



Manuscript Title: Islamic Innovation in Malaysian Public Service

Author(s): Ilhaamie Abdul Ghani Azmi & Junaidah Hashim

Accepted Date: 27-February-2021

Please cite this article as: Ilhaamie Abdul Ghani Azmi and Junaidah Hashim. 2021. Islamic innovation in Malaysian public service. *Kajian Malaysia* (early view).

This is a provisional PDF file of an article that has undergone enhancements after acceptance, such as the addition of a cover page and metadata, and formatting for readability, but it is not yet the definitive version of record. This version will undergo additional copyediting, typesetting and review before it is published in its final form, but we are providing this version to give early visibility of the article.

ISLAMIC INNOVATION IN MALAYSIAN PUBLIC SERVICE

Ilhaamie Abdul Ghani Azmi^{1*} and Junaidah Hashim²

¹Department of Sariah and Management, Academy of Islamic Studies, University of Malaya, Kuala Lumpur, MALAYSIA

²Department of Business Management, Kulliyyah of Economics and Management Science, International Islamic University of Malaysia, Selangor, MALAYSIA

*Corresponding author: ilhaamie@yahoo.com

ABSTRACT

*At the moment, there are few articles that discuss on Islamic innovation. Henceforth, this article will try to elaborate on this matter with regards to the concepts, principles, purpose, factors of innovation in Islam, famous Islamic scholars for innovation and modern Muslim innovators. In addition, this article will also elaborate the concepts of Islamic innovation which are *tajdid*, *islah* and *ijtihad* in Malaysian public service context by using library research method i.e. through examining online reports, document review from previous research and *al-Quran* and *hadith* verses. This understanding is pertinent as Malaysia is an Islamic country whereby Islam is the official religion. Public sector should be spearheading innovation in the country so as to elevate the country to greater heights.*

Keywords: innovation, public service, Islam, Malaysia, *tajdid*, *islah*, *ijtihad*

INTRODUCTION

Islam does not disregard innovation. In fact, innovation is very important in Islam. Without innovation, Islam cannot advance and grow. Hence, there are some terms that are referring to innovation in Islam such as *islah*, *tajdid*, *ijtihad* and *bidaah*. *Islah*, *tajdid* and *ijtihad* are good innovation while *bidaah* is innovation in religion which can be commendable or bad. However, this article does not concern about innovation in religion. The objective of this paper is to discuss more on the innovation at workplace especially in Malaysian public

service. Malaysia is an Islamic country whereby Islam is the official religion. Innovation is vital and crucial in public sector in order to deliver quality services to the public. This is because despite improvement made in Malaysian public service, it still suffers from inefficiency (Siddiquee 2006). Thus, this article will explain on the concepts, principles, purpose, factors of innovation in Islam, famous Islamic scholars for innovation and modern innovators. In addition, this article will also elaborate on the concepts of Islamic innovation from Malaysian public service context.

Concepts of Innovation in Islam

Innovation means improvement or new idea. It is not invention. Invention is totally making new product or service such as telephone as done by Alexander Graham Bell in 1875 or computer by Charles Babbage in 1838 and others. The terms that are linked with innovation in Islam are *islah*, *tajdid* and *ijtihad*.

al-'Islāh is an Arabic word usually translated as "reform", in the sense of "to improve, to change, or to put something into a better position." (Basir, Mohamed, Ismail, and Azmi 2016). However, according to Malik (2019), another word for *islah* i.e. *taghayir* means to renew in a positive way. *Islah* also has a connotation with *Tajdid*. As Allah says in Surah an-Nisa, verse 146:

Except those who repent and **improve** (cleanse their souls' hearts) and hold fast to Allah and make their religion pure for Allah. Those are then with the believers, and Allah will soon grant the believers a Mighty Reward.

Tajdīd; (Arabic: تجديد, literally means *renewal*). In an Islamic context, *tajdīd* refers to comprehensive basic change in concepts, philosophy, content, direction, and results with progressive and dynamic orientation in accordance to the time (Khosim, Husin and Salaeh 2018). One who practices *tajdīd* is called a *mujaddid*. As Allah says in Surah al-Isra, verse 49: "And they say, "When we are bones and crumbled particles, will we [truly] be resurrected as a **new** creation?"

According to Baba (2007), *tajdid* is more towards transforming. In other words, *tajdid* concerns more on the objective of innovation i.e. for the betterment of *ummah*. This is due to Allah's command in Surah al-Syua'ra, verse 83: "And do not deprive people of their due and do not commit abuse on earth, spreading corruption."

Ijtihad (Arabic: اجتهاد *ijtihād*, literally means physical or mental *effort* exertion in order to achieve certain objectives). From terminology, it means to exert effort in order to get relief from doubts by using reasoning and interpretation. It is an Islamic legal term referring to independent reasoning through critical thinking in finding a practical solution to a new legal question or problem by referring to Quran, Hadith and *ijma'* (Hashim and Mizerki 2010) and by conducting *tahqiq al-manat*, *takhrij al-furu'* 'ala al-furu', *takyif al-fiqhi* and *istinbat* processes (Abdallah 2006; Ismail, Rosele, Mohamad and Sulaiman 2015; Abd. Rahman and Rosele 2018). A person who wants to do reasoning should be qualified and expert in Arabic language, jurisprudence and Islamic Law and possess piety and integrity. *Mujtahid* is an expert and pious person who does reasoning and interpretation (Smock 2004; Abd. Rahman and Rosele 2018). According to Ismail et al (2015), there are two types of *ijtihād* which are *ijtihād tarjihi* dan *ijtihād istinbati*. Furthermore, there are three methods of *ijtihād* which are *ijtihād istislahi*, *ijtihād 'urfi* dan *ijtihād maqasidi*. However, according to Azhar, Hussain, Md. Nor and Othman (2016), there are two types of *ijtihād* which are *al-Ijtihad al-Intiqā'i* that are selective comparative *ijtihād* i.e. to re-*ijtihād* or to relook at past *ijtihād* of scholars, then to compare and select the best in terms of suitability, benefits and priority. Among the decision criteria are the opinion should be suitable with the present lifestyle, beneficial to people, simplify people's life, emphasizing on *Maqasid Syariah* and prevent from harmful and destructive (mafsadah) matters. Thus, in exerting new legal terms in these fields, one does not have to be a *mujtahid*. Second is *ijtihād insyā'i* which is innovative constructive *ijtihād* i.e. to exert legal regulation which is not available previously. Rosele, Md Ariffin, Ramli and Ismail (2016) added the third form of *ijtihād* which is the combination of both types of *ijtihād* i.e. to select the most suitable and the most credible opinion. Both of these authors agree that *Ijtihad* can be done individually (*ijtihād juz'i* i.e. according to one's specialization or in group (*ijtihād jama'i*). However, collective *ijtihād* is more significant as it is the *fatwa* (Islamic verdict) exerted by the *fatwa* council either at state or federal level (Ibrahim, Ibrahim, Mohd Noh, Jelani and Mohd. Nor 2019) and thus, it is higher than individual *ijtihād* (Hasan 2003). There is some unique of *ijtihād* whereby it is irrevocable as it is made according to its special requirements such as needs according to place, circumstance, intention, tradition and time. Thus, *ijtihād* is not merely opinion or judgment with good reasons but it involves certain process, methodology (Abdalla 2016) and sources (Hashim and Mizerki 2010). Henceforth, a quite popular type of thinking today known as *to think out of box* is not considered as *ijtihād* as it does not mean to innovate based on Islamic principles but to think out of the circle.

Islam ordains its people to innovate. The encouragement to innovate could be seen clearly from these two following Hadith:

From Muaz, Prophet Muhammad sent Muaz to Yemen. The Prophet (peace be upon him) said, "How do you decide things?" (Muaz replied), "I decide by the law of Allah." The Prophet (p.b.u.h) said, "If it is not in the book of Allah?" Muaz said, "I will decide with the Sunnah of the Prophet". The Prophet (p.b.u.h) said, "If it is not in the Sunnah of Prophet Muhammad?" Muaz replied, "I swear by my opinion". The Prophet (p.b.u.h) said, "Praise be to Allah who has guided the Prophet (Riwayat al-Tirmidhi).

The Prophet (p.b.u.h.) stated that: "if the ruler has judged a new event and made *ijtihad* rightly, he will get two rewards and if he judged it wrongly, he will get one reward." (Riwayat Bukhari, 1987, Vol. 6, *hadith* No. 6919, p. 2676).

According to Azhar et al. (2016), there is another form of *ijtihad* which is contemporary *ijtihad* or contemporary Islamic jurisprudence that refers to the fatwa research methodology in a way to answer to new legal questions that arise in society specifically on science and technology issues. There are no direct references to Qur'an and Sunnah as for cloning and genetic modification, for example.

Rosele, Md Ariffin, Ramli and Ismail (2016) also concur on this matter. Both groups of authors agreed that contemporary *ijtihad* (*al-mu'asir*) is implemented in accordance to time and tradition. However, other than science and technology, there are other fields that also need *ijtihad* such as food, politics and administration, economics and banking. This is due to civilization and globalization that raise the need of someone to observe *ijtihad*.

On the other hand, *bid'ah* (Arabic: بدعة) refers to innovation in religious matters. *The Prophet said: "Every bid'a is misguidance, and the path of every misguidance [leads] to the Fire."* Harun, Abdullah and Rosele (2018) supported this statement that innovation in religious matters is misguidance and forbidden. Thus, it is out of scope of the focus of this article. However, according to them, if the activity is to produce *maslahah* or benefits in this life and Hereafter, it is called as *sunnah hasanah* or *usul al-fiqh masalih al-mursalah* which is permissible. On the other hand, Wahid and Mohd Nor (nd) call it as *al-ibda* (innovation). Thus, there are a lot of connotation of *bidaah* which is not the focus of this article.

Islamic Principles in Innovation

Islam has underlined some principles for people who want to innovate. First and foremost, innovation in Islam should benefit people and not prohibable (haram)

i.e. according to Quran and Sunnah or Islamic principles known as Shariah. In other words, the ingredients or materials and process made by innovation should be permissible (halal) i.e. free of pork, intoxicants, interest (riba) and gambling.

Maqasid Shariah or the purposes of Shariah is classified into three levels which are necessities (*ḍaruriyyāt*), supporting needs (*ḥājiyyāt*) and luxury (*taḥsiniyyat*). Necessities are further classified into what preserves one's faith (*ad-dīn*), soul (*an-nafs*), mind (*al-'aql*), offspring or procreation (*an-nasl*), and wealth (*al-māl*) (Tengku Muda, Mohd and Md. Hashim 2017). The importance of these necessities is arranged in order accordingly (Abdul Rahman, Ramli, Shaikh Mohd Salleh, and Rosele 2013). Thus, this shows that the order of the importance of innovation in Islam is in accordance to the level of necessities. Hence, innovators should strive on coming up with innovation concerning faith first as it is the most important, and next is soul and so forth. Wealth is the least importance. This means that the innovators should think more of some innovation in preserving faith such as mobile prayer room and Shariah compliant hospital (Sharif and Rahman 2016). On preserving soul, one may innovate substitute halal food or drink. On preserving healthy mind, one may innovate special apparatus or tools for long life learning or special diet food to enhance IQ. On preserving offspring, one may innovate drugs that can prolong the longevity of life. Finally, one may innovate online payment on preserving wealth (Sobian 2011).

According to Tengku Muda et al (2017) and Abdul Rahman et al. (2013), the *ḍaruriyyat* are called necessities since their non-availability will result in disruptions and termination of life in this world and in thereafter and this results in losing salvation and blessings. *Maslahah* or *maqasid syariah* according to Al-Ghazali is an expression for the acquisition and justification of *manfa'a* (benefit) or the removal of *maḍarra* (injury and harm). Thus, innovation according to Islam, must comprise those five types of necessities.

Ismail, Ahmad and Khalid (2016) also concur on this matter. They added further that, *maslahah* is a branch of one of the important methods of the *fiqh* method known as *al-darar yuzal* (harm must be eliminated). The maxim is derived from a Hadith of the Prophet PBUH: *ضارر ولا ضرر لا* (Riwayat Ibn Majah n.d) which means "there should be no harm nor return of harm" (Tengku Muda et al 2017).

Meanwhile, *hajiyyaat* are the interests which are required for the betterment of the society. Thus, its absence may not create chaos, unlike *daruriyyat* but it may lead to a slight hardship and difficulty. For example, religious rituals, transactions, customs and punishment. While *taḥsiniyyat* are beautification interests leading to a desirable status. For example, wearing perfume in mosque

and while attending assembly (Tengku Muda et al. 2017; Abd. Rahman et al. 2017). Thus, its absence does not lead to disruptions as *daruriyyat* and difficulties as *hajiyyat* (Abd. Rahman et al. 2017).

Purpose of Innovation in Islam

According to Wahid et al (nd), innovation in Islam serves the purpose of:

1. Vicegerent

And [mention, O Muhammad], when your Lord said to the angels, "Indeed, I will make upon the earth a successive authority." They said, "Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?" Allah said, "Indeed, I know that which you do not know." (Surah Baqarah, verse 30)

As the vicegerent of the earth, it is our duty to ensure that our planet is not polluted and destructed. To ensure that our planet and community are prospering, thus; innovation is crucial. And this is the purpose of our existence and creation in this universe.

2. Tauhid

There are three levels of *Tauhid* which are *Hablun Minallah* (relationship of man and Allah), *Hablun Minannas* (relationship of man) and relationship of man with this universe.

By innovating, one can strengthen their relationship with the creator, man and universe as problems of people are solved and as the results, they are really thankful and grateful. For example, by producing innovative product that is beneficial for man and universe, his or her deed will be appreciated and acknowledged by all including his or her Creator (Mohamed, Abd. Ghani and Basir 2015).

3. Ibadah

"And I did not create the jinn and mankind except to worship Me." (Surah Az-Dzariyat, verse 56)

In Islam, *ibadah* or worship or religious duties do not only include prayers, fasting, hajj and zakat but it surpasses reciting our intention to obtain Allah's favor and blessings in anything. Thus, our intention and behavior in innovating because of Allah is considered as *ibadah* as long as our work does not transgress the Islamic principles and is beneficial for mankind.

4. Allah's blessing

"They swear by Allah to you [Muslims] to satisfy you. But Allah and His Messenger are more worthy for them to satisfy, if they should be believers."(Surah At-Taubah, verse 62)

The most important objective of innovation in Islam is to obtain Allah's favour and blessing and not just to seek people's pleasure in our innovation. This means that we have to produce beneficial innovation that please people and not to produce otherwise that could cause to people's contempt and misery.

5. Paradise

The final and utmost purpose of innovation in Islam is of course to seek a better place in the Hereafter i.e. Paradise as this is a permanent place compared to this world which is only temporary affairs. Thus, this shows the importance of playing our roles well in this world as it gives promise to the good outcomes in the thereafter. Hence, we have to ensure that we use this chance as good as possible by innovating only to the good cause (Wahid et al nd). Thus, success in this world is the bridge to the success in thereafter (al-falah).

Factors of Innovation in Islam

Islam has laid down some principles of innovation. First and foremost is that innovation has to be in line with Islamic principles i.e. Shariah which constitutes in Quran and Sunnah. This means that innovation should be beneficial to *ummah* and it does not lead them astray from their belief in Allah as their only God and Muhammad as their Prophet.

O you who have believed, do not violate the rites of Allah or [the sanctity of] the sacred month or [neglect the marking of] the sacrificial animals and garlanding [them] or [violate the safety of] those coming to the Sacred House seeking bounty from their Lord and [His] approval. But when you come out of ihram, then [you may] hunt. And do not let the hatred of a people for having obstructed you from al-Masjid al-Haram lead you to transgress. And cooperate in righteousness and piety, but do not cooperate in sin and aggression. And fear Allah; indeed, Allah is severe in penalty. (Surah Maidah, verse 2)

Before they innovate, they have to make sure that their intention in innovating is to seek for Allah's blessing or known as *madhatillah*. This is because if they innovate primarily because of worldly affairs, they will only obtain the worldly bounties but not Allah's blessings (Azmi 2011).

Ithaamie Abdul Ghani Azmi and Junaidah Hashim

“Whoever intercedes for a good cause will have a reward therefrom; and whoever intercedes for an evil cause will have a burden therefrom. And ever is Allah, over all things, a Keeper.” (Surah an-Nisa’, verse 85)

The next condition in having Islamic innovation at workplace is having clear objective. The top management need to brief or inform their employees that they need to innovate to ensure that the objectives of the organization will be attained in terms of productivity, profitability and service quality. And most importantly, the need to innovate should be linked with reward and recognition (Basir, Mohamed, Ismail and Azmi 2016). Consequently, the employees will be clear of what they are supposed to do i.e. what kind of innovation that they should produce and when they have to submit their ideas and innovation to their superiors.

Indeed We established him upon the earth, and We gave him to everything a way. So he followed a way (Surah Kahfi, verse 84-85)

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] guided. (Surah Nahl, verse 125)

Knowledge is the basis of innovation. Without knowledge, one cannot think rationally and innovate. Thus, knowledge is the source of innovation. However, in Islam, the Greatest innovator is God Almighty (Ismail, Abdul Latiff, Mat Yacob, Muda @ Ismail and Kandil 2016).

“Is not He Who created the heavens and the earth able to create the like thereof?” – Yea, indeed! for He is the Creator Supreme, of skill and knowledge (infinite)! (Surah Yassin, verse 81)

This is because human being is limited in being innovative. This means that not everybody can innovate. Knowledge, personality and environment are important influencing factors in innovation (Sobian 2011). Thus, organizations need to provide some training such as design thinking, critical thinking, problem-solving skills to equip their employees with innovation skills. In fact, Islam ordains its people to be knowledgeable. It is obligatory for Muslim to search for knowledge either *aqli* (technical knowledge) or *naqli* (reveal knowledge). This is because with *aqli* knowledge, one can produce good technical innovation while with *naqli* knowledge, one can produce Islamic innovation. With both types of knowledge,

the innovation will not lead people astray but is beneficial for all people and to the planet as well.

“Then We made the upper side of that town lower side and rained upon them stones of baked clay. Indeed in that are signs for those who discern.” (Surah al-Hijr, verse 74 & 75)

“There has already been a lesson for you in the two parties that met on the battlefield (the Battle of Badr). One party fighting in the Way of Allah and the other disbelieving. They saw them to be twice their own number by (their) eyesight; and Allah strengthens with His Aid whom He wills; most surely there is a lesson in this for the (owners of) insight.” (Surah Imran, verse 13)

“Indeed, in the creation of the heavens and the earth and the alternation of the night and the day are signs for those of understanding. Who remember Allah while standing or sitting or [lying] on their sides and give thought to the creation of the heavens and the earth, [saying], “Our Lord, You did not create this aimlessly; exalted are You [above such a thing]; then protect us from the punishment of the Fire.” (Surah Imran, verse 190-191)

“Allah alternates the night and the day. Indeed in that is a lesson for those who have vision”. (Surah Nur, verse 44)

“It is He who expelled the ones who disbelieved among the People of the Scripture from their homes at the first gathering. You did not think they would leave, and they thought that their fortresses would protect them from Allah; but [the decree of] Allah came upon them from where they had not expected, and He cast terror into their hearts [so] they destroyed their houses by their [own] hands and the hands of the believers. So take warning, O people of vision”. (Surah Hasyr, verse 2)

“O you who have believed, when you are told, “Space yourselves” in assemblies, then make space; Allah will make space for you. And when you are told, “Arise,” then arise; Allah will raise those who have believed among you and those who were given knowledge, by degrees. And Allah is Acquainted with what you do” (Surah al-Mujadalah, verse 11)

In order to innovate, employees need to be patience, high committed, disciplined and believe in oneself that they are able to produce good innovation that are

valuable to their workplace. This is important as innovation may not be successful at all times. In short, there is a tendency that some innovation might fail. In this case, one must not blame themselves and give up. They have to put trust in Allah as He is al-Mighty and we as human beings have limited capabilities. In other words, perseverance is another soft skill that one should have in order to be innovative (Mohamed, Ab. Ghani and Basir 2013). Before one innovates, he or she has to pray to Allah al-Mighty that he or she will innovate big ideas. *Ilham* or inspiration is an element of innovation. Allah will never give inspiration or ideas to someone without a clear mind and heart. In short, innovation comes in the form of inspiration or ideas which come to the person's mind. After innovation, the innovator has to put trust in Allah that his or her ideas or innovation will be accepted by the top management and society. Accepting one's failure and not to be jealous of others' success are also important. This is not to dampen someone's spirit in giving his or her fullest in being innovative (Mohamed, Ab. Ghani and Basir 2013).

“Have We not expanded your chest for you (Prophet Muhammad), And relieved you of your burden that weighed down your back? Have We not raised your remembrance? Indeed, hardship is followed by ease, indeed, hardship is followed by ease! So, when you have finished (your prayer), labor (in supplication), and let your longing be for your Lord (in humility).” (Surah al-Insyirah)

Accountability is another soft skill needed in order to be innovative. Accountability means to perform one's duties and responsibilities as good as possible and to be responsible in making mistakes and failures in innovation. This means that employees should not run from problems and failures but to be brave and stand up to his or her mistakes (Basir, Ismail, Azmi, Mohamed and Kamaruzzaman 2019). Bravery or courage is also another condition for innovation (Mohamed, Ab. Ghani and Basir 2015). This is because to be successful in innovation, one has to be brave of the consequences. One might not foresee whether the ideas are successful or not but only Allah knows. This is in line to what Allah SWT says in Surah al-Zalzalah: 7-8

“So whoever does an atom's weight of good will see it, And whoever does an atom's weight of evil will see it.”

Once given the duties to innovate from his superiors, it is the responsibilities of the employees to perform it diligently. The employees cannot sway or run from

his or her responsibility to innovate or leave or give up incomplete innovation project as he or she is entrusted to perform this duty and responsibility (Mohamed, Ab. Ghani and Basir 2015).

Leadership also plays a role in innovation. Other than being a model in being innovative and inculcating the innovative culture in the organization, a leader has to be trustworthy in his or her duties and responsibilities that he or she has to be honest in fulfilling all promises in providing support and facilities to his or her employees. Without support and facilities, the employees will not be able to innovate as there are too many limitations at workplace. Otherwise, organization objectives might not be able to be attained (Mohamed, Abd. Ghani and Basir 2015).

In order to emphasize innovation at workplace, it is very important that the top management plays its role in being the model. The top management has to introduce some Islamic innovation at workplace. They have to socialize innovation at workplace by inculcating innovation values in the mission and vision of the organization (Basir, Mohamed, Ismail and Azmi 2016). In Islam, employees' effort has to be rewarded in terms of monetary reward such as bonus, salary increment or worst come to worst, non-monetary reward like compliments, certificate and appreciation letter (Basir, Mohamed, Ismail and Azmi 2017).

To innovate is a good thing or known in Islam as *ma'ruf* which is a pillar in Islam. To do this, one needs cooperation as he or she cannot innovate alone. He or she also should not sabotage one another but to provide help and assistance when his or her co-worker is facing problems in his or her innovation project. Cooperation and assistance are good values in Islam and someone who does these will get good favour in return (Basir et al. 2019). As in surah Tawbah, verse 71:

“The believing men and believing women are allies of one another. They enjoy what is right and forbid what is wrong and establish prayer and give zakah and obey Allah and His Messenger. Those – Allah will have mercy upon them. Indeed, Allah is Exalted in Might and Wise.”

The ultimate purpose to innovate is to obtain success in this world and Hereafter and to receive Allah's blessings (Mohamed et al. 2013; 2015). Success in this world is in the form of promotion, bonus, salary increment and recognition while success in the Hereafter is whereby the good innovations are considered as good deeds and paradise is subsequently granted (Basir et al. 2019).

Famous Islamic Scholars in Innovation

Muslim scholars have long been indulging with innovation. Some Islamic scholars famous for their innovation are al-Biruni, al-Khwarizmi, Ibn Sina, Ibn Khaldun, al-Farabi, ibn al-Haytham and al-Kindi. Most of these Islamic scholars are famous during the Abbasid Caliphate.

According to Syed Aslam (2010), Muhammad Musa Al-Khwarizmi is considered to be one of the founders of algebra. Al-Khwarizmi developed the concept of the algorithm in mathematics and for this reason, some people called him as the grandfather of computer science. He also made major contributions to the fields of trigonometry, astronomy, geography and cartography. Al-Farabi was a great Muslim philosopher, who also made considerable contributions to logic, music, psychology, sociology, mathematics and medicine. Al-Kindi was a philosopher, astronomer, chemist, mathematician, musician, physician, physicist and a pioneer in cryptography. Al-Haytham was a polymath who made significant contributions to the principles of optics as well as to astronomy, engineering, mathematics, medicine, ophthalmology, philosophy, physics and theology. Al-Biruni was a physicist, an anthropologist, an astronomer, a historian, a geographer, a geodesist, a geologist, a mathematician and a physician who contributed greatly to all of these fields. Ibn Sina is regarded as the father of early modern medicine. Besides that, he was a philosopher, a mathematician, an astronomer, a chemist, a physicist, a theologian, a statesman and a poet. Ibn Khaldun is the forerunner of several social science disciplines like historiography, demography, sociology, cultural history and modern economics. He is also father of science of sociology.

Our Prophet Muhammad himself is an innovator. During his days, most of innovation were used in the battlefields such as Khandaq whereby trenches were dug as protection from the enemies (Ishak and Osman 2016). Madinah charter is also another innovation whereby his brilliant idea has saved the Muslims from fighting each other. By using his cloak, the *hajarul aswad* (black stone of Kaabah) was put back at the right place by all four main religions in Madinah and thus, all of the concerned groups were fully satisfied with the decision and action taken (Sulaiman, Mohd. Zarif, Mohd. Nizah, Atoma, Ismail and Kandil 2015).

In Malaysia, some famous modern Muslim innovators are our previous prime ministers such as Tun Mahathir, Tun Ahmad Badawi, and others, namely; YM Ungku Abdul Aziz, Dato' Abdul Halim Ismail, Dato Seri Idris Jusoh, Dato' Seri Nik Aziz Nik Mat, Tuan Hj. Shaharom Shariff, Coach Fadzil Hashim, Natasha Ozeir and Tengku Kaiyisah. Tun Mahathir was the person that has established the International Islamic University of Malaysia (Hashim 2013), made Malaysia as

the Islamic banking hub by enacting Islamic banking act (ElGindi, Said and Salevurakis 2009) and spearheading the halal certification in Malaysia by establishing a special Islamic regulatory department known as BAHEIS and later, JAKIM (Farah, NorAzla, Sharifah Nazirah, Nor Adha, Wawarah, Surianom and Norziah 2015). While Tun Ahmad Badawi, the fifth prime minister has founded Halal Corporation Development (Soraji, Awang and Mohd. Yusoff 2017). YM Ungku Abdul Aziz was responsible for the establishment of the pilgrimage saving corporation known as Lembaga Urusan Tabung Haji (LUTH) in 1963 (Islahi 2018). Dato' Abdul Halim Ismail founded Bank Islam Malaysia Berhad (BIMB) (Kitamura 2020). Dato Seri Idris Jusoh is famous for integrating tahfiz education with science stream known as Ulul Albab (Razimi and Baba 2013). Dato' Seri Nik Aziz Nik Mat was saluted for his pondok and madrasah in reviving Islamic education (Farish 2010). Tuan Hj. Shaharom Shariff is the CEO and Group Managing Director of an-Nur Specialist Hospital which is the first Shariah compliant hospital in the country (Shariff and Rahman 2016). Coach Fadzil Hashim is popular for introducing Islamic Montessori in pre-schools in Malaysia (Maruf 2019). While Natasha Ozeir and Tengku Kaiyisah are the pioneer of Halal online cosmetics store known as Pretty Suci (Zaidun and Hashim 2018).

Apart than these, there are many Muslims innovators around the world such as in Bangladesh, Professor Muhammad Yunus founded Grameen Bank in 1976 which is a microfinance organization that extends help to poor people in making loans without having any collateral. As a result, he had received the Nobel Peace Prize in 2006 (Alaro and Alalubosa 2019). Hamad A Al Mulla is the CEO and Board Member of Katara Hospitality who introduced Shariah compliant hotels in European cities (Zakiah and Fadilah 2013). Jawed Karim and his friends introduced YouTube in 2005 which was later bought by Google for more than 1 billion dollars (Syahrul 2020). Nushmia Khan and Rashid Dar founded Musallah, an application (app) that can locate places to pray in New York city. Irfan Ahmad founded Irhal, an Islamic travel mobile app which provides information on places to visit, shopping, hotels, halal restaurant and mosques in than 90 cities. It also has Qiblat direction and prayer times for all the cities. Karim Saad founded Halal Trip which was later acquired by a Singapore based company. This app allows us to book halal travel and check their ratings (Ummah Wide 2015). While Erwan Mace, is the founder of Bitsmedia Ltd based in Singapore which develop Muslim Pro applications for prayer time, holy Quran, qiblat direction, azan clock, Islamic Hijri calendar, map of halal restaurants and mosques (Wee 2011). Rushdi Siddiqui was the co-founder of Zilzar in October of 2014, a global online marketplace focused on Muslim consumers looking for certified Halal products. It is similar to a platform like AliBaba or Amazon (Ummah Wide 2015). Ugur Sahin and Oezlem Tuereci, Muslim Turkey couple physicians are the developers

for COVID 19 vaccine. Both are board members of BioNTech, a pharmacy company in Germany (Abdullah 2020).

RESEARCH METHODOLOGY

Apart from the literature review on concepts, principles, purpose, factors of innovation in Islam, famous Islamic scholars for innovation and modern Muslim innovators, this article will elaborate on types of Islamic innovation in Malaysian public service context by using content analysis i.e. document review from previous research, online reports and Islamic documents and texts which are from al-Quran and hadith. Content analysis is a systematic reading of texts, images, and symbolic matter, not necessarily from author or user perspective. It is a research technique for making replicable and valid inferences from texts to the contexts of their use (Krippendorff 2018). Thus, it is qualitative in nature which focuses more on library research in obtaining and analyzing the examples of Islamic innovation in Malaysian public service from the three concepts of Islamic innovation. Social innovation which is part of public service is not the focus of this study as it has been examined by previous researchers.

FINDINGS

Islamic Innovation in Malaysian Public Service

Innovation in public service context means creative ideas in order to enhance public service delivery. The ideas can be in terms of process, technology, product or service. In Malaysian public service, the emphasis on innovation is increasing. The previous Prime Minister, Datuk Seri Najib Tun Razak had launched the Government Transformation Programme (GTP) in 2010. Thus, the focus now is on innovation and not on quality any more. For example, year of 2010 is known as year of creativity and innovation. Apart than this, quality day has been replaced with innovation day. Furthermore, Quality Control Circle (QCC) has been transformed to Innovative and Creative Circle in 2009 (MAMPU 2006). In 2017, this innovation policy has been enforced through new horizon known as innovation value (MAMPU 2016). The idea is to increase efficiency and cost effectiveness of government system.

i. Tajdid

Most of Islamic innovation in Malaysian Public Service are for the benefits of people and they are necessities and thus, they are for people's life improvement

(Tajdid). This is in line with *Maqasid Shariah* in safeguarding faith, life, intellect, posterity and wealth (Basir and Azmi 2011). Malaysian Syariah Index, for example; which was launched on 10th January 2015, functions as a benchmark to determine if the country is fulfilling the five Shariah objectives (Maqasid Shariah). This index is headed by the Malaysian Fatwa Council (NST 2015). This index is the first kind in the world that measures Malaysian government performance in eight areas which are education, legal, politics, health, economy, culture, social and infrastructure and environment. In 2015, Malaysian government had obtained an overall score of 75.42 percent (Borneo 2016).

Other examples of Islamic innovation in Malaysian public service that fall under *tajdid* principle is like Malaysian Quality Management System from Islamic Perspective or known as MS1900. It includes three major principles which are compliance to the principles of *Halal* and *Haram*, organizational operation based on Islamic values and action taken is in line with the objectives of Shariah (Basir and Azmi 2011). The principles of the embedding Islamic elements through the Shariah requirements in MS1900 is the first ever effort done in the world by Standard of Industrial Research Institute of Malaysia (SIRIM) under the responsibility of Department of Standards Malaysia (DSM), Ministry of Science, Technology and Innovation in 2005 (Basir, Azmi, Ismail, Ibrahim and Mohamed 2017). MS 1900 is unique for having Islamic terms such as Shariah Compliance, Fiqh Council, Shariah Advisory Committee, Shariah Compliance Unit, Halal, Quran, Hadith, Sunnah, Al-Ijma' and Fatwa (Basir and Azmi 2011).

There are lots of benefits of MS 1900. Azmi, Ismail and Basir (2013) argued that MS 1900 implementation brought many benefits. Among them are: 1. a guide for the preparation of halal products and services nourished with Islamic values; 2. benchmark for quality management systems for products and services; 3. improving customer trust; 4. increasing market share; 5. enhancing transparency; 6. protecting workforce interests; and 7. organizational image enhancement. Meanwhile, Basir and Azmi (2011) suggested that the implementation of the MS 1900 does not only help organizations to improve their management systems, but also enable organizations to practice management systems that are complied with Shariah and Islamic obligations. This further led to many benefits for organizations, such as receiving Allah's blessings, market growth, increasing public trust, increasing confidence of Muslim customers, enhancing Islamic quality culture, and improving organizational management as a whole (Mohamad Ali, Basir and Ahmadun 2016).

According to Mohamad and Mansor (2018), the basic principles of MS 1900 are implicitly built upon the very foundation of *jalb almaṣlahah wa daf' al-maṣadah* in promoting what is good and beneficial, and preventing what is evil and harmful. Therefore, any institution aiming at attaining MS 1900 certification should ensure that positive values such as *'adl* (justice), *ukhūwwah* (brotherhood), *itqān* (conscientiousness and knowledgeable in all endeavours), *ihsān* (perfection or excellence), *ikhlas* (sincerity) and others be promoted and instilled into the minds of individual member of the organization. These positive values will not only drive them to perform tasks dutifully and diligently, but also provide strong abstention from committing sins and forbidden acts such as exploitation, corruption, selfishness or any dishonest practices at the workplace.

KPKT (Ministry of Housing and Local Authorities) is the only ministry that adopted MS 1900: 2014. Among the Islamic values implemented are trustworthiness, justice, sincerity, honesty, gratefulness, courage, caring, cooperation, courtesy, humility, tolerance, respect, learning, discipline, commitment, innovativeness, efficiency and effectiveness. In fact, they assimilate innovativeness with *tajdid*.

Another example of Islamic innovation in Malaysian public service is i-zakat which is an online system that provides information to customers on their zakat account. This online system simplifies customers that they do not have to go to PZM in order to check their zakat account. Instead, they can access their account in any branch of PZM in Malacca (Mohamed et al 2013).

JAKIM, a government agency under the prime minister department together with Malaysian Communications and Multimedia Commission (MCMC), Ministry of Home Affairs Malaysia (MOHA) have developed Smart Quran as the first Quran mobile application that is approved by the Al-Quran Printing Control and Licensing Board, Ministry of Home Affairs Malaysia under the Printing of the Quranic Text Act 1986 (Act 326). Smart Quran consists of Malay and English translations and the public can select their favourite reciter from the list. Earlier, JAKIM also developed e-Braille which is Quran developed for the blind and Quran with Mandarin translation (Sukaimi 2019).

JAKIM is also very active in innovating Islamic e-Government innovation programs. Some of them are:

1. e-KAFA Islam GRID

2. Portal e-Halal – won innovation award for Department of Prime Minister (Champion – ICT Category) for 2012
3. Portal e-Fatwa – Finalist for Case Study Award Open Source Software (OSS)

In the same vein, the Ministry of Women Development has won United Nation Public Service Innovation award on National Poverty Data Banking System (eKasih) in 2012. The system is pertinent as it has override information redundancy of poor people in Malaysia by establishing a central database where all public agencies can get access to.

Meanwhile, Shariah Court has won the first quality award for ICT known as AKICT in 2007 through E-Syariah. This system is an integrated case management system that integrates all the processes involved in the handling of cases in the Syariah Court. Other than these are e-Nafkah, e-Bicara, e-Faraid, E-Fos (E-Fast.Order.Sulh) and EZNafkah (specifically in Terengganu), This innovation has succeeded in receiving gold international award in the International Conference on Quality 2014 at Shinjuku, Tokyo, Japan. All of these innovations are introduced due to many complaints received from the public with regards to delay in public services. By having these innovation, problems of the public could be solved the fastest as possible that is within one day (Wan Muhammad and Abdul Salam 2019).

As a result of Islamic innovation increase in the public sector, JAKIM has spearheaded Islamic Innovation Challenge in 2019 together with SME Corp. Malaysia, Agensi Inovasi Malaysia and HDC. Some of the halal products categorized for the competition are Health and Beauty, Flavour and Ingredients, Food source and processing, Pharmaceutical, Travel and Tour products and services, Machinery, devices, tools, Facilities, Apparels, Software system and Apps and Personal devices. JAKIM also founded Halal Innovation and Technology Center (HITEC) which is responsible for:

- a) Design, create Halal Innovation and Technology Centre related to innovation and halal technology;
- b) Design, manage and execute the annual program of Halal Innovation and Technology Exhibition(HITEx)
- c) Monitor and regulate systems and applications developed by Halal Hub Division.

ii. *Islah*

Reformation practice or *Islah* in Malaysian public service has taken place since 1980s. However, many of them are conventional innovation. An example of Islamic innovation in Malaysian public service that is in form of this principle is *wasatiyyah* or moderation. According to Syed Ismail, Basir, Azmi, Shaikh Ahmad and Nayan (2015), the implementation of *wasatiyyah* in the Malaysian public administration can be seen as the innovation program implemented. The innovations implemented in the Malaysian public administration are in line with the opinion of al-Qaradhawi (2009) which states that one of the principles of *wasatiyyah* is to call for reformation in the context of *fiqh ma'alat* which emphasizes on the outcome or impact of a program.

Islah conflicts with the existing culture as people are normally hesitant to accept changes due to their attitude of resistance to change. Thus, *wasatiyyah* movement has stopped when the former Prime Minister, Dato' Seri Najib Razak was replaced with the new government. Similarly with Islam *Hadhari* which was introduced earlier in 2004 by the fifth Minister Ahmad Badawi Abdullah. Islam *Hadhari* had 10 objectives that include faith and piety in Allah, mastery of knowledge, cultural and moral integrity, just and trustworthy government, balanced and comprehensive economic development, good quality of life for all, free and independent people, protection of the rights of minority groups and women, protection of the environment and a strong defence policy (Noh 2014). Knowledge is important in order to innovate. Tun Mahathir was to no exception, had introduced the instillation of Islamic values in Malaysian public service in 1985. Some of the values are trustworthy, responsibility, sincerity, dedication, hardworking, discipline, cooperation, virtuous and gratitude. In 1987, he had launched the Islamic work ethics. Some of the Islamic work ethics are quite similar with the Islamic values except for competent, teamwork and collective peace (Azmi, Syed Ismail and Basir 2013). Later, when Tun Mahathir was the seventh prime Minister, he proposed the concept of *Rahmatan Lil 'Alamin* which comprised values such as friendly, worldly, respect, peace and harmony. However, the policy was not implemented when Tun Mahathir resigned after leading the country for almost two years with the opposition.

Islah or continuous improvement is very pertinent in quality management especially in MS 1900 in order to ensure that quality is continuously improved and zero defection can be attained in public service (Basir et al. 2017). Continuous improvement is the seventh MS 1900 activity other than Shariah compliant (Ali, Basir and Ahmadun 2016). Through continuous improvement,

the third objective of MS 1900 of Shariah compliance and stakeholder confidence could be obtained (Basir and Azmi 2011).

Afrin and Islam (2018) and Afrin, Islam, Fontaine, Ali and Rahman (2019) have developed a new model of continuous improvement from Islamic perspective, however; they have not tested the model yet. In short, the model has not been implemented yet in any sector in Malaysia. Instead of PDCA model introduced by Deming, they proposed NAMS model which constitute of *niat bil ikhlas* (good intention), *amal* (implement), *muhasabah* (evaluate) and *syukur* (gratitude).

iii. *Ijtihad*

National Fatwa Council which is operated under the umbrella of Religion Affairs Division can be considered as a public agency which under rule *fatwa* or known as collective *ijtihad*. The council is represented by mufti in each state in Malaysia. Fatwa can be categorized into animal, crime, *mualamat*, clothing, social/syariah, faith, *ibadah*, food, marriage, medical, zakat and administration (JAKIM 2015). Thus, it rarely touches on public service. These fatwas are to be adhered by all Muslims in the country. In addition, each mufti can derive his own fatwa whereby the people of the state are obliged to follow the rulings (Salleh 2020). Meanwhile, individual *ijtihad* is implemented by jurist in the shariah court (Salleh, Samuri and Kashim 2016) or by scientists on approving science and technology products in ensuring that they are not prohibitable (haram) in Islam as Muslims are not allowed to utilize them as long as they are not against the principles of Islam or known as Shariah. For example, deciding on who are to receive zakat is not *ijtihad* as this is already laid out clearly in al-Quran. This kind of *ijtihad* can be categorized as contemporary *ijtihad* (Isamail et al. 2015).

CONCLUSION

The purpose of innovation in Islam is *tauhid*, vicegerent, *ibadah*, to seek for Allah's blessing and to obtain Paradise. Contemporary *ijithad* is the corner stone of innovation in Islam. It is neither *bidaah* nor *islah* or *tajdid*. In order to enhance innovation at workplace, there are many factors of innovation in Islam such as leadership, reward, training and innovative characteristics in employees such as knowledge either *aqli* or *naqli*, skills, patience, discipline, perseverance, accountability, courage, cooperation, trust, commitment, dedication and others. To exemplify famous Islamic scholars is not easy, one has to start early with education and skills such as Ibn Sina and others and of course, to possess important soft skills such as determination and dedication. In this modern world,

Muslims either in Malaysia or foreign countries also contribute to innovation. Malaysian government has foreseen the importance of innovation in enhancing quality services to the public. Islamic Innovation in Malaysian public service centers on *Maqasid Shariah*. Some examples of the Islamic innovation implemented are like Malaysian Syariah Index, MS 1900, e-KAFA, e-fatwa, eKasih, e-halal, i-Zakat, e-Syariah, e-Nafkah, e-Bicara, e-Faraid, E-Fos, EZNafkah, e-Braille and Smart Quran. Many of these are exerted from *tajdid* principle while *Islah* in Malaysian public service means reformation and continuous improvement such as Islamic work values and ethics, Islam *Hadhari* and *wasatiyyah*. On the other hand, there is lack of *ijtihad* in Malaysian public service as contemporary *ijtihad* concerns more on innovation in private affairs such as *ibadah*, food, marriage, consumerism and science and technology. Hopefully, Malaysian government will be able to produce more Islamic innovation and continue to grow and prosper in the future.

REFERENCES

- Abd. Rahman, N.N., Ramli, M.A., Shaikh Mohd. Salleh, S.M.S. and Rosele, M.I. 2017. Relevansi teori al-maslahah menurut al-Syatibi dalam menangani isu perubahan masa kini. *al-Risalah, Jurnal Ilmu Hukum*, 13(1): 119-138.
- Abd Rahman, N.N and Rosele, M.I. 2018. Elemen semasa dalam penentuan fatwa: satu analisis IN *Penyelidikan serantau Islam dan alam Melayu*, Mohd. Nor, M.R. et al, Kuala Lumpur: Akademi Pengajian Islam, Universiti Malaya, 187-194.
- Abdallah, U.F. 2006. Innovation and creativity in Islam: a Nawawi foundation paper. <https://yassarnalquran.files.wordpress.com/2011/10/islam-and-creativity.pdf>
- Abdullah, A. 2020. A Muslim couple find the vaccine for COVID19. *Muslim Mirror*. 10 November.
- Abu Isa al-Tirmidhi, 2000. Hadith riwayat al-Tirmidhi, *kitab bab ma ja'a fi al-qadi kaifa yaqdi*, No Hadith 1377. Sunan al-Tirmidhi. Germany: Jam'iyyah Miknaz Islamiy, 1:358.
- Afrin, A.B. and Islam, R. 2018. A conceptual model of continuous improvement in total quality management from Islamic perspective. *Australian Academy of Business and Economics Review (AABER)*. 4(1): 1-16.

- Afrin, A.B., Islam, R., Fontaine, R.A.H., Ali, M.Y., and Rahman, M. 2019. A new model of continuous improvement in total quality management from an Islamic perspective. *Asian Academy of Management Journal*, 24(1): 129–149.
- Alaro, A-R, A-M and Alalubosa, A-R, H., 2019. Potential of sharī'ah compliant microfinance in alleviating poverty in Nigeria: a lesson from Bangladesh. *International Journal of Islamic and Middle Eastern Finance and Management*, 12(1): 115-129.
- Aplikasi Smart Quran @ <http://www.moha.gov.my/index.php/en/smart-quran>. Accessed on 25th November 2020.
- Azhar, A., Hussain, M.A., Md. Nor, M.Z. and Haji Othman, M.K. 2016. Implication of science and technology issues in contemporary fatwa research development. *Journal Of Global Business And Social Entrepreneurship (GBSE)*, 2(1): 41–52.
- Azmi, I.A.G., Ismail, S.H. S. and Basir, S.A. 2013. *Kualiti perkhidmatan sektor awam daripada perspektif Islam*. Kuala Lumpur: UMPress.
- Azmi, I.A.G. 2001. Pengurusan daripada perspektif Islam. *Jurnal Syariah*, 9(2): 85-102.
- Baba, S. 2007. Islam latari binaan budaya tinggi. *Utusan Online*. 3 April. <https://www.utusan.com.my/rencana/utama/islam-latari-binaan-budaya-tinggi-1.465040>. Accessed on 19th September 2019.
- Basir, S.A. and Azmi, I.A.G. 2011. Malaysian Islamic quality management system MS 1900 from an Islamic perspective: an implementation model. *Jurnal Syariah*, 19(2): 85-106.
- Basir, S.A., Azmi, I.A.G., Ismail, S.S.H., Ibrahim, P. and Mohamed, H.A. 2017. Malaysian Islamic quality management system MS1900: an implementation steps at Malacca Zakat Center. *Humanomics*, 33(2): 239-254.
- Basir, S.A., Mohamed, H.A., Ismail, S.S.H. and Azmi, I.A.G. 2017. Model integrasi faktor insaniah dalam pelaksanaan ISO 9000: analisis dari perspektif Islam. *Jurnal Usuluddin*, 137-170.
- Basir, S.A., Ismail, S.S.H., Azmi, I.A.G, Mohamed, H.A. and Kamaruzzaman, S.N. 2019. Islamic values in quality management system ISO 9000 implementation: A case study in Malaysia higher education institution. *International Journal of Islamic and Civilizational Studies (UMRAN)*, 02: 79 – 92.
- BHOnline, 2019. Gagasan 'rahmatan lil alamin' pendekatan kerajaan untuk wujudkan negara rahmah. Mac 25 @ 1:59am.

- Bitsmedia, 2019. Enhancing the Muslim lifestyle around the globe with Google. October. Cloud<https://www.bitsmedia.com/bitsmedia-enhancing-the-muslim-lifestyle-around-the-globe-with-google-cloud/> Accessed on 19th November 2020.
- Borneo Online Post*. 2016. Cabinet committee on shariah index to be set up, says Najib. 29th March. <http://www.borneopost>
- ElGindi, T., Said, M. and Salevurakis, J.W. 2009. Islamic alternatives to purely capitalist modes of finance: a study of Malaysian banks from 1999 to 2006. *Review of Radical Political Economics*, 41(4): 516-538.
- Farish, A. N. 2010. From pondok to parliament: the role played by the religious schools of Malaysia in the development of the Pan-Malaysian Islamic Party (PAS) IN *Madrasa in Asia: political activism and transnational linkages*. Farish A. Noor, Yoginder Sikand and Martin van Bruinessen (Eds), Amsterdam University Press.
- Farah, M. S., Norazla, A. W., Syaripah Nazirah, S. A., Marliana, A., Nor 'Adha, A. H., Wawarah, S., Surianom, M. and Norziah, O. 2015. Peranan agensi kerajaan dalam mengurus industri halal di Malaysia : isu dan cabaran yang dihadapi. Paper presented at World Academic And Research Congress 2015 (World-AR 2015), Ar-Rahim Hall, YARSI University, Jakarta, Indonesia, 9th-10th December 2015.
- Harun, M.S., Abdullah, L. and Rosele, M.I. 2018. Konsep bid'ah menurut perspektif Muhammad Sa'id Ramadan Al-Buti (1929-2013): satu huraian. *Al-Basirah*, 8(1): 11-22.
- Hashim, N.M. and Mizerki, D. 2010. Exploring Muslim consumer information sources for *fatwa* rulings on products and behavior. *Journal of Islamic Marketing*, 1(1): 37-50.
- Hasan, A. 2003. An introduction to collective ijthad (ijthad jama'i'i): concept and applications. *The American Journal of Islamic Social Sciences*. 20(2): 27-49.
- Ibrahim, A, Ibrahim, A., Mohd. Noh, A.M., Jelani, A.B. and Mohd. Nor, S.A. 2019. Pelaksanaan ijthad kolektif di Malaysia. *Asian People Journal*, 58-69.
- Islamic Innovation. <http://www.platcomdiscovery.com/islamicinnovation/>. Accessed on 19th September 2019.
- Islahi, A.A. 2018. History of Islamic banking and finance. *Intellectual Discourse*, 26(2): 403-429.
- Isamail, M.Z., Rosele, M.I., Mohamad, M.T. and Sulaiman@Mohamad, A.A. 2015. Aplikasi ijthad dalam isu zakat: satu tinjauan. Paper presented at Seminar Zakat Peringkat Kebangsaan, Academy of Islamic Studies, University Malaya, 6-7 October 2015, 28-35.

- Ishak, A.H. and Osman, M.R. 2016. A systematic literature review on Islamic values applied in quality management context. *Journal of Business Ethics*, 138(1): 103-112.
- Ismail, A., Abdul Latiff, L., Mat Yacob, S.N.B., Muda, F.L. @ Ismail and Kandil, H.M.T.E. 2016. The Islamic perspective on thinking and innovative culture as exemplified by the works of renowned Muslim scholars. *Jurnal Sains Insani*, 1(1): 22-25.
- Ismail, S.K., Ahmad, R. and Khalid, K.A. 2016. The concept of al-darurah tuqaddar biqadariha in the maternity garment innovation from the perspective of Maqasid al-Shari'ah. *Jurnal Syariah*, 24(3): 341-368.
- Ismail, S.S.H., Basir, S.A., Azmi, I.A.G., Shaikh Ahmad, S.N. and Nayan, I. 2015. Diversiti konsep wasatiyyah: aplikasi menerusi inovasi dalam perkhidmatan awam. *Jurnal Psikologi & Kaunseling Perkhidmatan Awam Malaysia*, 10: 183-207.
- JAKIM. 2015. *Kompilasi pandangan hokum Muzakarah Jawatankuasa Fatwa Majlis Kebangsaan bagi Hal Ehwal Ugama Islam Malaysia*. Cetakan ke 5. Putrajaya.
- Khosim, N., Husin, H. and Salaeh, A. 2018. Five types of innovation in teaching and learning thematic exegesis subject in the faculty of Quranic and Sunnah studies, USIM. *Journal of Fatwa Management and Research*, Special Edition, 645-659.
- Kitamura, H. 2020. Who pioneered Islamic banking in Malaysia? The background of the pioneers of Bank Islam Malaysia Berhad. *Contemporary Islam*. 14(1): 75-93.
- KPKT MS 1900 Compliance Checklist. http://www.kpkt.gov.my/resources/index/user_1/pengurusan_kualiti/2017/PROSEDUR_WAJIB/05_TINDAKAN_PEMBETULAN_DAN_PENCEGAHAN.pdf. Accessed on 19th September 2019.
- Krippendorff, K. 2018. *Content analysis: an introduction to its methodology*. New Jersey: Sage.
- Malaysian Government Open Source Software Conference (MyGOSSCON) 2010 <http://www.islam.gov.my/images/documents/Pelan%20Strategik%20Jakim%202015-2019%20-%20Publish.pdf>. Accessed on 19th September 2019.
- Malik, M. 2009. *Asas tadbir urus dalam Islam*. Gombak: IIUM Press.
- Majlis Halal Malaysia. <http://www.islam.gov.my/sekretariat-majlis-halal-malaysia/1741-profil> Accessed on 19th September 2019.

- MAMPU. 2006. Pekeliling Transformasi Pentadbiran Awam. Bil 1. Tahun 2006. Panduan pembudayaan inovasi dalam sektor awam. Jabatan Perdana Menteri.
- MAMPU. 2016. Pekeliling Transformasi Pentadbiran Awam. Bil 1. Tahun 2016. Panduan pembudayaan dan pemerkasaan inovasi dalam sektor awam melalui horizon baru kumpulan kreatif dan inovatif. Jabatan Perdana Menteri.
- Maruf, Y. 2019. Coach Fadzil Hashim and Brainy Bunch: raising a salah generation. https://muslimsonfire.com/coach-fadzil-hashim-and-brainy-bunch-raising-a-salah-generation/Accessed_on18th November 2020.
- Mat Salleh, M.K., Samuri, M.A. and Mohd Kashim, M.I.A. 2016. Fatwa as authority in shariah court. *Journal of Contemporary Islamic Law*, 1(1): 1-14.
- Mat Salleh, M.K. 2020. Keunikan institusi fatwa sebagai menara rujukan. *BH Online*. 23 March.
- Mohamad Ali, H., Basir, S.A. and Ahmadun. M. 2016. Implementation of the Islamic quality management system MS1900 and its benefits: A case study at the Department of Hajj, Waqf and Zakah, Malaysia. *GJAT*, 6(2): 85.
- Mohamad, H.M. and Mansor, F. 2018. A conceptual study on shari'ah compliance on risk mitigation of MS 1900-certified companies. *TAFHIM: IKIM Journal Of Islam And The Contemporary World*, 11: 113-149.
- Mohamed, H.A., Ab. Ghani, A.M. and Basir, S.A. 2015. The values of Islamic quality management system based on the Quran and integration of scientific knowledge. *Jurnal Syariah*, 23(1): 25-52.
- Mohamed, H.A., Ab. Ghani, A.M. and Basir, S.A. 2013. The guidance of moral values towards the consolidation of the quality management system according to the Islamic perspective. *International Journal of Business and Social Science*, 4(4): 254.
- Mohamed, H.A., Ab. Ghani, A.M. and Basir, S.A. 2013. Quality Islamic management system assures employee's satisfaction: reality and future challenges. *GJAT*, 3(1): 67-84.
- Mohd Shahril, A. R. and Sidek, B. 2013. Integrating Ulul Albab education and science education in development Insan Ta'dibi generation: A case study of Mara Junior Science College (MJSC). Paper presented at *WEI International Academic Conference Proceedings*. Antalya, Turkey. January 14-16, 2013.
- Noh, Abdillah. 2014. Islam, public policy and public administration in Malaysia: negotiating complexities. *Administrative Culture*, 15 (2): 204-221.

- NST. 2015. Malaysia launches first ever Syariah index. <http://www.nst.com.my>.11 February.
- Pelan Strategik JAKIM (2015-2019) <http://www.islam.gov.my/images/documents/Pelan%20Strategik%20Jakim%202015-2019%20-%20Publish.pdf>. Accessed on 19th September 2019.
- Rosele, M.I., Md Ariffin, M.F., Ramli, M.A. and Ismail, M.Z. 2016. Pendekatan ijthad kontemporari dalam isu semasa di Malaysia. *Jurnal Islam dan Masyarakat Kontemporari*. 13.
- Rosnani, H. 2013. The reformation of Muslim education in Malaysia: ensuring relevance and overcoming challenges. Paper presented at the International Symposium of Imam-Hatip (Vocational Religious) Schools in their Centennial Anniversary, 23-25th November 2013, Istanbul, Turkey.
- Siddiquee, N.A. 2006. Public management reform in Malaysia. *International Journal of Public Sector Management*, 19(4): 339-358.
- Shariff, S.M. and Rahman, A.R.A. 2016. Shari'ah compliant hospital; from concept to reality: A Malaysian experience. *Bangladesh Journal of Medical Science*, 15(01): 1-4.
- Smart Quran @ <http://www.islam.gov.my/smart-quran>. Accessed on 25th November 2020.
- Smock, D. 2004. *Ijtihad*: interpreting Islamic principles for 21st century. Special report of United States Institute of Peace. 1-8.
- Sobian, A. (Ed). 2011. *Islam, kreativiti dan inovasi*, Kuala Lumpur: IKIM.
- Soraji, A. and Mohd., Y. 2017. Malaysia halal trust: between reality and challenges. *International E-Journal of Advances in Social Sciences*, III(7): 197-204
- Sulaiman, A., Mohd Zarif, M.M., Mohd Nizah, M.A., Atoma, P., Ismail, A. and Kandil, H.M.T.E. 2015. Creativity and innovation in Islam: its necessity in Islamic education. *The Social Sciences*, 10(1): 61-66.
- Sukaimi, S.A. 2019. JAKIM lancar tafsir Al-Quran dalam e-Braille, Bahasa Mandarin. *BH Online*. 28th February. <https://www.bharian.com.my/berita/nasional/2019/02/...>
- Syahrul. 2020. Jawed Karim: The guy who appeared in the first YouTube. *The Hype*. 10th June. <https://hype.my/2020/189386/jawed-karim-the-guy...>
- Syed Aslam. 2010. *Muslim scientist and thinkers*. 2nd Edition. Gujarat: India.

- Syed Husin, S.S., Tajuddin, T.S., Ahmad Sanusi, S.W.S. and Takril, N.F. 2015. Komitmen pengurusan terhadap kejayaan pelaksanaan “Total Quality Fast Track Management” (TQFTM) di Pusat Zakat Melaka. Paper presented at The International Conference On Masjid, Zakat And Waqf (IMAF 2015). 1-2 December. <http://conference.kuis.edu.my/imaaf/images/e proceedings/2015/zakat/z14-imaaf-2015.pdf>. Accessed on 19th September 2019.
- Tengku Muda, T.F.M., Mohd, A. and Md. Hashim, N. 2017. Protecting the spouses’ interest (*Maslahah*) in cases of defects through the application of the Islamic principle of harm. *International Journal of Academic Research in Business and Social Sciences*, 7(4): 345-360.
- Ummah Wide. 2015. The 50 most innovative global muslim startups 2015: towards a global Muslim startup ecology. 24th March @ ummahwide.com/the-40-most-innovative-global-muslim-startups-2015-2405ea1178e7
- Wahid, H., A.R. and Mohd Nor, M.A. nd. Pembaharuan pentadbiran untuk pembangunan menurut perspektif Islam @ www.ukm.my/hairun/kertas_kerja/pentad_awam.pdf. Accessed on 19th September 2019.
- Wan Muhammad, R. and Abdul Salam, K. 2019. Achievements of human capital and innovation in the administration of Shariah court: aiming for an international model. *Jurnal Syariah*, 27(1): 27-44.
- Wee, W. 2011. Muslim Pro has 850,000 download but owner has other plans. 2nd October @ <https://www.techinasia.com/muslim-pro>
- Zakiah, S and Fadilah, A.R. 2013. Towards the formation of shariah compliant hotel in Malaysia: an exploratory study on its opportunities and challenges. Paper presented at the 2013 WEI International Academic Conference, Istanbul, Turkey, 108-124.
- Zaidun, N.A. and Hashim, N.H. 2018. Halal cosmetics: current issues and future opportunities. *Jurnal Pengguna Malaysia*, 30(1): 74-80.