Evolving Technology on Muslim Family: Conflicts and Solutions

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Abstract

Nowadays, information and communication technology (ICT) is being used in completing daily tasks of Muslims family. The tasks are including education, management services, banking, and more. The rapid developing of the technology such as gadgets, online services affected the families that lead to dilemma for society. There are positive and negative impacts of the ICT. Even though there are advantages, there are also conflicts and shortcomings that affected our religious beliefs and ethics. Therefore, this paper will discuss this issue and suggest solutions from the Islamic perspective and alternative solutions. As a result, this paper suggests that Muslims should utilize ICT wisely, intelligently and with integrity, guided by Shariah.
Keywords: Information and communication technology, ICT, Muslims family, conflicts, solutions

Abstrak

Saat ini, teknologi informasi dan komunikasi (TIK) digunakan dalam menyelesaikan tugas sehari-hari keluarga Muslim. Tugas-tugas tersebut mencakup pendidikan, layanan manajemen, perbankan, dan lainnya. Perkembangan teknologi yang pesat, seperti gadget dan layanan online, memengaruhi keluarga dan menyebabkan dilema bagi masyarakat. Terdapat dampak positif dan negatif dari TIK. Meskipun ada keuntungan, juga terdapat konflik dan kekurangan yang memengaruhi keyakinan dan etika religius kita. Oleh karena itu, makalah ini akan membahas isu ini dan mengusulkan solusi dari perspektif Islam serta alternatif solusi.

Kata kunci*: teknologi informasi dan komunikasi, TIK, keluarga Muslim, konflik, solusi*

Introduction

The rapid evolution of information technology has been transforming and evolving in enormous situations. This transformation can be observed where people more depend on online. Gadgets, tools, online platforms, online applications; can be considered as important needs. Muslims ummah or society, centering Muslim family also included in this dilemma. There are positive and negative effects towards them in many ways, in daily life, in terms of local norms and values, and most importantly religious beliefs and cultural beliefs. Muslims parents also faced the dilemma in dealing with these technologies to be parallel with Islamic teachings.

Information and communication technology (ICT), brought positive and negative impacts on society, leading to social dilemmas in daily life. In many years,[1] ICT has affected all sectors such as, government services, education, administration, business, medical care and agriculture. This situation also includes artificial intelligence (AI) technology. Most of these services are using online services dealing with their customers.

One of the information technologies is social media. Social media network is one of the most popular and important platforms to share information and knowledge to others. People can connect with others and communicate online using social media platforms.

Social media is two ways of communication, where the receiver of the information can react back to the informer. The system enables people to convey information in one-to-many, or many- to-many; which one informer can share information to others and various informers can share with other people concurrently.[2]

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[1]Ivonne Angelica Castiblanco Jimenez and others, 'Commonly Used External TAM Variables in E-Learning, Agriculture and Virtual Reality Applications', *Future Internet*, 13.1 (2020), p. 1–21.

[2]Yogev Matalon and others, 'Using Sentiment Analysis to Predict Opinion Inversion in Tweets of Political Communication', *Scientific Reports*, 11.1 (2021), p. 7250.

Using ICT in education such as Qur'anic learning among the children, is fun and exciting. However, the authenticity of the verses and translation must reliable and valid sources to prevent confusion and falsely.

Recently there is a new technology known as Artificial Intelligence also included in this issue. Although it has beneficial to the society, yet it is also carried the negative influences towards the Muslim such as discrimination, biases, loss of privacy, difficulty identifying liabilities, unemployment, and concentration of power and wealth in a few stakeholders.[3]

Ahmed Shan-A-Alahi, Muhammad Nazmul Huda in 2017, stated that there are identified positive position of IT, with weaknesses that can be defined in a comparative manner. This study thus describes the role of IT and its effectiveness. Meanwhile, Md. Shahidul Haque[4] (2016) in his research emphasized the significance, difficulties, and potential of using information and communication technology and media for Islamic promotion operations.

Islam encourages its ummah to adopt any new beneficial developments in any fields including science, technologies as (*fard kifayah*). Because of the teachings in Islam from the period of Prophet Muhammad until now, the Muslims has been guided to accept any goods new knowledge and have solutions based on the Quran and sunnah. The latter form of knowledge includes tanzur (observation), tadabbur (deliberation), tathakkur (recollection), takfakkur (consideration), tabassur (understanding) and ta'aqul (rationalization), all of which is mentioned in the Qur'an as mechanisms to gather knowledge.[5]

Khairuddin and Mohammad (2021)[6] described that Muslims live in non-Muslim country might have difficulties in practicing Islam such as daily prayer. There are areas where is difficult to hear azan. Therefore, various applications on phone developed to assist this Muslims group.

Any development of the ICT should consider the ethical in Islamic teaching. Artificial intelligence for example, encompasses with ethical future, especially at the level of privacy, manipulations and others.[7] All these elements are vital to the Maqasid shariah. This article is focusing on the ICT impacts toward Muslims Ummah, concentrating on family. It articulates on the evaluation, beneficial and

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[3]Ezieddin Elmahjub, 'Artificial Intelligence (AI) in Islamic Ethics: Towards Pluralist Ethical Benchmarking for AI', *Philosophy & Technology*, 36.4 (2023), p. 73.

[4]Shahidul Haque, 'Information and Communication Technology in Islamic Propagation Lack of Authenticity Addiction ':, *International Journal of Information and Communication Technology Research*, 6.8 (2016).

[5]Sulaiman, Kamal-deen Olawale. "The effects of information and communication technologies (ICT) On the teachings/learning of Arabic and Islamic studies." Ar-Raniry: International Journal of Islamic Studies 2, no. 1 (2020), p. 1-26.

[6]Mohammad Amin Mohammad. Sheikh Khairudin, Sheikh Muhamad Hizam, 'The Role of Information Technology on the Muslim Community in the Era of Globalization and Digitalization', *Journal of Information Technology Management*, 13.3 (2021), p. 178–86.

[7]Mawloud Mohadi and Yasser Tarshany, 'Maqasid Al-Shari'ah and the Ethics of Artificial Intelligence', *Journal of Contemporary Maqasid Studies*, 2.2 (2023), p. 79–102.

harmful of the ICT globally and Muslims. This article applies the content analysis from various articles and previous academic literatures to compile, review, and deliberated on the issues.

Muslims Dilemma

Kardara et al. (2015)[8] suggested that among the social networks' users, there was a person known as influencer, who had the ability to influence and attract the other person such as followers to value activity or any issue, which can carry positive or negative vibes exposed to social dilemma such as spreading fake news, cyberbullying, internet addiction, and privacy. The influencers targeted their followers who are young people, by posting various videos on their social media platform in positive or negative effect.

Vraga and Jacobsen (2020),[9] suggested that there are three main issues raised and should be concerned: information overload, information uncertainty, and misinformation. This situation can affect the psychological well-being among people, such as anxiety.[10]Trusted information can be spread through television and social media platforms to lessen anxiety.

Today's organizations preferred a new technology identified as block chained technology. This technology comes with the technology of data sharing that can be integrated, open and transparent which leads to leak of the privacy of information.[11] Yet, in Islam we are prohibited to stalk and talk bad on someone.

Parents should play their role wisely to monitor and control their children. As to convince their children with information, such as recent issue on vaccination[12] of this new pandemic Covid 19. It was found that there is significant relationship between parents' attitudes and the trust of their children. The quality time consuming between parents and children should be practice with quality activities such as baking, gardening and more. These types of activities can built trust between them.

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[8]Magdalini Kardara and others, 'Large-Scale Evaluation Framework for Local Influence Theories in Twitter', *Information Processing & Management*, 51.1 (2015), p. 226–52.

[9]Emily K. Vraga and Kathryn H. Jacobsen, 'Strategies for Effective Health Communication during the Coronavirus Pandemic and Future Emerging Infectious Disease Events', *World Medical & Health Policy*, 12.3 (2020), p. 233–241.

[10]Malik Sallam and others, 'COVID-19 Misinformation: Mere Harmless Delusions or Much More? A Knowledge and Attitude Cross-Sectional Study among the General Public Residing in Jordan', ed. by Flávia L. Osório, *PLOS ONE*, 15.12 (2020), p. e0243264.

[11]YanRu Kong and JiaWu Yue, 'Game Studies on Accounting Entity Behavior Based on Blockchain Technology', in *Proceedings of the 2020 International Conference on Cyberspace Innovation of Advanced Technologies* (ACM, 2020), p. 512.

[12]Boban Melovic and others, 'The Impact of Online Media on Parents' Attitudes toward Vaccination of Children—Social Marketing and Public Health', *International Journal of Environmental Research and Public Health*, 17.16 (2020), p. 5816.

Act of bullying among online social media networks users has arisen. Body shaming[13] and school bullying[14] are among issues that have been brought bad impact by online social media. Fosch-Villaronga et al (2021) [15] argued that social differences on gender, race, sexual orientation commonly practiced in online social media. can affect self-esteem, confidence and authenticity of human being.

Addiction of using social media also changed the quality of sleep time among the preschool children.[16] The screen time used by the preschool did not only affect the sleep time, but also for other quality time such as studying. People are highly addicted to involve in e-gambling is harm oneself.[17] These effects can impair the social life of the person. Besides, Duong (2021)[18], concerned on online shopping behavior also can be addicted, too much time spent on internet shopping correlated with frequency of daily internet online shopping. Pornography addiction is a situation of emotion self-loss control.[19] Overuse of social media has led to addiction, loneliness, depression, and sleep time.[20]

In Islam, issue of plagiarism of intellect is prohibited, as it is opposed of Islamic teaching of amanah (trust) and honesty.[21] Yet, the plagiarism often occurred among the higher level of education, in college or university.[22] Besides, plagiarism[23] claimed that students would face lack of confidence and critical thinking in their

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[13]Timothy M. Piatkowski and others, 'The Impact of Social Media on Self-evaluations of Men Striving for a Muscular Ideal', *Journal of Community Psychology*, 49.2 (2021), p. 725–736.

[14]Hee Moon and Seonah Lee, 'Moderating Effects of Socio-ecological Factors on the Relationship between Adolescent Exposure to Media Violence and Attitudes towards School Bullying', *Journal of Advanced Nursing*, 76.11 (2020), p. 2921–2932.

[15]E. Fosch-Villaronga and others, 'A Little Bird Told Me Your Gender: Gender Inferences in Social Media', *Information Processing & Management*, 58.3 (2021), p. 102541.

[16]Qiu-Ye Lan and others, 'Sleep Duration in Preschool Children and Impact of Screen Time', *Sleep Medicine*, 76 (2020), p. 48–54.

[17]Xiaolei Deng, Tilman Lesch, and Luke Clark, 'Pareto Distributions in Online Casino Gambling: Sensitivity to Timeframe and Associations with Self Exclusion', *Addictive Behaviors*, 120 (2021), p. 106968.

[18]Xuan-Lam Duong and Shu-Yi Liaw, 'Determinants of Online Shopping Addiction among Vietnamese University Students', *Journal of Human Behavior in the Social Environment*, 32.3 (2022), p. 402–14.

[19]Lorenzo Zamboni and others, 'Covid-19 Lockdown: Impact on Online Gambling, Online Shopping, Web Navigation and Online Pornography', *Journal of Public Health Research*, 10.1 (2021).

[20]Thi Truc Quynh Ho, 'Facebook Addiction and Depression: Loneliness as a Moderator and Poor Sleep Quality as a Mediator', *Telematics and Informatics*, 61 (2021), p. 101617,.

[21]Bukuri Zejno, 'Plagiarism in Academic Writing among Students of Higher Learning Institutions in Malaysia: An Islamic Perspective', *Journal of Education and Social Sciences*, 9.3 (2018).

[22]Alaa A. AlDahdouh, 'Information Search Behavior in Fragile and Conflict-Affected Learning Contexts', The Internet and Higher Education, 50 (2021), p. 100808.

[23]Arti Siddhpura and Milind Siddhpura, 'Plagiarism, Contract Cheating And Other Academic Misconducts In Online Engineering Education: Analysis, Detection And Prevention Strategies', in 2020 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE) (IEEE, 2020), p. 112–119.

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academic. It also led to cheating online behavior which is negative influence for the society also.

Social dilemma from Islamic perspective

Islam is a complete religion covered in all human life aspects. Quran and Hadith is always relevant to be referred[24] even condition of life is changing due to the new technology. As for this issue in social dilemma, there are few Quranic verses and Hadith that related to this matter, for example:

1. View on credibility of information. As Allah Taala said:

    O you who have believed, if there comes to you a disobedient one with information, investigate, lest you harm a people out of ignorance and become, over what you have done, regretful. (Al- Hujurat:6).

2. View on Security of Information. As Allah says:

    So by mercy from Allah, (O Muḥammad), you were lenient with them. And if you had been rude (in speech) and harsh in heart, they would have disbanded from about you. So pardon them and ask forgiveness for them and consult them in the matter. And when you have decided, then rely upon Allah. Indeed, Allah loves those who rely (upon Him). (Ali-Imran:159).

3. View on Cyber Bullying. As Allah says:

    Invite to the way of your Lord with wisdom and good instruction and argue with them in a way that is best. Indeed, your Lord is most knowing of who has strayed from His way, and He is most knowing of who is (rightly) guide. (An-Nahl:125).

    Also as narrated in hadith:

    Narrated Abu Umamah:

    The Prophet (ﷺ) said: "*I guarantee a house in the surroundings of Paradise for a man who avoids quarrelling even if he were in the right, a house in the middle of Paradise for a man who avoids lying even if he were joking, and a house in the upper part of Paradise for a man who made his character good*."
    (Abu Dawud: 4800).

4. View on Addiction of Internet. As narrated in hadith:

    Ibn Abbas reported: The Prophet, peace and blessings be upon him, said, "There are two blessings which many people waste: health and free time." (Sahih Bukhari: 6049).

5. View on Copyright. As Allah says:

    Verily, Allah commands that you should render back the trusts to those, to whom they are due; and that when you judge between men, you

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[24]Arti Siddhpura and Milind Siddhpura, 'Plagiarism, Contract Cheating And Other Academic Misconducts In Online Engineering Education: Analysis, Detection And Prevention Strategies', in 2020 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE) (IEEE, 2020), p. 112–119.

judge with justice. Verily, how excellent is the teaching which He (Allah) gives you! Truly, Allah is Ever All-Hearer, All-Seer. (An-Nisaa':58).

Solution from Islamic Aspects

Islam has promoted barrier and limitation, wasatiyyah or moderation (check and balance), and awareness towards behavior and the consequence. Overly done in anything can lead to negative consequence. Based on the Maqasid Syariah, there are five fundamentals or elements to secure: life, lineage, faith, intellect, and wealth. These elements are related to social life, including the social dilemma towards the ICT. As Muslims, we must know the barrier and limitation in doing something, which is must parallel with the Syariah law, to protect faith (deen) such as avoiding the fake news as referred to bring fitnah to others. Besides, the intellectual aspects also need to be protected, by avoiding much spending time on using online social media among the adolescent such as school and university students. Life also must be protected, as restraining us to harm other people life, such as cyberbullying which can lead to physical bullying. Exaggerating spending money on online shopping, e-gambling undoubtedly brings negative effects, where our wealth is important worth that need to be protected. Lastly, the protection of lineage of someone, such as avoiding watching online pornography video, that can lead to sexual criminal.
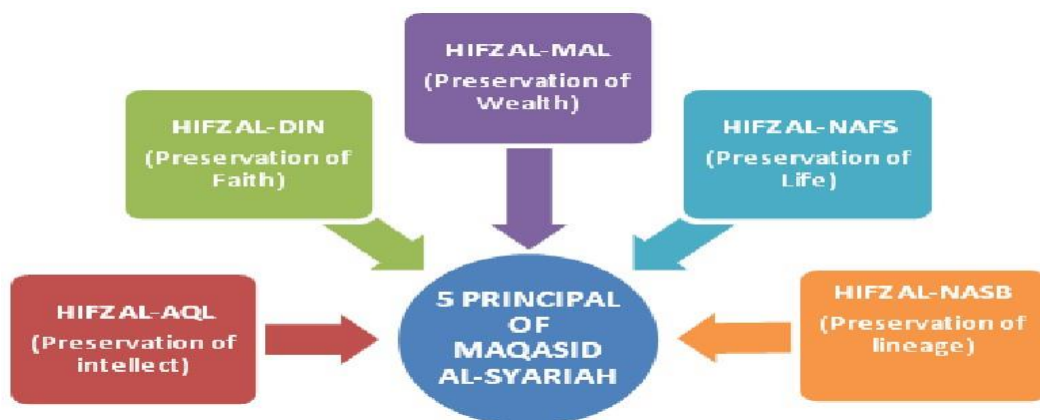

Figure 1: showed the elements of Maqasid Syariah.[25]

From the fiqh (Islamic jurisprudence) Qawaid al-fiqhiyyah is considered as a tool to help the Islamic law that deal with the complication due to new change of period. Some principles of qawaid fiqhiyah that can be adopted in this issue. The concept of; *All dharar (harm/loss) must be eliminated,* and *"Dharar (harm/loss) must be prevented as much as possible"*. These schemes are related to prevent

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[25]Salah T. Alshammari, Aiiad Albeshri, and Khalid Alsubhi, 'Integrating a High-Reliability Multicriteria Trust Evaluation Model with Task Role-Based Access Control for Cloud Services', Symmetry, 13.3 (2021), p. 492.

any harm to society or a person. In concluded that any possible harm, for example addiction in online shopping, cyberbullying needs to be eliminated or prevented immediately.

Abdullah bin Amr reported: The Messenger of Allah, peace and blessings be upon him, said:

The Prophet (ﷺ) said, "*A Muslim is the one who avoids harming Muslims with his tongue and hands. And a Muhajir (emigrant) is the one who gives up (abandons) all what Allah has forbidden*." (Sahih al-Bukhari: 10).

Other than that, the ICT should be come to give positive impact on the society, as "Something that applies based on customs is the same as something that applies based on the syara" (as long as it does not contradict the syari'at)". "The leader's policy towards the people must follow the benefit (society)" this can be related to the government policy law for online security, privacy information that can prevent the open and transparency of one person. Parallel with the concept of bringing benefits to the society of the ICT, all the positive effects are based on Allah commandment "Where there is a benefit, there is Allah's law".

Alternatives Solutions

Other alternative solutions are the development of Inter Planetary File System (IPFS) and Perceptual hash image for the security of the information.[26] High security system adopting the task role-based access control enables the system to enhance the security and privacy of information stored in cloud system.[27]

Clustering or grouping the information on online social media based on topics using Markov Markov-based computational method on different dataset enable to detect the fake news and disseminate them.[28] Garcia and Gil (2019), claimed that copyright issue of the information can be overcome with the semantic and ontology method, manage the huge information with trust and confidence of the information credibility.

Counselling session also effected in reducing the internet addiction, manage and tolerance with the amount of internet usage. Perera and Fernando (2021) suggested that cyberbullying can be diminished with machine learning with the ability to detect text contain negative terms or words. A new algorithm approach to improve the detection of the words use based on the fast text and word similarity scheme. Common words and terms that carried similarity in meaning can be detected.

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[26]Ali Muwafaq Alchaqmaqchee and Saad Najim Alsaad, 'Design Scheme for Copyright Management System Using Blockchain and IPFS', *International Journal of Computing and Digital Systems*, 10.1 (2021), p. 613–18.

[27]Salah T. Alshammari, Aiiad Albeshri, and Khalid Alsubhi, 'Integrating a High-Reliability Multicriteria Trust Evaluation Model with Task Role-Based Access Control for Cloud Services', Symmetry, 13.3 (2021), p. 492.

[28]Wilson Ceron and others, 'COVID-19 Fake News Diffusion across Latin America', *Social Network Analysis and Mining*, 11.1 (2021), p. 47.

Conclusion

Any technology should be utilized wisely and intelligently among the Muslim. In our daily life, communication technology is one of most important things today. We use phones, internet, online application i.e., social media to communicate with people. As our intention is good, then there will be reward by Allah. Da'wah, learning, teaching, are part of good deeds that able to improve our social life, in terms of spirituality, education and more. People should have the integrity, wise and ethics in using the ICT. We should know how to manage the time on the internet, restrain ourselves in badmouthing others, or attacking them personally. Family bonding between the members can reduce the usage and addiction of the ICT. Ethics of spreading and sharing of the received information should be concerned. Thus, Islamic teaching is complete and perfect in every way to prevent harm to self and society. Thus, the use of ICT among Muslims must be guided by Shariah compliance.

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