

2018 International Conference on Information and Communication Technology for the Muslim World (ICT4M 2018)

**Kuala Lumpur, Malaysia
23-25 July 2018**



**IEEE Catalog Number: CFP1854K-POD
ISBN: 978-1-5386-7526-7**

**Copyright © 2018 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP1854K-POD
ISBN (Print-On-Demand):	978-1-5386-7526-7
ISBN (Online):	978-1-5386-7525-0

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

2018 International Conference on Information and Communication Technology for the Muslim World **ICT4M 2018**

Table of Contents

Message from the ICT4M Steering Committee Chair .xii.....	
Message from the ICT4M General Chair .xiii.....	
ICT4M 2018 Conference Committee .xiv.....	
ICT4M 2018 Organizing Committee .xv.....	
ICT4M 2018 Reviewers .xvi.....	

Track 1: Islamic Applications for Development of the Ummah

Ontology Matching: A Case of English Translation of Al-Quran Tafsir .1.....	
<i>Farooqui N.K. (International Islamic University Malaysia and Prince Sattam Bin Abdulaziz University), Mohammed Fauzan Noordin (International Islamic University Malaysia), and Roslina Othman (International Islamic University Malaysia)</i>	
Knowing What You Know about Your Faith .7.....	
<i>Abdulrahman Gharamah (International Islamic University Malaysia), Mohamad Fauzan Noordin (International Islamic University Malaysia), Najma Imtiaz Ali (International Islamic University Malaysia), Imtiaz Ali Brohi (International Islamic University Malaysia), and Zeki Akram M. (International Islamic University Malaysia)</i>	
Halal Virtual Inspection Requirements for Food Premise Inspection Process: Towards the Virtualization of Malaysia Halal Certification System .12.....	
<i>Mohd Zabiedy Mohd Sulaiman (Universiti Teknologi MARA), Nurulhuda Noordin (Universiti Teknologi MARA), Nor Laila Md Noor (Universiti Teknologi MARA), Ahmad Iqbal Hakim Suhaimi (Universiti Teknologi MARA), and Wan Abdul Rahim Wan Mohd Isa (Universiti Teknologi MARA)</i>	
Cultivate Islamic Identity in Emoji Design .18.....	
<i>Zan Azma Nasruddin (Universiti Teknologi MARA), Muhammad Azmi Kamaruddin (Universiti Teknologi MARA), and Nor Aziah Daud (Universiti Teknologi MARA)</i>	

i-Tasmik Mobile Platform – Enabling Tahfiz Student to Memorize Al-Quran Independently .24.....	
<i>Muhammad Ghufuran Bin Musa (International Islamic University Malaysia), Mohd Hamzi Niyaz Bin Yusop (International Islamic University Malaysia), Muhammad Mustaqeem Bin Mohd Sopee (International Islamic University Malaysia), and Noor Azian Mohamad Ali (International Islamic University Malaysia)</i>	
GO BAR - A Conceptual Business Model for Enhancing the Well-Being of the Poor Community .30.....	
<i>Afnan Munir Bin Syed Jahir (International Islamic University Malaysia), Ahmad Hasrul Yusdi Bin Hassan (International Islamic University Malaysia), and AbdulRahman Ahmad Dahlan (International Islamic University Malaysia)</i>	
Teachers' Perception on Digital Game: A Preliminary Investigation towards Educational Game Application for Islamic Religious Primary Schools .36.....	
<i>Rozana Ismail (Universiti Teknologi Malaysia) and Roslina Ibrahim (Universiti Teknologi Malaysia)</i>	
Value, Religiosity and Behaviour in Social Media .42.....	
<i>Elistina Abu Bakar (Universiti Putra Malaysia), Nur Jannah Draman (Universiti Putra Malaysia), and Aznan Zuhid Saidin (International Islamic University Malaysia)</i>	
Exploring Ibn Khaldun's Thoughts on the Ethical Issues from Social Networking Sites .47.....	
<i>Mohamad Hafizuddin Mohamed Najid (International Islamic University Malaysia), Zahidah Zulkifli (International Islamic University Malaysia), Roslina Othman (International Islamic University Malaysia), and Rohaiza Rokis (International Islamic University Malaysia)</i>	
Guiding Social Media Use: Proposed Values and the Role of Maqasid al-Shari'ah .53.....	
<i>Zohora Azmin Shompa (International Islamic University Malaysia), Aznan Zuhid Saidin (International Islamic University Malaysia), Husnayati Hussin (International Islamic University Malaysia), Muhd. Rosydi Muhammad (International Islamic University Malaysia), and Elistina Abu Bakar (University Putra Malaysia)</i>	
Transliteration Engine for Union Catalogue of Malay Manuscripts in Malaysia: E-Jawi Version 3 .58.....	
<i>Sitti Munirah Abdul Razak (International Islamic University Malaysia), Muhamad Sadry Abu Seman (International Islamic University Malaysia), Wan Ali @ Wan Yusoff Wan Mamat (International Islamic University Malaysia), and Noor Hasrul Nizan Mohammad Noor (International Islamic University Malaysia)</i>	

Track 2: Innovation in Islamic Finance

Exploring the Intention to Invest in Cryptocurrency: The Case of Bitcoin .64.....	
<i>Haneffa Muchlis Gazali (Universiti Malaysia Sabah), Che Muhamad Hafiz Bin Che Ismail (International Islamic University Malaysia), and Tamrin Amboala (International Islamic University Malaysia)</i>	

Cryptocurrency vs. Fiat Currency: Architecture, Algorithm, Cashflow & Ledger Technology on Emerging Economy: The Influential Facts of Cryptocurrency and Fiat Currency .69.....	
<i>Mohammad Rabiul Islam (International Islamic University Malaysia),</i>	
<i>Rizal Mohd Nor (International Islamic University Malaysia), Imad</i>	
<i>Fakhri Al-Shaikhli (International Islamic University Malaysia), and</i>	
<i>Kabir Sardar Mohammad (International Islamic University Malaysia)</i>	
Towards a Reference Ontology in Islamic Finance and Banking .74.....	
<i>Keltoum Benlaharche (Ecole Nationale Supérieure d'Informatique ESI),</i>	
<i>Nabila Nouaouria (Université Badji Mokhtar), and Djamel Meslati</i>	
<i>(Université Badji Mokhtar)</i>	

Track 3: Commercialization and Entrepreneurship of Innovative Research

Translating the University Research: Venture Capitalist and Firms Involvement in the Commercialisation of Computing Artefacts .80.....	
<i>Tamrin Amboala (Universiti Malaysia Sabah), Mohd Zulkifli Muhammad</i>	
<i>(Universiti Malaysia Kelantan), and Joan Richardson (RMIT University)</i>	
Maqasid al-Shari'ah as Ethical Theory for Consultants .88.....	
<i>Nurul Amirah Rahim (International Islamic University Malaysia) and</i>	
<i>Jamaludin Ibrahim (International Islamic University Malaysia)</i>	
A Conceptual Digital Transformation Design for International Islamic University Malaysia to "University of the Future" .94.....	
<i>Nurul Auni Zahari (International Islamic University Malaysia), Malina</i>	
<i>Mustapa (International Islamic University Malaysia), Siti Shyahirah</i>	
<i>Qayyum Nasser (International Islamic University Malaysia), Abdul</i>	
<i>Rahman Ahmad Dahlan (International Islamic University Malaysia), and</i>	
<i>Jamaludin Ibrahim (International Islamic University Malaysia)</i>	
HERO Digital Platform for Domestic Help Services: A Conceptual and Enhanced Business Model .100.....	
<i>Nurul Nadia Che Saufi (International Islamic University Malaysia),</i>	
<i>'Afifah Mohd Murtadza (International Islamic University Malaysia), and</i>	
<i>Abdul Rahman Ahmad Dahlan (International Islamic University Malaysia)</i>	
A Business Case for Digital Transformation of a Malaysian-Based University .106.....	
<i>Muhammad Wildan Zulfikar (International Islamic University Malaysia),</i>	
<i>Amirul Idham bin Hashim (International Islamic University Malaysia),</i>	
<i>Haliq Ubaid bin Ahmad Umri (International Islamic University</i>	
<i>Malaysia), and Abdul Rahman Ahmad Dahlan (International Islamic</i>	
<i>University Malaysia)</i>	
New Business Model for Malaysian ar Rahnū Using Blockchain as Sustainable Business .110.....	
<i>Muhammad Zamir Bin Hussen (International Islamic University Malaysia)</i>	
<i>and Jamaludin Bin Ibrahim (International Islamic University Malaysia)</i>	
Modeling the Need for Decision Support Systems for Dyslexic Children Using BMC .114.....	
<i>Nur Izzah Rahmiah Ab Llah (International Islamic University Malaysia),</i>	
<i>Khadijah Hanis Ahmad Firdaus (International Islamic University</i>	
<i>Malaysia), and Jamaludin Ibrahim (International Islamic University</i>	
<i>Malaysia)</i>	

Track 4: Information System Implementation, Governance and Challenges

- Preliminary Study on Factors Affecting E-Commerce Success: A Modified Delone and Mclean Model .120.....
Najma Imtiaz Ali (International Islamic University Malaysia), Suhaila Samsuri (International Islamic University Malaysia), Imtiaz Ali Brohi (International Islamic University Malaysia), Arjumand Bano Soomro (International Islamic University Malaysia), Saira Soomro (University of Sindh, Jamshoro), and Asadullah Shah (International Islamic University Malaysia)
- Social Commerce in E-Business of Pakistan: Opportunities, Challenges and Solutions .126.....
Yasir Ali Solangi (Shah Abdul Latif University Khairpur), Zulfiqar Ali Solangi (International Islamic University Malaysia), Ali Raza (International Islamic University Malaysia), Madihah bt. S. Abd. Aziz (International Islamic University Malaysia), Mohd Syarqawy bin Hamzah (International Islamic University Malaysia), and Asadullah Shah (International Islamic University Malaysia)
- Is There a Relationship between ICT Development and Human Development?: An Analysis of Six Major Islands of Indonesia from 2012 to 2016 .132.....
Alfi Khairiansyah Machfud (International Islamic University Malaysia) and Mira Kartiwi (International Islamic University Malaysia)
- Towards Improving Information Quality Requirements for Online Health Information Systems: A Review on the Recent Frameworks .138.....
Mohamed Aden Ighe (International Islamic University Malaysia) and Siti Asma binti Mohammed (International Islamic University Malaysia)
- Smartphone Application for Physical Activity Enhancement at Workplace: Would Office Workers Actually Use It? .144.....
Hazwani Mohd Mohadis (International Islamic University Malaysia) and Nazlena Mohamad Ali (Universiti Kebangsaan Malaysia)
- Responsibility-Value Alignment in Information Security Governance .150.....
Rufizah Abdul Munir (International Islamic University Malaysia), Shuhaili Talib (International Islamic University Malaysia), Nurul Nuha Abdul Molok (International Islamic University Malaysia), and Mohd Ridzuan Ahmad (University Malaysia of Computer Science and Engineering)
- A Trust-Based Conceptual Framework on Open Government Data Potential Use .156.....
Noor Zalina Zainal (Universiti Teknologi MARA), Hunayati Hussin (International Islamic University Malaysia), and Mior Nasir Miro Nazri (International Islamic University Malaysia)

Track 5: Computing Technologies and Applications

- Window Size and Round-Trip-Time in a Network Transmission Session .162.....
Adamu Abubakar (International Islamic University Malaysia) and Khin HayMan Oo (International Islamic University Malaysia)
- Automated Real-Time At-Scene Reporting System .167.....
Akeem Olowolayemo (University Malaysia Sarawak) and Pearly Oh Bei Qing (University Malaysia Sarawak)

E-Payment System Using SMS Gateway and Line Application .173.....	<i>Emir Husni (Institut Teknologi Bandung) and Muhammad Ayat Hidayat (Institut Teknologi Bandung)</i>
Formulation of SQL Injection Vulnerability Detection as Grammar Reachability Problem .179.....	<i>Kabir Umar (Bayero University Kano), Abu Bakar Sultan (Universiti Putra Malaysia), Hazura Zulzalil (Universiti Putra Malaysia), Novia Admodisastro (Universiti Putra Malaysia), and Mohd Taufik Abdullah (Universiti Putra Malaysia)</i>
Requirements Patterns Structure for Specifying and Reusing Software Product Line Requirements .185.....	<i>Badamasi Imam Ya'u (International Islamic University Malaysia), Azlin Nordin (International Islamic University Malaysia), Norsaremah Salleh (International Islamic University Malaysia), and Isma'il Aliyu (Abubakar Tafawa Balewa University)</i>
U-Learning: A Modern Paradigm Shift of Learning from Higher Education Students' Perspective .191.....	<i>Shafaq Siddiqui (Sukkur IBA University), Ahmad Waqas (Sukkur IBA University), M. Abdul Rehman Soomrani (Sukkur IBA University), Faiza Qureshi (Sukkur IBA University), Marina Gul (Sukkur IBA University), and Irfan Memon (Sukkur IBA University)</i>
Research of Semantics Used in GPS Based Mobile Phone Applications for Blind Pedestrian Navigation in an Outdoor Environment .196.....	<i>Israh Akbar (International Islamic University Malaysia) and Ahmed Fatzilah Misman (International Islamic University Malaysia)</i>
GoBeli: Providing Runner Platform for Personal Shopper and Delivery Services for Urban Community .202...	<i>Muhammad Aidid Waft bin Nordzi (International Islamic University Malaysia), Muhammad Farhan Mohd Hatta (International Islamic University Malaysia), and Abdul Rahman Ahmad Dahlan (International Islamic University Malaysia)</i>
Digitalizing Bullying: Do Nigerian Students Get Cyberbullied? .208.....	<i>Naeem Atanda Balogun (University of Illorin), Abd Rahman Ahlan (International Islamic University Malaysia), and Taofeekat Adedolapo Awodele (Access Bank Plc.)</i>
eTutor4U Platform: Acquiring Knowledge and Skills with the Help of Great Tutors .213.....	<i>Muhammad Shukri Safari (International Islamic University Malaysia), Muhammad Badiuzzaman Abdullah (International Islamic University Malaysia), and Abdul Rahman Ahmad Dahlan (International Islamic University Malaysia)</i>
The Effectiveness of Computer-Assisted Instruction in Vocabulary Learning .219.....	<i>Elok Vradizza Feni Abdul Wahdi (International Islamic University Malaysia) and Mariam Adawiah Dzulkifli (International Islamic University Malaysia)</i>
Repairing, Maintenance and Cleaning Services (RMCC) - A Conceptual Enhanced Business Model .227.....	<i>Nasratullah Habib (International Islamic University Malaysia), Zakaria Yassin Abdullahi (International Islamic University Malaysia), and Abdul Rahman Ahmad Dahlan (International Islamic University Malaysia)</i>

PetGrab-Linker Services – A Conceptual Business Model .233.....	
<i>Muhammad Alif Mohd Fadil (International Islamic University of Malaysia), Muhammad Taufiq Syahmi Abd Rahman (International Islamic University of Malaysia), and Abdul Rahman Ahmad Dahlan (International Islamic University of Malaysia)</i>	
Improving the Scoring Process of Question Answering System in Indonesian Language Using Fuzzy Logic .239	
<i>Syopiansyah Jaya Putra (Syarif Hidayatullah State Islamic University), Muhammad Zidny Naf'an (Institute of Technology Telkom), and Muhamad Nur Gunawan (Syarif Hidayatullah State Islamic University)</i>	
Malay Online Virtual Integrated Corpus (MOVIC): A Systematic Review .243.....	
<i>Normi Sham Awang Abu Bakar (International Islamic University Malaysia), Hamwira Yaacob (International Islamic University Malaysia), Dini Handayani (Taylor's University), and Mustafa Ali Abuzaraida (Misurata University)</i>	
Massive Open Online Courses (MOOCs) and Their Effect on Learners' Motivation .249.....	
<i>Umniya Usama Elsayed Mohamed (International Islamic University Malaysia) and Asma Md Ali (International Islamic University Malaysia)</i>	
The Influence of IT Leaders' Leadership Behaviour on IT Governance Performance in Higher Education: A Literature Review .254.....	
<i>Hussain Waheed (International Islamic University Malaysia), Husnayati Hussin (International Islamic University Malaysia), and Mohamed Razi Mohamed Jalaldeen (International Islamic University Malaysia)</i>	
Persuasive Technology from Islamic Perspective .260.....	
<i>Mohammed Abdullah Bawazir (International Islamic University Malaysia), Murni Mahmud (International Islamic University Malaysia), and Nurul Nuha Abdul Molok (International Islamic University Malaysia)</i>	
Cyber Security Maturity Model and Maqasid al-Shari'ah .266.....	
<i>Nadwiyah Mohamed Ridza (International Islamic University Malaysia), Normaziah Abdul Aziz (International Islamic University Malaysia), Aznan Zuhid Saidin (International Islamic University Malaysia), Mohamed Ridza Wahiddin (International Islamic University Malaysia), Abdul Rahman Ahmad Dahlan (International Islamic University Malaysia), Jamaludin Ibrahim (International Islamic University Malaysia), and Rahmah Ahmad H. Osman (International Islamic University Malaysia)</i>	
Neurophysiological Analysis of Porn Addiction to Learning Disabilities .272.....	
<i>Nurul Izzati Mat Razi (International Islamic University Malaysia), Abdul Wahab Abdul Rahman (International Islamic University Malaysia), and Norhaslinda Kamaruddin (Universiti Teknologi Mara)</i>	
A Systematic Literature Review of Cloud Computing Adoption and Impacts among Small Medium Enterprises (SMEs) .278.....	
<i>Noor Afzan Salleh (International Islamic University Malaysia), Husnayati Hussin (International Islamic University Malaysia), Mohd. Adam Suhaimi (International Islamic University Malaysia), and Asma Md Ali (International Islamic University Malaysia)</i>	

Identifying Cues to Deception in Islamic Websites Text-Based Content and Design .285.....	
<i>Fatima Ahmed Mohamed (International Islamic University Malaysia), Madihah Sheikh Abdul Aziz (International Islamic University Malaysia), Zahidah Zulkifli (International Islamic University Malaysia), and Murni Mahmud (International Islamic University Malaysia)</i>	
Knowledge Management Readiness Index: Multiple Industries Perspective .290.....	
<i>Mohamed Jalaldeen Mohamed Razi (International Islamic University Malaysia), Mohd Izzuddin Mohd Tamrin (International Islamic University Malaysia), Abdul Rahman Ahmad Dahlan (International Islamic University Malaysia), Noor Azian Mohamad Ali (International Islamic University Malaysia), and Md Habibullah (International Islamic University Malaysia)</i>	
Assessing Arabic Language Learning for Deaf Student: A Study of Using Mobile Immersion in Saudi Arabia .296.....	
<i>Jawaher Jamaan (International Islamic University Malaysia) and Zainatul Shima Abdullah (International Islamic University Malaysia)</i>	
Mining Web Usage Using FRS .301.....	
<i>Rosli Omar (International Islamic University Malaysia) and Zainatul Shima Abdullah (International Islamic University Malaysia)</i>	
Sentiment Analysis for Malay Language: Systematic Literature Review .305.....	
<i>Dini Handayani (Taylor's University), Normi Sham Awang Abu Bakar (International Islamic University), and Hamwira Yaacob (International Islamic University)</i>	
A Delphi Study on Thematic Interpretations of Al-Quran .311.....	
<i>Ashraf Ali Salahuddin (International Islamic University Malaysia) and Roslina Othman (International Islamic University Malaysia)</i>	
Designing Healthcare Knowledge Management Systems – Development of an Integrated Component-Based KM Model for Effective Governance .317.....	
<i>Arfan Arshad (International Islamic University Malaysia and Jazan University), Mohamad Fauzan Bin Noordin (International Islamic University Malaysia), Roslina Bint Othman (International Islamic University Malaysia), and Waqar Mehmood (COMSATS Institute of Information Technology)</i>	
Cultural Preferences of Pakistan for the University Website Design .323.....	
<i>Saad Nizamani (University of Sindh), Sehrish Nizamani (University of Sindh), Khalil-u-Rehman Khoubati (University of Sindh), Sarwat Nizamani (University of Sindh), Shahzad Memon (University of Sindh), and Nazish Basir (University of Sindh)</i>	
Exploring the Impact of Cultural Preferences in Website Design: A Controlled Experiment Based on Three University Websites of Pakistan .329.....	
<i>Sehrish Nizamani (University of Sindh), Khalil-u-Rehman Khoubati (University of Sindh), Sarwat Nizamani (University of Sindh), Shahzad Memon (University of Sindh), Saad Nizamani (University of Sindh), and Nazish Basir (University of Sindh)</i>	
Author Index 335.	