diberikan adalah amat dihargai.

Penyelidik   : Mohd Fitri Yusoff
Penyelia   : Prof. Madya Dr. Juliana Aida Abu Bakar & Prof. Madya Dr. Ruzinoor

      Che Mat
      Universiti Utara Malaysia (UUM)

Tel: 019-417 4666; Emel: mfitri@uum.edu.my | mfitri4696@gmail.com

***Sila ke lembaran sebelah untuk menjawab borang kaji selidik ini.

BAHAGIAN A: MAKLUMAT UMUM

NAMA PAKAR	
UMUR	
BIDANG KEPAKARAN	
NAMA ORGANISASI	
PENGALAMAN (TAHUN) cth: 5 Tahun	

SILA TANDAKAN [√] PADA BAHAGIAN YANG BERKENAAN

Kriteria	Nom.	Item	Perwakilan (Representative)				Kepentingan (Important)				Kejelasan (Clarity)				Cadangan
Al-Fatihah		*Ayat 1 (Niat)*	1	2	3	4	1	2	3	4	1	2	3	4	
	1.	Saya berniat untuk membangunkan aplikasi yang dituntut oleh Allah SWT.													
	2.	Saya bermohon untuk beramal membina aplikasi dengan rahmat kasih sayang dan belas kasihan-NYA													
		Ayat 2 (Syukur)	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1.	Saya merasa bersyukur kepada Allah kerana dapat mengembangkan ilmu dalam pelbagai bidang dengan aplikasi yang dibangunkan.													
	2.	Saya merasa bersyukur kepada allah kerana rahmat kasih sayang dan kasihan belas-Nya, saya dapat membangunkan aplikasi untuk pembelajaran.													

Ayat 3 (Ikhlas)		1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
1.	Dengan membangunkan aplikasi, saya dapat merasakan kasih sayang dan kasihan belas Allah SWT yang luas ke atas hambaNya.													
2.	Saya dapat memberitahu dan mengajari orang lain dengan aplikasi yang dibangunkan ini.													
Ayat 4 (Sabar)		1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
1.	Saya yakin bahawa aplikasi yang dibangunkan untuk mencari ilmu merupakan amal baik yang dinilai Allah SWT kelak.													
2.	Ilmu yang dipelajari daripada aplikasi yang dibangunkan dapat menjadi panduan dan pedoman yang benar untuk tindakan dalam kehidupan di dunia.													
Ayat 5 (Rendah Diri)		1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
1.	Saya berusaha mencari Ilmu bersungguh-sungguh untuk menambahkan amalan kebaikan dalam membina aplikasi													
2.	Saya berusaha untuk memahami ilmu yang ingin disampaikan dengan bersungguh-sungguh dalam membangunkan aplikasi.													
3.	Saya percaya bahawa kefahaman tentang ilmu dalam membangunkan aplikasi adalah pertolongan daripada Allah SWT.													
Ayat 6 (Tawakkal)		1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*

		Item	1	2	3	4	1	2	3	4	1	2	3	4	Cadangan
	1.	Saya berharap aplikasi yang dibangunkan menjadi penyebab kebaikan di dunia dan di akhirat.													
	2.	Saya berharap aplikasi yg dibangunkan membolehkan saya mendapatkan balasan kebaikan daripada Allah SWT.													
	3.	Saya berharap agar aplikasi Islamik yang dibangunkan bermanfaat kepada diri sndiri dan orang lain.													
Ayat 7 (Bersih)			1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1.	Saya akan mencuba untuk meningkatkan kefahaman dalam membangunkn aplikasi yang berlandaskn islam.													
	2.	Saya akan mencuba untuk beramal dalam membangunkan aplikasi yang berlandaskan islam													
	3.	Saya akan mencuba untuk menyampaikan ilmu pembangunan aplikasi yang berlandaskan islam kepada orang lain													

Keterlibatan	*Hiburan*		1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1.	Aplikasi yang dibangunkan perlu menerapkan unsur hiburan dalam konteks Islam yang menenangkan hati.													
	2.	Aplikasi menggunakan strategi yang unik untuk meningkatkan penglibatan pengguna berorientasikan Islam.													
	Menarik Minat		1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1.	Aplikasi yang dibina perlu mempunyai strategi yang unik bagi menarik minat pengguna dalam konteks Islam.													
	Penyesuaian		1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1.	Aplikasi membenarkan penyesuaian yang relevan mengikut keutamaan pengguna terhadap ciri Islamik aplikasi (Contoh: bunyi, isi kandungan, notifikasi, dan sebagainya)													
	Interaktiviti		1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1.	Keupayaan interaktiviti diperlukan bagi membolehkan pengguna mencapai maklumat, mengawal dan berinteraksi dengan sistem yang membawa kebaikan kepada pengguna.													
	2.	Papan kekunci atau pen stilus peranti mudah alih membolehkan pemilihan dan menyusun atur objek atau perkataan dengan baik bagi mendapatkan kandungan Islamik.													

	Kumpulan Sasaran	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1. Reka bentuk, visual dan bahasa yang digunakan harus bersesuaian bagi memudahkan kegunaan kumpulan sasaran.													
Kefungsian	*Prestasi*	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1. Aplikasi memberi respon yang tepat dan cepat kepada pengguna.													
	2. Semua fungsi (bebutang, menu dan sebagainya) dalam aplikasi berfungsi dengan baik serta cepat dan tepat apabila dicapai pengguna.													
	Kemudahan Penggunaan	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1. Penggunaan aplikasi ini mudah dan dapat dicapai serta mengikuti pembaharuan semasa.													
	2. Menu, ikon, label dan arahan yang berorientasikan Islamik dalam aplikasi sangat jelas dan mudah difahami.													
	Navigasi	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1. Navigasi antara skrin ke skrin yang lain dalam aplikasi yang dibangunkan haruslah berpatutan dan mudah dikawal oleh pengguna.													
	Rekabentuk Pergerakan	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1. Pergerakan maklumat grafik dan proses interaktiviti yang dibangunkan membolehkan pengguna merentasi													

		1	2	3	4	1	2	3	4	1	2	3	4	Cadangan
		semua komponen skrin untuk tujuan pembelajaran dan kebaikan.												
	2.	Interaksi seperti *tap, swipe, pinch, scroll* dalam aplikasi perlu berfungsi dengan baik dan konsisten bagi memberi kemudahan pengguna dalam memperolehi ilmu agama yang diterapkan dalam aplikasi.												
Estetika	*Reka letak*	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1.	Setiap reka letak kandungan islamik mengikut kepentingan masing-masing.												
	2.	Reka letak kandungan memberi kesan positif terhadap persembahan applikasi.												
	3.	Reka letak aplikasi bercirikan konsep Islamik dari segi maklumat dan penyampaian.												
	Grafik	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1.	Kualiti dan resolusi grafik untuk bebutang pilihan, ikon, menu dan isi kandungan yang digunakan dalam aplikasi haruslah tinggi dalam memudahkan pengguna mendapatkan kandungan Islamik yang jelas.												
	2.	Grafik yang diinovasikan harus mempunyai kualiti dan resolusi yang baik supaya isi kandungan yang terdapat dalam aplikasi dapat disampaikan dengan baik.												

	Tarikan Visual	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1. Reka bentuk visual haruslah bersesuaian dengan tema dan mesej yang hendak disampaikan bagi membawa kebaikan untuk pengguna aplikasi bagi memahami mesej yang cepat dan jelas.													
	2. Dalam rekaan visual, objek atau item utama mestilah ditampilkan agar dapat dilihat dan difahami maksudnya oleh pengguna.													
Maklumat	*Ketepatan Penerangan Aplikasi*	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1. Kandungan aplikasi perlu dinilai oleh individu ataupun pihak ilmuah islam.													
	2. *Is*Kandungan pembelajaran Islamik perlu diluluskan atau disahkan oleh kementerian atau organisasi yang berwibawa.													
	3. Kandungan dalam aplikasi adalah berkaitan tentang maklumat, pengetahuan, atau kemahiran praktikal yang diperlukan dalam agama Islam.													
	Matlamat	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
	1. Penerangan aplikasi harus menyatakan matlamat spesifik yang ingin dicapai dalam menyampaikan kandungan Islam yang sahih.													
	2. Aplikasi harus menepati aspek yang penting dalam Islam untuk mencapai matlamat yang dinyatakan.													

Kualiti Maklumat	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
1. Maklumat di dalam aplikasi adalah tepat dan jelas mengenai konteks Islamik.													
2. Maklumat yang disampaikan adalah relevan, bersesuaian dengan konteks Islamik dan mempunyai kualiti topik yang jelas yang ingin dismpaikan.													
Kuantiti Maklumat	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
1. Jumlah maklumat dalam membangunkan aplikasi yang berlandaskan islam mestilah komprehensif													
2. Kuantiti maklumat mesti merangkumi pelbagai elemen dan mempunyai capaian untuk maklumat serta sumber tambahan yang menepati segala syarat-syarat Islamik.													
Maklumat Visual	1	2	3	4	1	2	3	4	1	2	3	4	*Cadangan*
1. Penggunaan elemen visual seperti imej, carta, graf dan video untuk menerangkan maklumat atau konsep berorientasikan Islamik harus jelas agar dapat memudahkan pengguna.													
2. Aplikasi yang dibangunkan perlu mempunyai penerangan yang jelas tentang kegunaan aplikasi agar ianya dapat memudahkan pengguna.													

Kredibiliti (Sumber)	1	2	3	4	1	2	3	4	1	2	3	4	Cadangan
1. Aplikasi yang dibangunkan harus mempunyai tajuk yang jelas yang membawa kebenaran isi kandungan Islamik.													
2. Deksripsi yang terperinci perlu disediakan bagi memudahkan pengguna mempelajari kandungan Islamik.													
3. Ulasan untuk aplikasi untuk pembelajaran kandungan Islamik adalah positif dan baik.													
Kredibiliti (Kewibawaan)	1	2	3	4	1	2	3	4	1	2	3	4	Cadangan
1. Aplikasi yang dibina mempunyai kandungan Islamik yang telah dinilai oleh pihak atau individu yang layak. (Cth: Imam, ustaz, ustazah atau mana-mana organisasi yang ditakrif)													
2. Kandungan pembelajaran Islamik dalam aplikasi diluluskan atau disahkan oleh kementerian atau organisasi yang berwibawa.													
Kredibiliti (Keaslian)	1	2	3	4	1	2	3	4	1	2	3	4	Cadangan
1. Kandungan dalam aplikasi adalah berkaitan tentang maklumat, pengetahuan, atau kemahiran praktikal yang diperlukan dalam agama Islam.													
2. Penerangan kandungan dalam teks adalah boleh dipercayai dan tiada keraguan untuk setiap kandungan													

			1	2	3	4	1	2	3	4	1	2	3	4	Cadangan
		Islamik yang disampaikan.													
	3.	Penggunaan mana-mana ayat Al-Quran dan hadis mestilah benar dan tepat.													
Niat Penggunaan	1.	Saya berhasrat untuk menggunakan semua dimensi (keterlibatan, kefungsian, estetika dan maklumat) jika saya membangunkan aplikasi pada masa akan datang.													
	2.	Saya menjangkakan bahawa saya akan menggunakan semua dimensi (keterlibatan, kefungsian, estetika dan maklumat) dalam membangunkan aplikasi ini pada masa akan datang.													
	3.	Saya merancang untuk menggunakan semua dimensi (keterlibatan, kefungsian, estetika dan maklumat) pada masa akan datang semasa membangunkan aplikasi ini.													

~Soal selidik tamat. Terima kasih~

Appendix B

Questionnaire for Final Data Collection

SOAL SELIDIK:
Garis Panduan Penilaian Aplikasi Untuk Kandungan Pembelajaran Islamik

Assalamualaikum W.B.T. dan Salam Sejahtera, terima kasih kerana bersetuju untuk menyertai kajian ini. Borang soal selidik ini dibina berdasarkan beberapa rujukan yang telah dipilih seperti Tafsir Al-Fatihah Syed Qutb untuk Faktor Dalaman dan beberapa rujukan untuk Faktor Luaran.

Borang soal selidik ini dikemukakan bertujuan untuk mendapatkan maklumbalas responden terhadap garis panduan penilaian aplikasi untuk kandungan pembelajaran Islamik.

Data responden tidak akan diambilkira sekiranya responden berhenti atau hanya menjawab sebahagian daripada soal selidik. Responden juga dilarang mengambil mana-mana bahagian daripada soal selidik ini tanpa kebenaran penyelidik.

Adalah diharapkan borang soal selidik ini dijawab dengan jujur dan lengkap. Segala maklumat yang diberikan adalah sulit dan hanya akan digunakan untuk tujuan kajian ini.

Saya amat berbesar hati dan berterima kasih kerana sudi meluangkan masa (5 - 10 minit) untuk menjawab borang kaji selidik ini. Kerjasama yang diberikan adalah amat dihargai.

Penyelidik   : Mohd Fitri Yusoff
Penyelia   : Prof. Madya Dr. Juliana Aida Abu Bakar & Prof. Madya Dr. Ruzinoor

              Che Mat
              Universiti Utara Malaysia (UUM)

Tel: 019-417 4666; Emel: mfitri@uum.edu.my | mfitri4696@gmail.com

***Sila ke lembaran sebelah untuk menjawab borang kaji selidik ini.

BAHAGIAN A: MAKLUMAT UMUM

NAMA	
UMUR	
BIDANG PENGAJIAN	
NAMA UNIVERSITI	

SILA TANDAKAN [√] PADA BAHAGIAN YANG BERKENAAN

1	2	3	4	5	6	7
Sangat Tidak Penting		Tidak Penting	Tidak Pasti	Penting		Sangat Penting

KRITERIA	NOM.	ITEM	SKALA						
Al-Fatihah	*Ayat 1 (Niat)*		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Saya berniat untuk membangunkan aplikasi yang dituntut oleh Allah SWT.							
	2.	Saya bermohon untuk beramal membina aplikasi dengan rahmat kasih sayang dan belas kasihan-NYA							
	Ayat 2 (Syukur)		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Saya merasa bersyukur kepada Allah kerana dapat mengembangkan ilmu dalam pelbagai bidang dengan aplikasi yang dibangunkan.							

		1	2	3	4	5	6	7
2.	Saya merasa bersyukur kepada allah kerana rahmat kasih saying dan kasihan belas-Nya, saya dapat membangunkan aplikasi untuk pembelajaran.							
Ayat 3 (Ikhlas)		**1**	**2**	**3**	**4**	**5**	**6**	**7**
1.	Dengan membangunkan aplikasi, saya dapat merasakan kasih sayang dan kasihan belas Allah SWT yang luas ke atas hambaNya.							
2.	Saya dapat memberitahu dan mengajari orang lain dengan aplikasi yang dibangunkan ini.							
Ayat 4 (Sabar)		**1**	**2**	**3**	**4**	**5**	**6**	**7**
1.	Saya yakin bahawa aplikasi yang dibangunkan untuk mencari ilmu merupakan amal baik yang dinilai Allah SWT kelak.							
2.	Ilmu yang dipelajari daripada aplikasi yang dibangunkan dapat menjadi panduan dan pedoman yang benar untuk tindakan dalam kehidupan di dunia.							
Ayat 5 (Rendah Diri)		**1**	**2**	**3**	**4**	**5**	**6**	**7**
1.	Saya berusaha mencari Ilmu bersungguh-sungguh untuk menambahkan amalan kebaikan dalam membina aplikasi.							
2.	Saya berusaha untuk memahami ilmu yang							

			1	2	3	4	5	6	7
		ingin disampaikan dengan bersungguh-sungguh dalam membangunkan aplikasi.							
	3.	Saya percaya bahawa kefahaman tentang ilmu dalam membangunkan aplikasi adalah pertolongan daripada Allah SWT.							
Ayat 6 (Tawakkal)			**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Saya berharap aplikasi yang dibangunkan menjadi penyebab kebaikan di dunia dan di akhirat.							
	2.	Saya berharap aplikasi yg dibangunkan membolehkan saya mendapatkan balasan kebaikan daripada Allah SWT.							
	3.	Saya berharap agar aplikasi islamik yang dibangunkan bermanfaat kepada diri sndiri dan orang lain.							
Ayat 7 (Bersih)			**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Saya akan memcuba untuk meningkatkan kefahaman dalam membangunkn aplikasi yang berlandaskn islam.							
	2.	Saya akan mencuba untuk beramal dalam membangunkan aplikasi yang berlandaskan islam.							
	3.	Saya akan mencuba untuk menyampaikan ilmu							

			1	2	3	4	5	6	7
		pembangunan aplikasi yang berlandaskan islam kepada orang lain							
Keterlibatan	*Hiburan*		1	2	3	4	5	6	7
	1.	Aplikasi yang dibangunkan perlu menerapkan unsur hiburan dalam konteks Islam yang menenangkan hati.							
	2.	Aplikasi menggunakan strategi yang unik untuk meningkatkan penglibatan pengguna berorientasikan Islam.							
	Menarik Minat		1	2	3	4	5	6	7
	1.	Aplikasi yang dibina perlu mempunyai strategi yang unik bagi menarik minat pengguna dalam konteks Islam.							
	Penyesuaian		1	2	3	4	5	6	7
	1.	Aplikasi membenarkan penyesuaian yang relevan mengikut keutamaan pengguna terhadap ciri Islamik aplikasi (Contoh: bunyi, isi kandungan, notifikasi, dan sebagainya).							
	Interaktiviti		1	2	3	4	5	6	7
	1.	Keupayaan interaktiviti diperlukan bagi membolehkan pengguna mencapai maklumat, mengawal dan berinteraksi dengan sistem yang membawa kebaikan kepada pengguna.							

		1	2	3	4	5	6	7
	2. Papan kekunci atau pen stilus peranti mudah alih membolehkan pemilihan dan menyusun atur objek atau perkataan dengan baik bagi mendapatkan kandungan Islamik.							
	Kumpulan Sasaran	1	2	3	4	5	6	7
	1. Reka bentuk, visual dan bahasa yang digunakan harus bersesuaian bagi memudahkan kegunaan kumpulan sasaran.							
Kefungsian	*Prestasi*	1	2	3	4	5	6	7
	1. Aplikasi memberi respon yang tepat dan cepat kepada pengguna.							
	2. Semua fungsi (bebutang, menu dan sebagainya) dalam aplikasi berfungsi dengan baik serta cepat dan tepat apabila dicapai pengguna.							
	Kemudahan Penggunaan	1	2	3	4	5	6	7
	1. Penggunaan aplikasi ini mudah dan dapat dicapai serta mengikuti pembaharuan semasa.							
	2. Menu, ikon, label dan arahan yang berorientasikan Islamik dalam aplikasi sangat jelas dan mudah difahami.							
	Navigasi	1	2	3	4	5	6	7

			1	2	3	4	5	6	7
	1.	Navigasi antara skrin ke skrin yang lain dalam aplikasi yang dibangunkan haruslah berpatutan dan mudah dikawal oleh pengguna.							
	Rekabentuk Pergerakan		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Pergerakan maklumat grafik dan proses interaktiviti yang dibangunkan membolehkan pengguna merentasi semua komponen skrin untuk tujuan pembelajaran dan kebaikan.							
	2.	Interaksi seperti *tap,swipe, pinch, scroll* dalam aplikasi perlu berfungsi dengan baik dan konsisten bagi memberi kemudahan pengguna dalam memperolehi ilmu agama yang diterapkan dalam aplikasi.							
Estetika	*Reka letak*		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Setiap reka letak kandungan islamik mengikut kepentingan masing-masing.							
	2.	Reka letak kandungan memberi kesan positif terhadap persembahan applikasi.							
	3.	Reka letak aplikasi bercirikan konsep Islamik dari segi maklumat dan penyampaian.							
	Grafik		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Kualiti dan resolusi grafik untuk bebutang pilihan,							

		1	2	3	4	5	6	7
	ikon, menu dan isi kandungan yang digunakan dalam aplikasi haruslah tinggi dalam memudahkan pengguna mendapatkan kandungan Islamik yang jelas.							
	2. Grafik yang diinovasikan harus mempunyai kualiti dan resolusi yang baik supaya isi kandungan yang terdapat dalam aplikasi dapat disampaikan dengan baik.							
	Tarikan Visual	**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1. Reka bentuk visual haruslah bersesuaian dengan tema dan mesej yang hendak disampaikan bagi membawa kebaikan untuk pengguna aplikasi bagi memahami mesej yang cepat dan jelas.							
	2. Dalam rekaan visual, objek atau item utama mestilah ditampilkan agar dapat dilihat dan difahami maksudnya oleh pengguna.							
Maklumat	*Ketepatan Penerangan Aplikasi*	**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1. Kandungan aplikasi perlu dinilai oleh individu ataupun pihak ilmuah islam.							
	2. Kandungan pembelajaran Islamik perlu diluluskan atau disahkan oleh kementerian atau organisasi							

		yang berwibawa.							
	3.	Kandungan dalam aplikasi adalah berkaitan tentang maklumat, pengetahuan, atau kemahiran praktikal yang diperlukan dalam agama Islam.							
	Matlamat		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Penerangan aplikasi harus menyatakan matlamat spesifik yang ingin dicapai dalam menyampaikan kandungan Islam yang sahih.							
	2.	Aplikasi harus menepati aspek yang penting dalam Islam untuk mencapai matlamat yang dinyatakan.							
	Kualiti Maklumat		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Maklumat di dalam aplikasi adalah tepat dan jelas mengenai konteks Islamik.							
	2.	Maklumat yang disampaikan adalah relevan, bersesuaian dengan konteks Islamik dan mempunyai kualiti topik yang jelas yang ingin dismpaikan.							
	Kuantiti Maklumat		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Jumlah maklumat dalam membangunkan aplikasi yang berlandaskan islam mestilah komprehensif.							

			1	2	3	4	5	6	7
	2.	Kuantiti maklumat mesti merangkumi pelbagai elemen dan mempunyai capaian untuk maklumat serta sumber tambahan yang menepati segala syarat-syarat Islamik.							
	Maklumat Visual		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Penggunaan elemen visual seperti imej, carta, graf dan video untuk menerangkan maklumat atau konsep berorientasikan Islamik harus jelas agar dapat memudahkan pengguna.							
	2.	Aplikasi yang dibangunkan perlu mempunyai penerangan yang jelas tentang kegunaan aplikasi agar ianya dapat memudahkan pengguna.							
	Kredibiliti (Sumber)		**1**	**2**	**3**	**4**	**5**	**6**	**7**
	1.	Aplikasi yang dibangunkan harus mempunyai tajuk yang jelas yang membawa kebenaran isi kandungan Islamik.							
	2.	Deksripsi yang terperinci perlu disediakan bagi memudahkan pengguna mempelajari kandungan Islamik.							
	3.	Ulasan untuk aplikasi untuk pembelajaran kandungan Islamik adalah positif dan baik.							
	Kredibiliti (Kewibawaan)		**1**	**2**	**3**	**4**	**5**	**6**	**7**

			1	2	3	4	5	6	7
	1.	Aplikasi yang dibina mempunyai kandungan Islamik yang telah dinilai oleh pihak atau individu yang layak. (Cth: Imam, ustaz, ustazah atau mana-mana organisasi yang ditakrif)							
	2.	Kandungan pembelajaran Islamik dalam aplikasi diluluskan atau disahkan oleh kementerian atau organisasi yang berwibawa.							
	Kredibiliti (Keaslian)		1	2	3	4	5	6	7
	1.	Kandungan dalam aplikasi adalah berkaitan tentang maklumat, pengetahuan, atau kemahiran praktikal yang diperlukan dalam agama Islam.							
	2.	Penerangan kandungan dalam teks adalah boleh dipercayai dan tiada keraguan untuk setiap kandungan Islamik yang disampaikan.							
	3.	Penggunaan mana-mana ayat Al-Quran dan hadis mestilah benar dan tepat.							
Niat Penggunaan	1.	Saya berhasrat untuk menggunakan semua dimensi (keterlibatan, kefungsian, estetika dan maklumat) jika saya membangunkan aplikasi pada masa akan datang.							
	2.	Saya menjangkakan bahawa saya akan menggunakan semua dimensi (keterlibatan, kefungsian, estetika dan maklumat) dalam membangunkan aplikasi ini pada masa akan							

		datang.						
	3.	Saya merancang untuk menggunakan semua dimensi (keterlibatan, kefungsian, estetika dan maklumat) pada masa akan datang semasa membangunkan aplikasi ini.						

~Soal selidik tamat. Terima kasih~