Editors

Hasan Bahrom S. Salahudin Suyurno Abdul Qayuum Abdul Razak

© Akademi Pengajian Islam Kontemporari (ACIS), UiTM Melaka 2015

Hak cipta terpelihara. Tiada bahagian daripada terbitan ini boleh diterbitkan semula, disimpan untuk pengeluaran atau ditukarkan ke dalam sebarang bentuk atau dengan sebarang alat juga pun, sama ada dengan cara elektronik, gambar serta rakaman dan sebagainya tanpa kebenaran bertulis daripada ACIS, UiTM Melaka terlebih dahulu.

Perpustakaan Negara Malaysia

Data Pengkatalogan-dalam-Penerbitan

Hasan Baharom

Proceedings of the 1st international Islamic heritage conference / Hasan Bahrom, S.Salahudin Suyurno, Abdul Qayuum Abdul Razak 978-967-0637-13-6

1. Islamic Heritage 2. Civilization I. Hasan Bahrom

II. S.Salahudin Suyurno III. Abdul Qayuum Abdul Razak

Reka bentuk kulit : Mohd Zaid bin Mustafar

Dicetak di Malaysia oleh:

AKADEMI PENGAJIAN ISLAM KONTEMPORARI (ACIS), UNIVERSITI TEKNOLOGI MARA MELAKA, KM 26 JALAN LENDU, 78000 Alor Gajah, Melaka, Malaysia

Tel: +606 558 2058

CONTENTS

PRAKATA	i
KATA ALUAN REKTOR UITM MELAKA	ii
ARTS	
A DOCUMENT OF IBÂDI JURISPRUDENCE RELATED TO THE ARCHITECTURE OF MOSQUES Benkari Naima	1
RE-THINKING THE DEPICTIONS OF TWO-DIMENSIONAL 'LIVING BEINGS' IN CONTEMPORARY ISLAMIC ART Lina Kattan	15
REVIVING THE CLASSICAL ISLAMIC ARCHITECTURAL DESIGNS OF MOSQUE IN TIN MINING AREA: KINTA VALLEY, PERAK, MALAYSIA Wan Noor Anira Hj Wan Ali @ Yaacob, Norasikin Hassan, Khalilah Hassan & Ameri Mohd Sarip @ Shariff	25
TOWARDS A CONCEPTUAL FRAMEWORK OF ANIMATED INFOGRAPHICS IN AN ISLAMIC CONTEXT Nur Nazihah Rahim, Nik Zulkarnaen Khidzir, Anuar Mohd Yusof & Khairul Azhar Mat Daud	38
QUR'AN AND SPLENDOR OF ISLAMIC CALLIGRAPHY: DEVELOPMENT OF IRANIAN CALLIGRAPHY UNDER INFLUENCE OF QUR'AN TRANSCRIBING Mahdi Sahragard	49
PLANT AND LANDSCAPE DESIGN: REFLECTION FROM THE QURAN AND HADITH Khalilah Hassan, Nur Huzeima Mohd Hussain, Norizan Mt Akhir & Mazlah Yaacob	60
SUSTAINABLE AND DIVERSE ISLAMIC ART: A SOCIAL AND CULTURAL EXPERIMENT IN AUSTRALIA Abdul Attamimi & Majdi Faleh	70
KUFI LARI': THE HYBRID OF KHAT KUFI TO UPHOLD THE MALAYS' IDENTITY IN DIGITAL ART APPLICATION Mohd Amin bin Mohd Noh, Mohd Fauzi bin Harun, Nik Narimah bt Nik Abdullah, Zaharah bt Hj. Ramli & Nor Fariza bt Baharuddin	81

KONSEP SENI DALAM ISLAM: SATU SOROTAN 89 Nor Adina Abdul Kadir, Nang Naemah Md Dahlan, Mohd Farhan Abd Rahman & Norsaeidah Jamaludin **GENDER** CANNING CHILDREN: ABUSE OR EDUCATE? 101 Ekmil Krisnawati Erlen Joni & Salmiah Salleh THE WISDOM OF POLYGAMY IN ISLAM: THE LAW AND CUSTOMARY 114 PRACTICE IN AFGHANISTAN Hekmatullah Muradi & Nasir Ahmad Yousefi PERBEZAAN TANGGUNGJAWAB PERIBADI PELAJAR DI KOLEJ 125 UNIVERSITI ISLAM MELAKA (KUIM) Siti Marhamah binti Kamarul Arifain, Atini Alias, Farrah Wahida Mustafar & Faudziah Yusof **CULTURE** VOLUNTEER TOURISM FOR MUSLIM COMMUNITY DEVELOPMENT: 133

Nik Rozilaini binti Wan Mohamed, Ahmad Rozelan bin Yunus, Mohd Hasrul Yushairi bin Johari & Mashita binti Abdul Jabar

APPLYING SOCIAL EXCHANGE THEORY FOR CROSS CULTURE BENEFITS

14 مكتبة آشوربانيبال تراث إنساني فريد وان كمال موجاني & سميرة ميلاد عامر

POLITIC

النظام الجنائي الاسلامي هو الحل للأمن في العالم

سعدى حيدرة

العلاقات الدبلوماسية الاسلامية في الاندلس مع المماليك الاوروبية، دراسة و تحقيق طارق عبد السلام & عصام ميلود المحراث

EDUCATION	
دور الثورة التعليمية والثقافية في تطوير الأمة المسلمة في منطقة مليبار، كيرلا الهند على أكبر كي وي	175
ISLAM AND EDUCATION Nasiruddin Mizy	182
ISLAM AND HIGHER EDUCATION: THE ROLE OF ISLAMIC-BASED UNIVERSITIES IN URBAN DEVELOPMENT Nur Rafidah Asyikin binti Idris	190
LEARNING ORAL PRESENTATION IN A COLLABORATIVE ENVIRONMENT IN TERTIARY CLASSROOMS: ISLAMIC PERSPECTIVES Juritah Misman & Mardziah Hayati Abdullah	201
PENDIDIKAN ISLAM DENGAN AKHLAK MORAL PELAJAR: SOROTAN FALSAFAH PENDIDIKAN ISLAM Siti Noorbiah Md Rejab, Najahudin Lateh, Hanifah Musa Fathullah Harun, Nur Zahidah Jaafar & Nur Hidayah Zainal	213
FAKTOR AGAMA SEBAGAI FAKTOR UTAMA MENGUBAH TINGKAH LAKU SEORANG BANDUAN Ahmad Zaidi Johari, Mohd Izam Ghazali & Alis Puteh	222
HISTORY	
PARADIGMA ILMU KITAB JAWI DI ALAM MELAYU: SATU PENGENALAN Rahimin Affandi Abd. Rahim, Ahmad Farid Abdul Jalal, Badlihisyam Mohd Nasir, Wan Zailan Kamarudin Wan Ali, Abdul Halim Ismail, Nor Adina Abdul Kadir & Zurina binti Mohamed Noor	226
ANALISIS KEBANGKITAN VOLGA BULGARIA 922M Harliana Halim, Kamaruzaman Yusoff, Mohd Faizal Khir & Shakila Ahmad	236

حق الدولة المسلمة في امتلاك الأسلحة الحربية وضروة انتاجها وليس استيرادها

نور العارفة بنت محمد & تُعيم حنك

165

LAKSAMANA PĪRĪ REIS DAN SUMBANGANNYA KEPADA KARTOGRAFI DAWLAH ^CUTHMĀNIYYAH

Ahmad Sobrie Haji Ab Rahman & Roziah Sidik @ Mat Sidek

SOCIETY

نظرية الطلاق في الإسلام: دراسة مقارنة مع اليهودية والنصرانية	259
عثمان بن إبراهيم غُرغُدو	
A QUALITATIVE STUDY ON WIFE ABUSE IN MUSLIM FAMILIES: WHY WOMEN ENDURE? Mariny Abdul Ghani, Noor Azizah Ahmad & Azizul Mohamad	278
HIMA AS A MODEL FOR NEIGHBOURHOOD OPEN SPACE PLANNING Khalilah Hassan, Siti Syamimi Omar & Izrahayu Che Hashim	290
حكم تارك الصلاة	301
طارق حميش	
ASPEK-ASPEK TIDAK PATUH SYARIAH DALAM AMALAN JAMPI DI MALAYSIA Juriah Mohd Amin, PM Dr Huzaimah Ismail & PM Supani Husain	307
LELAKI BERPAKAIAN SEPERTI PEREMPUAN: ANTARA GENDER IDENTITY DISODER, UNDANG-UNDANG SYARIAH DAN PERLEMBAGAAN MALAYSIA Yuhanza binti Othman, Ida Rahayu binti Mahat, Mimi Sofiah Ahmad Mustafa & Marziana Abd Malib	316
GEJALA SOSIAL DI MALAYSIA: PENDEKATAN ISLAM DAN PERANAN PEMIMPIN DALAM USAHA PENCEGAHAN Rajwani Md. Zain, Khairullah Mokhtar & Mushaddad Hasbullah	328
PEMAHAMAN SERTA PENGAMALAN MAKANAN SUNNAH DAN SUNNAH PEMAKANAN WARGA UNIVERSITI TEKNOLOGI MARA (UiTM) JOHOR KAMPUS PASIR GUDANG Siti Fairuz Sujak, Noor Syahida Md Soh, Azizah Md. Kasah, Siti Zaleha Syafiee, Noraishah P. Othman Rohaya Sulaiman Nor Fazlin Uteh & Zuliana Zoolkefli	335

SCIENCE AND TECHNOLOGY

HARM REDUCTION IN CARTILAGE TISSUE ENGINEERING EXPERIMENTATION: A COMPARATIVE REVIEW BETWEEN ISLAMIC AND CONVENTIONAL ETHICS Muhammad Aa'zamuddin Ahmad Radzi, Abdurezak Abdulahi Hashi, Zainul Ibrahim Zainuddin, Rozlin Abdul Rahman, Norhamiza Mohamad Sukri, Mohd Yusof Mohamad, Noorhidayah Md Nazir, Wan Ahmad Dzulkarnain Razali & Munirah Sha'ban	346
THE IMPACT OF SCIENCE AND TECHNOLOGY TOWARDS RURAL COMMUNITY IN UNDERSTANDING ISLAM Abdul Hapes bin Mohammed & Nurul Diana bt Mohamed Iqbal	359
KERANGKA TEORI E-WASIAT Zainal Fikri Zamzuri, Noormala Rabu, Abdullah Hj Said & Mohd Fauzi Md Isa	366
KAJIAN TINJAUAN LITERATUR TERHADAP APLIKASI MUDAH ALIH BERUNSURKAN ISLAM "ISLAMIC MOBILE APPS" Ronizam Ismail, Shahrul Niza Samsudin, Wahid Ab Sulaiman, Norzaimah Zainol & Dina Syafini Zaid	373
ECONOMICS	
المضاربة الشرعية البديل الإسلامي للفائدة الربوية عبدالله بن عمر بلعيدي	388
-	388
عبدالله بن عمر بلعيدي AWARENESS OF CASH WAQF AMONG THE MALAYSIAN MUSLIMS Wan Musyirah binti Wan Ismail, To' Puan Prof Dr Rokiah binti Embong, Nur Hayati	

FINANCE

A STUDY OF THE ATTRACTIVENESS ON ISLAMIC PAWNBROKING AT AR-RAHNU MAIDAM KUALA TERENGGANU Najdah bt Abd Aziz, Syahrul Hezrin bin Mahmud, Nurul Syazwani binti Ahmad, Adida binti Muhammud, Asmawati@Fatin Najihah bt. Alias & Rubiah Abu Bakar	443
EXAMINING THE DIFFERENCES BETWEEN AR RAHNU AND CONVENTIONAL PAWN BROKING IN COMPATIBILITY TOWARDS MAQASID SHARIAH Salbiah Nur Shahrul Azmi, Nazimah Hussin & Rohaida Basiruddin	455
THE MAIN FACTORS THAT INFLUENCE THE PUBLIC TO PURSUE ISLAMIC PAWN BROKING (AR-RAHNU) COMPARE TO THE CONVENTIONAL PAWN BROKING IN KUALA TERENGGANU Rubiah Abu Bakar, Najdah bt Abd Aziz, Syahrul Hezrin bin Mahmud, Norliyana binti Zulkifli Mohd, Adida binti Muhammud & Asmawati@Fatin Najihah bt. Alias	467
THE AWARENESS OF EFFECTIVE FINANCIAL PLANNING AMONG THE STUDENTS OF FACULTY OF BUSINESS AND MANAGEMENT UITM MELAKA CITY CAMPUS Mohd Sufian bin Ab Kadir, Mohd Fuad bin Othman, Nur Izzati binti Abas, Saloma binti Mohd Yusoff, Maymunah Ismail, Sharina Shariff	476
PANDANGAN FUQAHA MALIKI TERHADAP JUALBELI SUKUK PADA ZAMAN MARWAN AL-HAKAM: SATU ANALISIS RINGKAS Mohd Asyadi Redzuan, Mohd Farhan Ahmad, Siti Noor Ain Aziz & Shahidatul Ashikin Shahran	501
PENILAIAN KESAHAN INSTRUMEN PELABURAN EMAS PATUH SYARIAH (IPEPS) DENGAN MENGGUNAKAN MODEL PENGUKURAN RASCH Najahudin Lateh, Ghafarullahhuddin Din, Muhammad Rahimi Osman, Ezani Yaakob & Salmy Edawati Yaacob	506

PHILANTHROPHY

DANA KHAIRAT: PENGALAMAN INSTITUSI PENGAJIAN TINGGI 515 Hasan Bahrom & Rawi Nordin

PHILOSOPHY

Fadzilah Din	
LEGASI MAZHAB SYAFI'I DI MALAYSIA: ANTARA KEKANGAN TRADISIONALISME DAN TUNTUTAN LIBERALISME Muhammad Ikhlas Rosele, Mohd Anuar Ramli, Mohd Farhan Md. Ariffin & Syamsul Azizul Marinsah	526
KAJIAN PEMIKIRAN BADIUZZAMAN SAID NURSI TERHADAP KENABIAN BERDASARKAN KITAB RASAIL AN-NUR Muaz bin Hj. Mohd Noor, Faizuri bin Abdul Latif, Mohd Zaid bin Mustafar , Mohd Khairul Nizam bin Mohd Aziz, Muhammad Taufik Md Sharipp, Mohd Norazri bin Mohamad Zaini & Mohd Paidi bin Noman	535
PANDANGAN HAMKA TERHADAP AYAT-AYAT EMBRIOLOGI DALAM TAFSIR AL-AZHAR Wan Helmy Shahriman Wan Ahmad, Sharifah Norshah bani bt Syed Bidin & Kamarul Shukri bin Mat Teh	547
KAJIAN <i>TURATHIY</i> DAN ' <i>ILMIY</i> TERHADAP BUAH-BUAHAN DAN HERBA YANG DISEBUT DALAM AL-QURAN DAN AL-HADITH Mohd Asmadi Yakob, Mohd Yakub @ Zulkifli Mohd Yusoff, Monika @ Munirah Abd Razzak, Khadher Ahmad, Nurulwahidah Fauzi, Khalijah Awang, Rozana Othman & Mohd Rais Mustafa	556
LANGUAGE AND COMMUNICATION	
MEDIA SOSIAL SEBAGAI MEDIUM TERKINI PEMBENTUKAN AKHLAK DALAM KALANGAN PELAJAR Aina Sabariah Md. Isa & Huzaimah Hj Ismail	571
FAMILY COMMUNICATION MANAGEMENT FROM MUSLIM ADOLESCENT PERSPECTIVE Aziyah binti Abu Bakar	581
KEBERKESANAN DAKWAH MELALUI LAMAN JARINGAN SOSIAL DALAM MEMBENTUK MASYARAKAT ISLAM A.Rauf Ridzuan, S. Salahudin Suyurno, Rusydi Kamal, Fakrulnizam Jafri, Dzaa Imma Abd Latif & Siti Nurshahidah Sah Alam	593

THE SIGNIFICANCE OF RELIGIOUS KEY TERMS AND THEIR NEW 520

MEANINGS IN AL-FARUQI'S AL-TAWHID: ITS IMPLICATIONS FOR

فوائد وسائل الإعلام الحديثة وأضرارهاعلى الإسلام والمسلمين: الإنترنت نموذجًا	600
محمّد الأمين محمّد سيلا	
THE ROLE OF PARENTAL COMMUNICATION IN DEVELOPING MUSLIM PERSONALITY: AN OVERVIEW OF PARENTAL ACCEPTANCE-REJECTION THEORY	606
Aini Faezah Ramlan, S. Salahudin Suyurno, Muhammad Shafiei Ayub, Rosilawati Sultan Mohideen & Norazlinda Hj Mohammad	
PERANAN LAMAN JARINGAN SOSIAL DALAM MENGUKUHKAN UKHWAH KEKELUARGAAN	614
Rosilawati Sultan Mohideen, Abdul Rauf Ridzuan, Aini Faezah Ramlan, Fakhrulnizam Jafri & Faridah Hanem Ab. Rashid	
KESAN PENGGUNAAN MEDIA SOSIAL TERHADAP PERPADUAN UMMAH DI KALANGAN MASYARAKAT ISLAM DI MALAYSIA Afiqah Mior Kamarulbaid, Abd Rauf Ridzuan, Siti Nur Fadzilah Abdullah, Efina Hamdan & Mohd Hilmi Bakar	620
PENCARIAN TEMAN HIDUP BERLANDASKAN ISLAM MELALUI LAMAN JARINGAN SOSIAL Fakrulnizam Jafri, Abdul Rauf Ridzuan, Rusydi Mohamad Kamal, Rosilawati Sultan Mohideen & Nur Alyani Mohd Shukri	627
AN ADVERTISING MEDIA: THE RELATIONSHIP OF ADVERTISING MESSAGE, IMAGE AND LANGUAGE USAGE TOWARDS SENSITIVITY IN ISLAMIC PERSPECTIVE Norazlinda Hj. Mohammad, Norida Abu Bakar, Nurliyana Kamilah Khairul Anuar, Siti Nur Fadzilah Abdullah, Aini Qamariah Mohd Yusof	636
HIKMAH DALAM BERDAKWAH SEBAGAI MANHAJ RABBANIYYAH: SATU SOROTAN DEFINISI S.Salahudin Suyurno, Mohammad Taufik Md Sharipp, Mohamad Shafiei Ayub, Muaz Mohd Noor, Mohd Khairul Nizam Mohd Aziz, Mohd Zaid Mustafar & Abdul Qayuum Abdul Razak	645
PEMBIKINAN FILEM ISLAM DI MALAYSIA: PERJALANAN DAKWAH ATAU PELABURAN KOMERSIL Shafezah Abdul Wahab, Siti Najah Raihan Sakrani & Prof Madya Dr Mohd Adnan Hashim	651

MANAGEMENT

THE EFFECTS OF SERVICE QUALITY TOWARDS CUSTOMER SATISFACTION OF ISLAMIC BANK IN KUANTAN PAHANG	659
Maz Izuan Mazalan, Faresya Zunaida Mohd Zubair & Rozman Mohd Yusof	
COMPATIBILITY OF PLANTS APPLICATION WITH ISLAMIC VALUES IN THE MALAY LANDSCAPE OF KOTA BHARU CITY Nur Hafizah Ramle & Nik Ismail Azlan Rahman	680
THE IMPLEMENTATION OF SHARIAH COMPLIANT HOTEL: A CASE STUDY OF PULAI SPRINGS RESORT BERHAD Zuliana binti Zoolkefli, Nor Fazlin binti Uteh, Ruqaiyah binti Ab Rahim & Noor Syahida binti Md Soh	688
A DETERMINANT MODEL FOR ISLAMIC MANAGEMENT Azman Che Omar	692



Sejarah warisan Islam telah memberikan impak yang cukup besar kepada perkembangan dunia hari ini. Ia bukan sahaja memberi sumbangan kepada aspek kerohanian malah turut menyumbang kepada aspek ekonomi, politik, pendidikan, sosial, kesenian, kebudayaan. sains dan teknologi. Perkembangan ini memperlihatkan bahawa pentingnya ketamadunan ilmu kepada ketamadunan dunia. Perkara ini selaras dengan tuntutan al-Quran yang menyatakan dengan jelas bahawa Allah SWT memuji sesiapa yang berusaha menuntut ilmu dan juga bertaqwa kepadaNya. Namun sejak akhir-akhir ini, sumbangan hasil pensejarahan Islam sering dipandang sepi oleh generasi muda. Sejarah warisan Islam tidak lagi dijadikan panduan dan iktibar dalam melebarkan ketamadunan ilmu Islam. Mereka lebih tertumpu kepada ketamadunan Barat yang dikatakan 'kaya' dengan khazanah ilmu. Sedangkan kemajuan hari ini seharusnya berlandaskan kepada ketamadunan Islam.

Penelitian atau pengkajian mengenai warisan Islam perlu direncanakan sebagai ketamadunan dunia. Idea-idea baru mengenai sejarah warisan Islam perlu diketengahkan, Oleh yang demikian, menerusi *Ist International Islamic Heritage Conference* (IsHeC 2015) dilihat akan dapat membantu kepada perkembangan produksi seterusnya menjana idea-idea baru khususnya untuk memperkayakan kajian dalam bidang sejarah warisan Islam kepada masyarakat. Dengan penganjuran seminar ini secara tidak langsung membantu untuk menjalinkan hubungan antara para sarjana dalam bidang sejarah warisan Islam. Ini adalah satu cabaran dan membuka peluang baru untuk membina satu perpaduan intelektual merentas sempadan dunia.

Buku ini merupakan kompilasi diskusi ilmu antara para ilmuan yang terlibat secara langsung dalam pembentangan kertas kerja mereka dalam *Ist International Islamic Heritage Conference* (IsHeC 2015) daripada pelbagai platform ilmu Islam antaranya Kesenian, Ketamadunan, Komunikasi, Pendidikan, Kewangan, Sains dan Teknologi dan lain-lain lagi. Semoga curahan ilmu melalui penulisan ini mampu memberi sumbangan dalam menambah khazanah ilmu Islam kepada masyarakat.

Editor,

1st International Islamic Heritage Conference (IsHeC 2015), Akademi Pengajian Islam Kontemporari, UiTM Melaka.

Kata Aluan Rektor UiTM Melaka

Dengan Nama Allah Yang Maha Pemurah Lagi Maha Pengasih Assalamu'alaikum warahmatullahi wabarakatuh

Segala puji bagi Allah, Tuhan seru sekalian alam, dengan limpah kurniaNya serta keizinanNya, kejayaan penganjuran *Ist International Islamic Heritage Conference* 2015 yang berlangsung di Hotel Mahkota Melaka pada 11-12 November 2015, telah menghasilkan banyak kertas kerja yang amat bermutu. Justeru, buku ini mengumpulkan puluhan penulisan para ilmuan dan cendekiawan dari dalam dan luar negara untuk bacaan semua.

Pelbagai isu telah dikupas termasuklah perihal seni Islam, budaya, politik, gendar, pendidikan, sejarah, kemasyarakatan, sains dan teknologi, ekonomi, kewangan, falsafah, bahasa dan komunikasi, kedermawanan dan pengurusan. Pembaca juga akan mendapati buku ini memuatkan kajian-kajian yang komited melaksanakan usaha mengintegrasikan antara ilmu duniawi dan ukhrawi. Ini membuktikan kesegaran keilmuan tamadun Islam itu sendiri.

Semoga perkongsian ilmu ini dapat meningkatkan komitmen umat dalam memartabatkan perintah Ilahi dalam kehidupan duniawi sebagai jambatan ukhrawi. Sekaligus ia bakal memberi manfaat pada alam sejagat.

Pihak UiTM Melaka merakamkan setinggi-tinggi tahniah dan ucapan terima kasih atas segala sokongan dalam bentuk material, tenaga dan sebagainya dalam merialisasikan seminar ini. Buat semua penaja yang telah memberikan sumbangan kepada wacana ini, sekalung penghargaan diucapkan. Semoga seminar dwi tahunan ini akan terus diperkasakan demi mengangkat martabat umat melalui kecemerlangan tamadun Islam yang diakui telah terbukti diseluruh jagat.

Sekian, terima kasih. Wassalam

PROF. MADYA DR MOHD ADNAN BIN HASHIM

Rektor, UiTM Melaka.

THE IMPACT OF SCIENCE AND TECHNOLOGY TOWARDS RURAL COMMUNITY IN UNDERSTANDING ISLAM

Abdul Hapes bin Mohammed ⁵⁰⁹ Nurul Diana bt Mohamed Iqbal

ABSTRACT

Islam has derived into this world to bring civilization to mankind. It is a gift from Allah to all human beings on this earth. After an extensive period of Islam based in Malaysia since the time of the Malacca Sultanate, it has grown swiftly and become the official religion of Malaysia. As we know, this country is now moving towards the developed countries. Innumerable efforts and initiatives engaged by the government to safeguard that Malaysia continues to advance in all aspects and one of it is science and technology. This is aligned with our country's Vision 2020, "The sixth is the challenge of establishing a scientific and progressive society, a society that is innovative and forward-looking, and one that is not only a consumer of technology but also a contributor to the scientific and technological civilization of the future". That's why it's a requirement for us to understand and mastering the skills in the arena of anything you want endeavour. Things would be much easier with the support of science and technology. This paper will show how science and technology can contribute a positive influence to the community, especially for those living in rural areas regarding the understanding the matters of Islam which related in their lives.

Keywords:ICT4D, Rural Communities, Information Technologies, content development, BDD

In the era of globalization, where technological development is especially rapid, it has become crucial for every developing nation to use and cultivate information and communication technology (ICT) for development purposes. This is especially more prevalent in the developing countries which are still striving to develop ICT especially in the rural areas where there is little penetration if ICT. However, this cannot be sidelined as incorporating ICT in the daily lives of these rural people would also subconsciously nurture development. Though there might be several challenges in doing so, both the governmental and non-governmental organizations should work hand-in-hand in making this a reality for the benefit of the people in particularly. It is the aim of many countries worldwide to make ICT available, affordable and usable by each level of the society existing in their population. Hence, this leads to the formation of policies by some government such as subsidizing the implementation of public telephones. This is also extended towards profit-seeking ICT companies that aim in knowing in which region or provinces that is best targeted in order to aggrandize revenues apart from knowing if there are other ICT companies present as a competitor. Though they are varying factor which influences the penetration level of ICT in rural areas, one of it is because the people itself chooses not to use a given type of ICT, whereas in other areas, the providers do not make the products or services as widely or easily available (Pitikom Temgtrakul, 2011).

Other obstacles faced in granting universal access to ICT would be accounted to the perception of the capitalistic firms. These firms believe that when investing in the rural markets, it is simply not profitable. Hence, is it not worth to invest a huge some of capital into it. In a world where capitalists are governing development alongside the governmental and non-governmental organizations, profits and returns are the best assets of ICT development

-

⁵⁰⁹ Lecturer, Faculty of Computer & Mathematical Sciences, Universiti Teknologi Mara Perlis, Malaysia, mazterpeace@gmail.com
Graduated Student, Faculty of Applied Sciences, Universiti Teknologi Mara Perlis, Malaysia, n.diana82@yahoo.com

360

apart from motivating reinvestments. This barrier must be overcome, to bring forth the installation and utilization of ICT in the rural areas. Illiteracy in ICT is also another large problem to be tackled. Take the Internet as an example. The Internet is information based and knowledge intensive, hence it requires users to communicate to certain extent with the computers in which a small amount of basic education is essential (Akshay Mathur, 2005).

According to (Hassan Bakhshizadeh, 2011) ICT is also used for as a tool in combating poverty. However, this is not especially applicable globally. In country such as India, where electricity supply is still unavailable in certain places, where telephone lines are yet to be installed, ICT has failed to do so. It is also said that ICT has the ability to increase the betterment of the social services, increasing the state of information for supporting food security, increasing knowledge by combining the local knowledge with innovative strategies in agricultural fields, providing equal opportunities for everyone in the village to be able to gain information and other advantages which is also inclusive of their social, culture as well as political issues in the rural community (Hassan Bakhshizadeh, 2011).

SCIENCE AND TECHNOLOGY IN RURAL COMMUNITIES

Based on a study conducted in India (Akshay Mathur, 2005), it is seen that science and technology has opened up a vast range of possibilities for the rural communities. In fact, by providing this opportunity to the rural communities which makes up a huge population of India, it is seen to be the next revolution waiting to happen. Driven by a wide dissemination of knowledge, a developing country such as India has made minor improvements in their attempt of utilising ICT for development. In a state that reeks of poverty and where the majority of the people have yet to be connected to the electricity, the idea of utilising ICT appears to be farfetched. ICT would provide the villagers a much better channel to make their complaints apart from being their problems into the limelight. This helps the rural people tremendously as they do not have to go through bureaucratic hierarchy in urban areas. One such project is the "Gyandoot" project. "Gyandoot" means 'messenger of knowledge'. According to a detailed survey in 2001, the Dhar district in madhya Pradesh, India has a population of 1,741,000 where 74% of them live below the poverty line. Only 27% of the population are literate and the economy in Dhar is driven by agriculture as in most parts in India. This government initiated program serves the purpose of creating an intranet in the district by the setup of rural public cyber cafes' alongside data connectivity. Launched on November 29, 1999, it is officially authorized in January 2000. The entire project was executed over a period of 51 days with a cost of INR.2, 500,000 (~ \$ 57,000 USD). A number of 21 rural cyber cafés called "Soochanalya" provides services to about 20-30 villages with a population ranging from 20,000-30,000 people which is strategically located at Block headquarters, village markets and bus pots. The intranet covers 5 out of 13 blocks of the district, serving a population of about half a million. The central hardware of the Gyandoot is based at Dhar district government headquarters with a computer configured as a server possessing a 450MHz Pentium III processor, 128MB RAM, and a 40GB disk drive. To help overcome the problem of illiteracy, local youths are given training to operate these cafes. This project has successfully addressed the difficulty burdened by transaction costs linked with government services. Several hundred villagers travel miles away to these government offices from their remote village with a tiresome journey that could extend up to days. During this period, there are also losses of income and having to put up with the harassment of corrupt and uninterested public officials. The Gyandoot solves this plight for over a half million rural villagers with various access to various government and market related access.

The following survey research (Amirhossein Alibiyagi, 2011) was conducted to investigate the effectiveness of rural ICT Centres in the development of e-governance in the rural communities of the Kermanshah Township, located west of Iran. In Iran, almost 34 percent of the whole population lives in villages. Therefore the government intends to facilitate ICTs to most of them. This is because, if people living in the rural areas do not

participate in the activity of using or sharing ICT, a new challenge would be posed in their development aspect. In a very rapidly advancing world, they would then have to address the problem of information gap. The main purpose of this study is to assess how effective is the ICT centres located in the villages of the Kermanshah Township. The objectives are: 1) to assess ICT centre effectiveness based on achieving their goals and based on benefits received by the households and communities, and 2) to assess the accessibility of these centres. The design of the study was that of a descriptive survey, focusing on 6218 rural households heads of which 367 was selected through stratified random sampling. The data collection was done in two phases where in the first stage a Delphi technique was utilized. This was carried out by the participation of 15 ICT experts to determine the effectiveness indicators. The Delphi technique is described as a group process used to solicit, collate, and direct expert response with the aim of reaching consensus. It can also be explained as a mean of securing and refining group opinions while substituting computed general agreement for the case of an agreed-upon majority opinion. Also, it has been noted that this particular technique is most effective in order to obtain a general agreement from an advisedly elected group of experts. In the second phase, a structured interview was employed using a questionnaire. It is found that the majority of the people choose to not use the internet services despite being easily accessible in the ICT centres. Also, these ICT centres have low impact in improving the villagers' household income, employment rate, diffusion of agricultural information among farmers, and e-commerce. Nevertheless, they do slightly impact the migration rate to urban area, the frequency of the trips to near cities, and postal requirements have all been reduced as a result of e-governance in the rural areas.

Table 1: Delphi Technique-Round One. Level of Agreement With Effectiveness Indicators (n=15)

Indicator	Agree (%)
E-commerce	88.2
Filling leisure time of rural youth	87.1
Improving postal services	84.2
Reducing trips to urban areas	83.6
Improving employment opportunity via job searching	82.3
Increasing access to telephone	81.8
Official registrations by Internet	80.2
Reduction in rural-urban migration	78.8
Developing crop insurance	77.1
Business services	76.2
Growth in the number of community businesses	75.5
Access to rural cooperatives information	73.2
Increasing value of agricultural sales	72.5
Access to information about agricultural markets	71.4
Access to information about agricultural inputs	69.8
Access to agricultural weather information	67.5
Awareness of event in a country	66.1
Reduction in monetary cost to obtain information and communication	65.5
Reduction in time to obtain information and communication	65.4
Access to information about agricultural input and output prices	64.9
Changes in household income	46.1

As displayed in the table1 above the panel's members agreed that 22 items represents the major indicators for assessing the effectiveness of rural ICT centers. E-Commerce with 88.2% agreement was the highest recorded. Over 80% of the panel's members agreed on another six additional categories which were also important indicators in order to measure the

362

effectiveness of ICT centers. The other six indicators included were filling leisure times of rural youth, improving postal services, reducing trips to urban areas, improving employment opportunities via job searching, increasing access to telephone, and official registrations through internet. Overall, it can be said that ICT when implemented is definitely effective in the development of the rural community. Also, rural ICT centers have been proven to help the development in the rural community in the west of Iran with the aid of, for example, ecommerce and dissemination information which is very much needed. Since most of them are farmers, ICT has aided them with the information provided regarding agricultural product and marketing, agricultural subsidies, cooperatives, insurances, finances, and public credits.

The next case study (Andreea-Diana, 2014) is focused on the importance of ICT towards the pupils in the rural area of Romania. When talking about a community, it must be put into consideration that there are many levels of society that's involved. Hence, in this next study, the subject is primarily students and teachers of the rural area. This is also important to be addressed as knowledge is best instilled at a young age as this is a point where the mind is still developing therefore, able to enhance creativity in these pupils. Where ICT is concerned, the rural students too should be able to benefit from it. This paper addresses the educational progress and the importance of using ICT skills and tools by the pupils in Romania. Nevertheless, the primary focus will be on how far the pupils from the rural areas are involved in using ICT to keep in par with the requirements of the European Union. There are different aspects which are also analyzed such as the importance of involving students from the rural area into different ICT projects, which is essential for their personal development in this particular field alongside the progress made by both students and teachers in their skills. The purpose of developing ICT skills is very important by both students and teachers to enhance the quality of the current education system. According to the study Implementation of Methodology and Tools for Monitoring and Evaluating the Rural Education Project-Second Longitudinal Study-Summary (REP) which was conducted in Romania, the final report exclaims that students have developed a liking to learn further about informatics from their teacher. Their teachers on the other hand reckons that the software used be updated to further facilitate teaching lessons. However, there are also limitation factors that hinder the progress of the rural students. Among them are the ownership of a computer and the ease of access to the computers.

This is observed from a study lead by the *Pupil's Time* which sees the time spent on the computers by the pupils as a crucial factor in determining its importance to the pupils.

Table 2: Time Allocated For Computer And Their Residential Area

Residential area	Average daily	Average working days	Average weekend
Urban	42'	36'	1h6'
Rural	12'	12'	48'

Source: (Andreea-Diana, 2014)

The urban students spend more time on their computers than that of the rural students as they have greater opportunities to access the computer. This is an important fact that must be looked into by the government and non-governmental organizations of Romania. If this is over-looked, then the prospects of developing the rural students through the application of ICT would not be able to be attained as one of the basic tools in ICT is not yet available or accessible to those living in the remote areas. Without the tool, it is difficult to thoroughly study the impact of ICT on them as the result may be biased.

This following study (Hassan Bakhshizadeh, 2011) was also conducted in Iran in the Ardabil province involving the Sardabeh village. In general, whilst some already has access to ICT, others are soon to be connected to the privilege that ICT has to offer.

Table 3: Population Situation in Sardabeh Villages

Family		Population		
	Whole	Man	Woman	
4,367	20,579	10, 495	10, 084	25

Source: (Amirhossein Alibiyagi, 2011)

As shown in Table 3, the Sardabeh village involves 25 villages with a population of 20, 579. Also, in this county, most of them are either farmers or dairy farmer; hence, there are a lot of rooms for development to take place with the usage of ICT. The Ministry of IT and Communication of Iran is particularly interested in developing these abandoned and desolated areas for the benefit of those living in Sardabeh village. IT Companies in Iran has also come up with a slogan of "better village, better life with ICTs" to work alongside the Iranian Ministry in aiding the development of the rural community. This is in accordance with the Iranian fourth development program. The focus of the program is to use ICT as a tool whilst providing numerous services to enhance villagers' skills and also to provide job opportunities. Up to date, there are 9950 villages apart from Sardabeh that is utilizing ICT with another 9912 rural ICT centers to be set up soon. For this particular study, both qualitative and interactive planning was used. The fundamental view of interactive planning is that, to understand every problem, they must be looked from a general point of view. This process can be divided into five stages. They are; 1) ordering the disorders; 2) purpose planning; 3) instruments planning; 4) sources planning; 5) implementing and controlling the plan. The first step taken was to investigate the positive and negative point of ICT to determine the possible problems followed by structured and semi-structured interview and finally group discussions to obtain additional information. The findings are such that in the first stage, environmentally, there is no negative point, the positive points includes a reduction in emigration for job purposes and an increase in villagers' knowledge. For cultural and social issues, the positive point is saving time and energy among villagers and the negative point is the unfamiliarity of villagers with ICT. There is no negative point regarding economical issue and its positive point is an increase in the participation of the villagers' in decision making. Among the purpose that must be completed in the second stage would be the decreasing the information gap among urban and rural regions as well as enhancing economy through marketing. The third stage planning would be to increase the number of telephone and mobile lines. The fourth stage would be an inclusive of sufficient facility to promote the tourism industry as Sardabeh is rich in cultural heritage. The final stage would be to have the government, non-governmental organization and IT companies working alongside one another and the villagers to provide the needed plans.

According to the findings of this study, ICT when utilized is able to promote communication among the villagers, for instance in spreading the latest information apart from catering to most of their needs especially with the help of the Internet. Most of the rural communities are also very welcoming towards the incorporation of ICT into their daily lives. They believe that it has a lot of advantages to be offered especially in increasing their knowledge in agriculture. This study also proves that ICT should be based on local organization and local control should be fitted to local specification and characteristics. This is essential to prevent the negative aspects from overthrowing the positive aspects of ICT.

SCIENCE AND TECHNOLOGY IN UNDERSTANDING ISLAM

Science and technology plays a very significant role in raising awareness of rural communities to the knowledge of Islam. It is a starting point in making them as informative community and sensitive towards current information developments. I have conducted several studies to distinguish how ICT can aid rural communities in their daily lives in the village.

Based on my study (Mohammed, 2011), the findings shows that rural communities intend to utilize ICT in their live if the content are related to their needs. From the data that has been collected, it indicates that most of the respondent need information related to religion. Based on this result, I've developed a web based information kiosk that offers the information about Islam and then a pilot test study being conducted using the villagers. To be specific, in this research I focused on one set of respondent which is the senior citizen. From the result of the pilot study, I found that 97% believed the content that has been provided are related to their needs and a clear cut 100% decision from all the respondents where they agreed if the related content being extend to other sections of information.

From another study (Abdul Hapes Mohammed, 2014) that I conducted, I focused on another set of respondent which is women who work as a farmers and fulltime housewife. The method that I used to extract the information by using face to face interview and 40 respondents involved in this session. Based on the outcome from the interview, I found that these set of respondents interested in several type of information and the highest percentage is on religion aspect which carry 72.5% followed by health and medicine 57.5% and education also 57.5%. After I analyzed the result, a platform were setup that combine all three type of information that classified as religion, health and education. Using the same technique, to identify whether the content able to attract them to practice ICT a pilot study being conducted and 30 respondents involved in this session. Result shows 100% respondents agreed to the content offered to them because it's related to their needs and they also agree if the content being use by all communities.

The result from both studies backing the ideas that there is a strong relationship between understanding the knowledge in islam and the knowledge of using ICT as a tools.

DISCUSSION

A success of a project can be seen by the impact it has on people. Where ICT is concerned, various studies has indeed proven that it does give a major impact in enhancing the development of rural communities in aspects such as information gathering, business, economy, agriculture, and etc.

For example, by the execution of the "Gyandoot" project in India, has been able to provide commodity marketing and information services. Apart from that, land records has also been made much easier as a printout is easily available rather than having to go through meticulous steps in obtaining one. Corruption on the other hand makes the scenario much worse adding difficulty to an already difficult life of the rural community. Applications registrations and governmental complaints are also made much easier. The ICT does not only improves the quality of life for the rural community, but it is also subconsciously promoting the betterment of the nation itself with better management practices and the managements of risks through microfinance. Private sector companies are also more willing to invest and work alongside the government as they see real and viable opportunities present.

Apart from that, this is also proven through from the case study conducted in the West of Iran where the effectiveness is focused on services and e-commerce apart from increasing information dissemination among them. The same impact can be drawn from the Sardabeh case study.

The same is observed in Romania. The rural school children, has progressed in their ICT skills and tools as feel a strong need in mastering it. It has also changed both teaching and learning habits, hence, increasing the quality of education there.

Whereas in Malaysia, there might be a different story and challenges. Although rural society realize that the importance of ICT in their lives, still some of them still perceive ICT will adversely affect them. This is a challenge that must be confronted by the various parties, whether government or NGOs in ensuring penetration of ICT in rural areas could be improved. Even so, with only depends on the provision of infrastructure alone is not enough to safeguard the success of this idea because it depend on the rural community itself. They need to realize comprehend these things from a positive perspective that their understanding in a variety of things, especially things correlated to Islam may be increased from time to time.

REFERENCES

- Abdul Hapes Mohammed, U. K. (2014). Spesific Content Development: A study on targeted group in rural communities in bridging digital divide. 5th International Conference on Science and Technology: Appications imn Industry& Education. Penang.
- Akshay Mathur, D. A. (2005). ICT and rural societies: Opportunities for growth. *The International Information & Library Review*, 37, 345-351.
- Amirhossein Alibiyagi, M. K. (2011). Effectiveness of Rural ICT Centers: A perspective from west of Iran. *Precedia Computer Science*, *3*, 1184-1188.
- Andreea-Diana, S. (2014). The importance of involving pupils from the rural area in using ICT skills and tools a milestone. *Procedia-Social and Behavioral Sciences*, *3*, 36-43.
- Hassan Bakhshizadeh, M. H. (2011). Rural ICT interactive planning in Ardabil province: Sardabeh case study. *Procedia Computer SCience*, *3*, 254-259.
- Mohammed, A. H. (2011). The Importance of Local Content Development to Increase The Digital Access for Rural Community Using Telecenter. *International Conference of Public Policy & Social Sciences*, (p. 8). Sarawak.
- Pitikom Temgtrakul, J. M. (2011). Access to and penetration of ICT in rural Thailand. *Telecommunications Policy*, *35*, 141-155.