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## Bitcoin: The Extent of its Usability from the Perspective of Islamic Scholars

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### Abstract

In the pursuit of modernness in the world today, various systems begin to have a place in society, especially involving the economic sector. Development of available technology gives the space and opportunity for a "smart" minority in society to invent techniques that provide convenience or amenity as well as returns for the public, such as the invention of digital currency. Cryptocurrency is no longer a strange medium of payment in current world technology. It is becoming more popular as society discovers its advantages if correctly used. Besides, its use is growing because the minority in society have begun to catch on with using Bitcoin in the world of investment. However, the rest of society outside this group are still hesitant about its 'permisibility' in sale and purchase transactions because no central authority or Central Bank has issued a statement that digital currency is legal tender, except for El Salvador. Therefore, this article discusses some views of Islamic scholars on the Shariah perspective of using Bitcoin in order to develop and advance the economy of the Muslim society. Researh results find that a minority of Islamic scholars consider Bitcoin as a permissible medium of exchange while some others consider it as prohibited. However, in Malaysia, a fatwa was issued by the Majlis Muzakarah Hal Ehwal Agama Islam and the Securities Exchange that its use is permissible but subject to certain conditions. Keywords: Bitcoin, Digital Currency, Halal (permissible), Economy, Islam

#### Introduction

Cryptocurrency such as Bitcoin has been growing since its introduction in the year 2008. Bitcoin is among the highest in value in comparison to other cryptocurrencies such as BitcoinCash, Ethereum Zcash and so on. Use of cryptocurrency such as Bitcoin in current economic transactions has attracted the attention of many parties to study and understand it. This technological innovation in the financial world makes transactions become more costsaving, convenient, more secure and yields high return on investment. If the Muslim community does not take advantage of this Fintech technology, they will be left behind in

developing a digital economy while the world is gradually accepting its wide usage. The digital economy offers e-business, e-commerce and other good and effective opportunities for the Muslim community to develop and advance their economy. Day by day, society begins to invest in Bitcoin and sees its positive effect on investors and users. By 7th January 2018, it was recorded that about 1384 cryptocurrencies appeared and their number is still increasing (Marjan and Muhd, 2020). Indifference, disinterest or even skepticism toward using cryptocurrency in economic activity of Muslim society means a considerable opportunity loss because the potential benefit is enormous. However, the problem revolves around Shariah issues regarding the permissibility of using cryptocurrency, such as elements of *gharar* (uncertainty, hazard or risk), *maysir* (speculation or gambling) and potential wrongful use such as deception, fraud and illegal activities. Therefore, the researchers find it very necessary to study cryptocurrency from the Shariah perspective to determine if its use is permissible and to what extent, in order to store wealth and invest for the economic sustainability of the Muslim society. To be specific, the objectives of this article can be seen as follows:

- To explore the historical background Bitcoin and Cryptocurrencies.
- To critically analyse the debates on the usage of Bitcoin, based on prominent Islamic scholars' views and Shariah perspectives in Malaysia.
- To analyse the prospect and development of digital economy via the usage of Bitcoin, in the context of contemporary Malaysian Muslim society.

#### **Evolution and Development of Bitcoin**

Bitcoin is a digital cryptocurrency that has successfully attracted public use for its high value and returns on investment as well as convenience of transacting (O'Dwyer and Malone, 2014). According to Courtois *et al* (2014), Bitcoin is a cryptocurrency based on an electronic decentralised peer-to-peer payment scheme based on cryptography or encrypted in secret code. Generally, cryptography involves formation and analysis of protocols that prevent third party interference, with information security such as data confidentiality, data integrity, validation and irrefutability (irreversability/immutability) with no trusted third party. Cryptography is a system of codes or encryption using algorithm and key intended to secure information between sender and recipient. It is also applied for mining Bitcoins. This system differs from the existing financial system regulated by the Central Bank (Bank Negara), where each transaction is charged a fee or payment to enable transfer from one party to another. This practice is seen as incurring a loss even though a user is charged only a small fee or payment. In addition, current fiat money is easily created by any irresponsible individual through counterfeitng. Hence, this situation forces a minor group of people to create 'new money' which is more convenient, more secure and yields high return on investment.

Bitcoin is a digital currency introduced by a Japanese man, Satashi Nakamoto, in the year 2008 or 2009. This fact is validated by Courtois *et al* (2004), that Bitcoin was invented in the year 2008 and first launched in the year 2009. Initially Bitcoin was a kind of social experiment, however, it was later traded with real money for some years. The increasing sophisticated development of financial technology inspired the idea to create digital currency such as Bitcoin as an alternative to existing fiat currency. Satashi was said to have introduced the first 50 units to show the on-line method to users or observers (David, 2015). The use of Bitcoin requires a sophisticated and speedy computer device system to facilitate a "miner" to mine Bitcoins. It has a transactions record network called Blockchain. Blockchain technology acts

to prevent digital currency from being hacked by any irresponsible party (Sonny and Afifah, 2017).

When Bitcoin was first launched, the response was not quite enthusiastic. However, its use increased after its value jumped to 600 percent for a Bitcoin (BTC) within a year (Marjan Muhammad and Muhd Rosydi Muhammad, 2018). Up to March 2021, the value recorded for one Bitcoin was equivalent to RM 208, 730.16. In April 2013, The Economist predicted that Bitcoin would stay as a medium of payment in the future, and declared it as "digital gold". At the same time, Bitcoin has become a mainstream financial instrument and shares about 74 percent of market capitalization (Fakhri and Khairul, 2017). With that success, other cryptocurrencies began to be created to compete with Bitcoin, among which the popular ones are Ethereum, Bitcoin Gold, Litecoin, Zcash and so on.

#### Literatures on Bitcoin and Cryptocurrency

The use of cryptocurrency such as Bitcoin in economic activity currently has captured the attention of many parties to study and understand it. Various aspects relating to its use are studied by writers and researchers such as the history of its founding, management, market usability, financial instrument or medium of exchange in transaction, positive and negative social and legal effects, and its future. The British Library listed 658 materials on cryptocurrency, including journals(588), books (64), theses (2), audio materials (2) and others (1). However, only some books discuss permissibility (halal) of cryptocurrency. Based on the researchers' reading, only a few articles touched on Shariah rulings applied to the use of cryptocurrency but without discussing it as an instrument to advance and empower Muslim society with digital economy in Malaysia. Thus, the researchers find that a more in-depth and detailed research is necessary on the use of Bitcoin from the Shariah perspective in order to harness Bitcoin for economic progress and sustainability of the Muslim society for a more guaranteed future in line with current economic development. The article divides this part into two themes, namely Bitcoin and cryptocurrency, and debate on the usability of Bitcoin from the Shariah perspectives.

### History of Bitcoin and Cryptocurrency

A study about the history of cryptocurrency written by Khairunnisa and Asma (2018) is *Bitcoin, Risiko & Regulasi: Satu Tinjauan Awal* (Bitcoin, Risk and Regulations: An Initial Review). The said authors narrated a little on Bitcoin's historical background, how it emerged in this contemporary world. It was invented by Satoshi Nakamoto through a system of properly kept and secure Blockchain network (chains of transaction record). Through this system, any party can be prevented from attempting to steal money or value as the system has a secret code (cryptography) which is only known to the miners themselves. However, there are such still risks faced by miners such as hacking, bankruptcy, data loss, money laundering, price volatility, and so on. Nevertheless, cryptocurrency still holds the attention of society when it was discovered that Bitcoin gives good return on investment because of its high value and built-in security. This article also looks at the function of Bank Negara as a regulator of all business and currency transactions, and discusses the need for effective guidelines in using cryptocurrency such as Bitcoin to prevent any irregular activity and to reduce existing risks.

In addition, the said article also discusses issues of implementing use of cryptocurrency, among which is the element of *gharar* (uncertaintly, hazard, risk) frequently raised, regarding the uncertainty of Bitcoin's virtual existence. Fakhri and Khairul (2017) explained the same issue in their article, *Isu-Isu Syariah Terhadap Bitcoin: Satu Sorotan Awal* 

(Sharah Issues of Bitcoin: An Initial Highlight). They stated that Bitcoin is indistinct with formless existence or in intangible electronic form. In addition, most scholars who discussed it stated that the first condition is that *mal* (property or asset) must be tangible (perceptible by touch) form capable of being in one's possession and being stored. In contrast, crytocurrency such as Bitcoin exists virtually and the authenticity of its existence cannot be guaranteed. Hence, Bitcoin is categorised as non-existent and cannot thereby become a property or asset.

Muhammad et al (2020) also touched on the history of currency. In the old days, society used the barter system, such as exchanging salt for cigarettes and so on. Up to a few hundred years ago, society was still using the precious metals gold and silver, or example, gold dinar and silver dirham coins to make purchases. Then currency backed by gold reserve was invented for convenience without the need to carry heavy coins. However, since 1971 we are using fiat money (inconvertible paper money not backed by gold and silver commodity) decreed by government as legal tender for sale and purchase transactions. This millenium indicates a change toward a system of using digital currency or electronic money, which has the same function as a medium of exchange. Electronic money actually already exists when banks and Central Bank creates it (out of thin air as there is no gold backing for existing currency). Cryptocurrency such as Bitcoin is digital currency but it is not however regulated by any authority or Central Bank, only by parties to a transaction (Bohme et al., 2015).

In addition, the writers also touched on the advantages of Bitcoin, namely; (1) Opportunity and advantage - even though it is as a new commodity, it gives realistic space and opportunity to the user now and in the future, along with investors including the government; (2) Secure technology - blockchain network technology is built into Bitcoin to protect information and data, as well as eliminate the need for intermediation by any institution or any party who intend to take advantage. Fraudsters or intruders cannot succeed in committing irregularities or crime because they cannot alter or validate many ledgers at the same time when a user is transacting; (3) Charge for transaction - with Bitcoin, users or miners do not incur much cost to transact compared to fiat currency. In addition, cryptocurrency operates 24/7 throughout the year so long as internet network functions properly; (4) High return - the special characteristic of Bitcoin is that it gives high returns to miners even though its value can sometimes be erratically volatile. Most miners buy low and sell high to gain maximum profit. In the present era, users predict that by using better computer technology and internet in the future, the value of Bitcoin will stabilise and give a better return.

#### Debate on Permissibility of using Bitcoin from Shariah Perspectives

Besides discussing the history of Bitcoin's emergence, the researchers also discuss the permissibility of using Bitcoin from the Shariah viewpoint. Fakhri et al (2019), wrote an article entitled *Bitcoin: Analisis Bitcoin Melalui Muamalat dan Maslaha* (Bitcoin: Analysis according to *Muamalat* (Civil transactions) and *Maslaha* (Public Benefit). The article discussed the meaning of Bitcoin itself as a medium of exchange and its increasing popularity in sale and purchase transactions, in spite of having been quite recently introduced. Its age has reached only 12 years, yet there is already a new group who recognise it as a currency and there is a high demand for it as a good investment for the future. Despite its usage gaining more momentum in the economic sector, the researchers think there is need for more in-depth

discussion to relate this issue with Islamic law as the Muslim society will only decide to delve into it or use or invest in it if there are no doubts or skepticism about it.

Bitcoin analysis in terms *Maslahat* (Public Benefit/Interest) *and Mafsadah* (Preventing Harm/Damage/Evil) is also discussed as at present, Bitcoin is still not recognised as a legal currency in Islam as its value is erratically volatile, it can drastically go up and may drop sharply. The reseracher also views Bitcoin in terms of the *maslahat* and *mafsadah* concept whereby new users or society who wish to delve in cryptocurrency such as Bitcoin may suffer loss or detriment through fraud, money laundering and so on, if Bitcoin were recognised as currency because most of them do not have deep knowledge and experience in using Bitcoin as habitual users or miners do about the complexities of Bitcoin (Muhammad et al., 2020). Therefore, the Anti-Money Laundering, Anti-Terrorism Financing and Proceeds of Unlawful Activities Act 2001 was gazetted as a preventive measure against money laundering and other related activities. Hence, Bitcoin has not satisfied the condition of *maslahat* as there is no urgent need, whether *dharuriyyah* (essential) or *hajiyyah* (complementary) for it to be accepted. In fact, there is a very high risk of misuse which can lead to forbidden matters in Islam if Bitcoin were accepted as currency (Fakhri et al., 2019).

In addition, Muhammad and Ahmad (2019a) in their article, 'Analisis Syariah Terhadap Kedudukan Bitcoin Sebagai Alat Pembayaran' (Shariah Analysis of Bitcoin's Status as a Tool of Payment) is also significant in this research. It states that using cryptocurrency such as Bitcoin as a medium of exchange or payment does not satisfy the Islamic concept of currency because it is not recognised as legal tender of many countries (except El Salvador). A currency need not be recognised as valid by the country or certified by Shariah to be a medium of exchange, but to be regulated by government as legal tender would require it to be issued by a government as it is the responsibility of a government to do so. In this way, the legitimacy of a currency is acknowledged in the current economic environment and the currency issued is sovereign money (cash) accepted by the public. The government's stamp on the money issued guarantees value in using the currency in transactions. Printing and issuing of currency by private individuals, such as in the case of Bitcoin, is prohibited in Islam and some scholars forbid such an act on the gound that it can cause damage and devaluation of currency which will have considerable impact on the economic system (Muhammad and Ahmad, 2019b).

Among other matters discussed about Fintech technology is whether cryptocurrency is used in Islamic banking industry in Malaysia or anywhere else. Each crytocurrency has its own system and differs from one another, between Bitcoin, Ethereum, Bitcoin Cash, EOS and so on in terms of public legder, transaction and mining (Nur, 2018). Since Islamic law allows 'halal' currency which has intrinsic value of the supporting asset, Bitcoin is seen as fulfilling this condition. Further, Bitcoin and other cryptocurrencies are considered as asset-based, referring to the asset base that gives value to a company, investment or loan. But the asset value is not fixed, it can fluctuate according to the market strength or volatility when a company sells or acquires new assets. Cryptocurrency differs from fiat currency which is debtbased, namely, fiat currency is an asset when a loan is given directly to the borrower, or it (the debt as an asset) can be retained by a person who buys from the orignal lender the right to receive repayment from the borrower. This gives the impression to a minority of Islamic scholars that Bitcoin is actually halal compared to fiat currency, for example, Mufti Abdul Kadir held the opinion that Bitcoin could be on the developments in digital currency that will have a good effect on Islamic finance in the future (Abdul, 2016).

This matter is proven by a number of Muslim countries that support cryptocurrency development such a United Arab Emirates (UAE), Malaysia and Indonesia. In UAE, any transaction using cryptocurrency is legally valid, following Shariah compliance of OneGram, namely an agency that sells and purchases digital currency that is backed by gold. However, foreign banks are not allowed to buy and sell crytocurrency due to its risk (Nur, 2018). In Malaysia, Bank Negara (Central Bank) issued regulations for cryptocurrency even though it is still not recognised as currency. Society can use it but must shoulder self-responsibility of dealing with any problems arising. Nevertheless, Shariah rulings applicable are still not clear as the elements *gharar* (uncertainty, chance or risk) and *shubhah* (dubiety, skepticism, suspicion) are still being discussed. The Central Bank of Indonesia issued similar regulations allowing cryptocurrency to be used with a warning of its high risk to users.

The reward concept in Blockchain transaction system is divided into two, namely, reward gained by the methods of 'Proof of Work' and 'Proof of Stake'. In addition, the competition to gain reward is found to be similar to the concept of *Ju'alah* (contract for promise of reward). The Blockchain reward concept is also found to be in line with guidelines established by Shariah based on the views of al-Zuhyali because the Blockchain transaction system involves two transacting parties, namely the offeror (user of service and Blockchain system) and the implementor (miner). Sighah (Contractual formula) for offer of task can be in any form understood without requiring Qabul (acceptance) from the implementor (the offer of task to manage the transaction to the miner is understood through the Smart Contract). There are the elements of task (transaction management) and reward (digital currency from payment of transaction fee and generation of new digital currency) in the contract. For the Proof of Work protocol, the Ju'alah concept used involves two different parties which promises reward for the same task. While for the Proof of Stake protocol, the Ju'alah is accompanied by a *daman* (guarantee/surety/risk) contract (Sheikh and Nik, 2019).

Writings about the capability of cryptocurrency to develop digital economy have been produced without relating it to empowerment of Muslim society through digital economy, such as Digital Economy, The Development Ways of Cryptocurrency (Ananova, 2018). Most writers only focus on the role of cryptocurrency in developing only conventional economy such as How Cryptocurrencies Can Help Global Economy and Build a Better Future (Pooja, 2019), Toward a New Economy: Cryptocurrency and International Development (Marweg, 2019) and Digital Economy and Business Analytics: Understanding Bitcoin, Blockchain Technology and The Application of Cryptocurrency For Future Business. How Disruptive Technology Impact The World (Wan, 2018). Hence, it is urgently necessary to conduct research on empowerment of Muslim society through digital economy using cryptocurrency. Clearly, the above literature review and discussion show that Muslim scholars are not unanimous in their views on the position of using cryptocurrency. Some allow its use, some others forbid it and the rest allow it in certain circumstances. There is no comprehensive and holistic writing on this issue, including any writitings on how cryptocurrency can be used to increase the digital economy of Muslims in the present. Hence, further research is needed to enable cryptocurrency to be used by the Muslim society in Malaysia without any doubts.

#### Views and Arguments of Islamic scholars on using Bitcoin

Lately, Bitcoin has been frequently used as medium of exchange for sale and purchase transactions such that its usage becomes phenomenonal. This is due to its high value and unconditional ease of accomplishment. Bitcoin is a digital asset developed in the virtual world by fully using computer hardware. It is not physical like today's paper money. The

community's enthusiasm for using Bitcoin in transactions this century caused its value to soar to more than USD200,000 for just one Bitcoin. Hence, this article discusses the views of Islamic scholars on Bitcoin usage in order that society take it more seriously and not hesitate as to its permissibility. It can benefit the economy, especially of the Muslim society. In addition, it is capable of strengthening the economy, especially digital economy, of Muslims by using Shariah-compliant cryptocurrency. The percentage of Muslims in Malaysia who are involved in digital economy is still low whereas the year 2020 was the final year to gain momentum for the 11th Malaysian Plan (Rancangan Malaysia Ke-sebelas or RMKe-11) to open opportiunities for them to step into the millenial economic era. The digital economy approach was indeed already expected, in view of the very large scale of digital economy and promised prospect of lucrative returns (Noor, 2020).

Islamic scholars in Muslim countries hold a strict and skeptical view of Bitcoin usage as it raises concern about doubtful elements that may affect the maslahah (public interest) of Muslim society. In Egypt, a fatwa was issued by the Highest Religious Authority, namely Al-Misriyyah (2018) forbidding Bitcoin usage on the grounds that it is not considered as a publicly accepted instrument of payment and is not issued by any country as well as that it contains elements of gharar (uncertainty, hazard, chance, risk). This viewpoint is supported by Al-Hayah al-Ammah Li al-Shu'un al-Islamiyyah Wa al-Awqaf of United Arab Emirates (UAE except Dubai) which also issued the fatwa that using Bitcoin is forbidden (haram) as it does not satisfy the requirements of Shariah and laws. A similar fatwa was also issued by Dar al-Ifta' al-Filistiniyyah of Palestine in the year 2018 prohibiting the use of Bitcoin on the ground that its value is unstable with considerable differences in its fluctuating value. In order for a cryptocurrency to be a measuring instrument of value like other currencies, Bitcoin must be capable of measuring values of goods and services in an economy. However, using several decimal points in the Bitcoin financial system can cause confusion to the user and becomes problematic when comparing prices of goods and service. This is inconvenient when compared to fiat currency which uses only two decimal places in stating prices. A seller would have to state Bitcoin prices for most things in four or more decimal places. In addition, Bitcoin value shows very extreme volatility and this can be an obstacle to becoming a good unit of measure for value. Extreme volatility (fluctuating) in price, directly or indirectly, causes additional cost to businesses and users. Compared to the values of other currencies, Bitcoin value changes rapidly thus it may force business people to review sale prices of goods everyday. Therefore, there is an element of gharar (uncertainty) as Bitcoin does not have a stable value for a period of time (Muhammad and Ahmad, 2019).

A number of Islamic scholars, from Turkey, Egypt, Iran and Saudi Arabia among others, forbid Bitcoin. Most countries describe digital currency such as Bitcoin as having no set standards for electronic money and fluctuate erratically in value which will adversely affect users even though Bitcoin is seen as strengthening the national economy. In addition, cryptocurrency is exposed to risk of money laundering, and support for terrorist activities such as arms smuggling, use by lawbreakers and so on. For example, Turkey's Directorate of Religious Affairs or Diyanet stated that sale and purchase of virtual currency such as Bitcoin and Bitcoin can easily be misused for lawbreaking activities such as money laundering (Diyanet, 2017). The prohibition on using Bitcoin is caused by its ownership and conversion involving gambling and speculation. In Saudi Arabia, Minister Sheikh Assim al Hakeem sternly reminded the people not to get involved in doubtful transactions to gain abundant money quickly as this concept is not Islamic. Wifaq al-Ulama from the United Kingdom also stated that Bitcoin

is forbidden in Islam as it contains element of gambling in mining Bitcoin and the market price is unstable.

It can be said that Islamic scholars are not unanimous on the status of cryptocurrency according to the Islamic viewpoint. Some of them hold the opinion that using Bitcoin as an instrument of payment is permissible or allowed because Bitcoin is a currency and *Mutaqawwim* property (is possessed and has financial value) (Al-Misriyyah, 2018). Kahf (2017) stated that Bitcoin specifically is a valid currency. According to Evans (2015) Bitcoin is a valid currency free from riba (usury) element. He added that each unit issued in the market shows that it is real currency. Zakat is compulsory on Bitcoin becaue it has monetary value (Adam, 2017; Mahanum, 2018). The late Shaikh Taha Karaan, South African Shafie scholar and jurist who formerly served as Head Mufti of Muslim Judicial Council and founder of Darul Uloom al-Arabiyyah al-Islamiyyah decided that Bitcoin is *māl* (property) based on public acceptance. Absence of regulations is not a problem for Bitcoin to be considered as property. Darul Uloom's Zakaria also stated that Bitcoin is *māl* (property) and can be used as currency. Siraj Desai, Mufti of South Africa also stated that Bitcoin is similar to actual currency and thus valid for use in transactions (Mahomed and Ramadili, 2018).

Further, Mohd Ma'sum Billah, financial and insurance expert at Islamic Economics Institute, King Abdul Aziz University, Saudi Arabia and Farrukh Habib, researcher at ISRA dan Shariah Advisory Board Member of Salihin Shariah Advisory Sdn. Bhd are among some Islamic scholars who accept using cryptocurrency according to set standards and with close supervision. According to them, using cryptocurrency such as Bitcoin is closer to the concept of Maqāşid Shariah, compared to using fiat currency because Bitcoin flows through Blockchain technology saving users' cost and time. Abdul (2016) described Bitcoin as a growing commodity that will have a good impact on Islamic finance in the future and guarantees financial security as the concept of Maqasid Syariah demands.

At the same time, Mufti Muhammad Abu Bakar, a Shariah compliance advisory officer at Blossom Finance in Jakarta published a report on the permissibility of Bitcoin. Basically his view is that in certain cases, using Bitcoin can be allowed. He added that in Germany, Bitcoin is recognised as legally valid currency. In countries such as United States of America, Bitcoin does not have legal monetary status but is still accepted for payments in business and even accepted as Islamically valid. As for the situation in Malaysia, the views of Islamic scholars are not very different from that discussed at the international level relating to Bitcoin. Marjan Muhammad, Head of Research Quality Control Office, International Shariah Research Academy in Islamic Finance (ISRA), stated that Shariah experts' opinions can be divided into three categories, namely, permissible, prohibited and allowed under certain circumstances. Besides that, he explained that Shariah experts who argue that Bitcoin should be acknowleged as currency base their reasoning on trust between transacting parties as well as public acceptance even though not legally validated. Those who disagree hold the opinion that Bitcoin does not satisfy the requirements of a currency, namely, it has no intrinsic value (real) as money, is legally invalid, not regulated by government, highly risky, extremely volatile in price, and speculative due to unstable market value.

The Mufti of Federal Territory in Malaysia, Zulkifli (2018) issued a fatwa prohibiting using Bitcoin as currency as it does not follow Islamic Shariah. In contrast, Daud (2019) stated that Bitcoin's Open and Distributed concept of digital currency Blockchain transaction system is more transparent compared to the current fiat currency system because it enables more accurate and open monitoring. Thus the Blockchain system enables an authorised body to regulate or monitor any transaction conducted through this platform, to detect financial

crime and corruption at the same time. Zaharuddin Abu Bakar, CEO of Elzar Shariah Advisory, also voiced his opinion that use of Bitcoin should be allowed in sale and purchase transactions because it meets the characteristics of currency outlined by Islam, even if it is not legal tender. He himself has personal experience of actively investing in Bitcoin. He added that Bitcoin can be used simply to store value and fight inflation. It can be resold in the future when one needs cash and no longer needs to hold it as an investment. In addition, Mufti of Perlis state, Asri Zainal Abidin decided in a fatwa that zakat is obligatory on Bitcoin if the conditions of haul (duration of one lunar year) and nisab (minimum amount) are sufficiently satisfied. Hence Bitcoin is considered as *al-mal* (property) and liable for zakat subject to conditions. Discussion on cryptocurrency has still not finalised at the international level in order to decide the best for the economy of the Muslim umah. Some opinions allow Bitcoin, some others forbid and the rest permit it under certain circumstances. However, in Malaysia, the result of discussion by the Council for Dialogue on Islamic Affairs and Shariah Advisory Council of Securities Commission allows and permits use of Bitcoin as an asset or commodity for the purpose of spurring the economy of the Muslim umah in order to progress with the times, subject to the specified condition to avoid any risk, loss or doing the prohibited (TV al-Hijrah, 2020).

#### Prospect for Development of Digital Economy Using Bitcoin

This article explored the issues of digital economy of contemporary Muslim society in Malaysia as part of wider contribution to the body of knowledge in the field of economy, finance and Islamic civilization. This article also discussed some challenges link to the prospects of developing standard operating procedure (SOP) for Sharia complient Cryptocurrencies that would serve as guidelines for banks (Islamic and conventional) and other financial institutions in Malaysia. The proposed SOP will also benefit the authority in Malaysia in two ways; 1) To serve as guidelines in monitoring any related Cryptocurrencies transcations and activities in the country; 2) To contribute towards mechanism in coping any improper use of Cryptocurrencies (such as money laundering, criminal and illegal activities, terrorism etc). In this 4.0 Industrial Revolution era (IR 4.0), digital information and big data function as the main material to drive a new economy. The growth momentum of digital economy is increasing especially in today's world pandemic current. The digital economy revolution is seen as facilitating resolving cost of living and price control issues as well as economic recovery. Therefore, Bitcoin gives a bright prospect of digital economy that is competitive and viable.

A form of digital economy that can be expanded using Bitcoin are on-line order and delivery businesses such as the companies, Amazon, Ebay, Shopee, Lazada, Grab, Food Panda, Traveloka, Sea and Tokopedia. All these forms of digital economy began to get response when the country was going through the COVID-19 crisis which forced people to replace the existing platform. Through delivery order, people did not have to go out to get daily necessities, thus it was convenient, time-saving and profitable for business. Hence, this development more or less gave a positive effect of using Bitcoin by society, especially those in the Muslim community who were extra diligent in this economic sector.

In addition, through e-commerce platform, small and medium (SME) grew, especally involving rural entrepreneurs. At the same time, the government's role is also significant to provide good and adequate infrastructure for the survival of entrepreneurs in digtal business, such as the Economic Regeneration Plan (PENJANA) which allocates RM700 million to develop a digital economic platform (Harian, 2020). It is in line with the aspiration of Malaysia Digital Economy Corporation (MDEC) which has the important mission of leading the digital

economy through the 5.0 Malaysia narrative. This shift from the existing fiat currency economy toward a digital currency economy is important for national economic growth, at once helping entrepreneurs adversely affected by COVID-19 crisis. Indeed, the digital economy approach is to be expected in view of its promise of very large scale and prospect of lucrative returns. In this perspective, developed infrastructure will later be the main arena for the Muslim society to explore digital entrepreneur groups and be directly involved in an on-line economic ecosystem. Rapid change in present world technology is not something to be taken lightly, instead Muslim entreprenuers and society need to treat it as a stepping stone to stay competitive in business, at once stimulating the national economy.

#### Conclusion

The emergence of Bitcoin and othe cryptocurrencies is not a strange issue to speak of because society views it as a necessity or alternative in today's world technology. Generally, Bitcoin is not known as a currency but is considered as a commodity, namely an asset which has a value in high demand by society. It is clear that currently cryptocurrency is increasingly popular as an alternative to existing fiat currency. This is because society sees that using Bitcoin gives 1001 advantages rather than disadvantages. This matter is clearly reflected in the increase of Bitcoin users, estimated at 45 million people who are starting to catch on using it. Nevertheless, debate on the status of Bitcoin as cryptocurrency at the international level is still going on, whether it is halal or haram. In Malaysia, however, using Bitcoin is permitted as decided by the Majlis Muzakarah Hal Ehwal Islam and Suruhanjaya Sekuiriti depending on the specified condition to avoid any risk of loss from fraud, deception and speculation and forbidden matters such as money laundering, and other illegal activities. Bitcoin should not be completely rejected as it is a high technology asset and using it can give a beneficial effect on economic development of the Muslim society. Further, a digital lifestyle, cashless society, application-based business, 'smart' nation and services in the virtual world may be realized using Bitcoin.

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#### References

- Abdul, Q. B. (2016). *How Does Sharia View Crypto-Currencies? Cryptocurrency and Islamic Finance.* Ebrahim College. https://ebrahimcollege.org.uk/how-does-sharia-view-crypto-currencies/
- Adam, F. (2017). *Bitcoin: Shariah Complaint*? Amanah Advisors. http://afinance.org/bitcoin-shariah-compliant/
- Al-Misriyyah. (2018). *Mufti Al-Jumhuriyyah Yubayyin Ḥukm Al-Ta-Āmul Bi Al-`Umlah Al-Iliktirūniyyah "Al-Bitkuwin".* Dar al-Ifta' al-Miṣriyyah. https://www.daralifta.org/ar/Viewstatement.aspx?sec=media&ID=5617
- Ananova, O. G. (2018). Digital economy, the development ways of cryptocurrency. XIV International Scientific-Technical Conference "Dynamic of Technical Systems", 226(0048), 1-4. https://doi.org/10.1051/matecconf/201822604050
- Bohme, R., Christin, N., Edelman, B., & Moore, T. (2015). Bitcoin: Economics, technology and governance. *The Journal of Economics Perspectives*, 29(2), 213-238.
- Courtois, N. T., Grajek, M., Naik, R. (2014). Optimizing SHA256 in Bitcoin Mining. In: Kotulski,
  Z., Księżopolski, B., Mazur, K. (eds) Cryptography and Security Systems. CSS 2014.
  Communications in Computer and Information Science, vol 448. Springer, Berlin,
  Heidelberg. https://doi.org/10.1007/978-3-662-44893-9\_12
- David, Y. (2015). *Is Bitcoin A Real Currency? An Economic Appraisal.* National Bureau of Economic Research. https://www.nber.org/papers/w19747.
- Diyanet. (2017, November 28). Bitcoin 'not compatible with Islam', Turkey's religious authorities say. *Euronews.* https://www.euronews.com/2017/11/28/bitcoin-is-not-compatible-with-islam-turkeys- religious-authorities-say.
- Evans, C. W. (2015). Bitcoin in Islamic Banking and Finance. *Journal of Islamic Banking and Finance*, 3(June), 1-11.
- Fakhri, S., & Khairul, A. A. (2017). *Isu-Isu Syariah Terhadap Bitcoin: Satu Sorotan Awal*. 3rd Muzakarah Fiqh & International Fiqh Conference (3 MFIFC), Shah Alam, Malaysia.
- TvAl-Hijrah.(2020).Bitcoin,HalalatauHaram.https://www.facebook.com/tvalhijrah114/videos/152076213060704.
- Kahf, M. (2017). *How Does Islam View Bitcoin and Other Cryptocurrencies*? AboutIslam. https://aboutislam.net/counseling/ask-the-scholar/financial-issues/islam-viewbitcoin-cryptocurrencies/
- Khairunnisa, K., & Asma, H. A. H. (2018). *Bitcoin, Risiko dan Regulasi: Satu Tinjauan Awal*. ICGROWTH.
- Mahanum, A. A. (2018). Majlis Fatwa nilai penggunaan mata wang kripto. *Berita Harian Online.* https://www.bharian.com.my/bisnes/lain-lain/2018/02/394192/majlis-fatwa-nilai-penggunaan-mata-wang-kripto.
- Mahomed, Z., & Mohd, R. S. M. (2018). Crypto mania: the Shariah verdict. *CIAWM Bulletin*, 3 (2017), 33-36.
- Marjan, M., & Muhd, R. M. (2020). Analisis syariah terhadap bitcoin. In M.N. Omar (Ed.), *Islam dan Matawang Kripto*. IKIM.
- Marweg, A. (2019). *Toward a new economy: cryptocurrency and international development.* Colorado State University Liberal Arts Magazine. https://magazine. libarts.colostate.edu/article/toward-a-new-economy-cryptocurrency-andinternational-development/

- Daud, M. B. (2019). Matawang Kripto: Satu Analisa Syariah Kontemporari Dan Holistik (Bahagian V). Coinmy. https://coin.my/op-ed/matawang-kripto-satu-analisa-syariahkontemporari-dan-holistik-bahagian-v/
- Muhammad, A. C. H., & Ahmad, D. S. (2019a). Analisis syariah terhadap kedudukan bitcoin sebagai alat pembayaran. *Journal of Contemporary Islamic Law*, 4(2), 46–64.
- Muhammad, A. C. H., & Ahmad, D. S. (2019b). Bitcoin: analisis mata wang maya menurut perspektif siyāsah shar'iyyah. *Journal of Contemporary Islamic Law*, 4(1), 83–90.
- Muhammad, A. F., Norazha, P., & Zarina, O. (2020). Bitcoin and Cryptocurrency: Challenges, Opportunities and Future Works. *Journal of Asian Finance, Economics and Business*, 7(8), 695-704.
- Noor, A. H. (2020). Manfaatkan ekonomi digital jadi usahawan alaf baru. *Berita Harian*. https://www.bharian.com.my/rencana/komentar/2020/07/714259/manfaatkan-ekonomi-digital-jadi-usahawan-alaf-baharu.
- Nur, A. M. D. (2018). Cryptocurrency in islamic banking industry: is it applicable?. *ICGROWTH* 2018.
- O'Dwyer, K. J., & Malone, D., Bitcoin Mining and its Energy Footprint. (2014). 25th IET Irish Signals & Systems Conference 2014 and 2014 China-Ireland International Conference on Information and Communications Technologies (pp. 280 – 285).
- Pooja, K. (2019). How Cryptocurrencies Can Help Global Economy and Build a Better Future. *Finextra.* https://www.finextra.com/blogposting/18159/how-cryptocurrencies-canhelp-global-economy-and-build-a-better-future.
- Sheikh, A., & Nik, A. R. (2019). Analisis konsep ganjaran di dalam sistem transaksi matawang digital menurut perspektif Islam. *Journal of Contemporary Islamic Law*, 4(2), 11–21.
- Sonny, Z., & Afifah, S. (2017). Whither policing cryptocurrency in Malaysia? *IIUM Law Journal*. 25(2), 179-196.
- Wan, M. H. (2018). Digital Economy & Business Analytics: Understanding Bitcoin, Blockchain Technology and The Application of Cryptocurrency For Future Business. How Disruptive Technology Impact The World. Independent Publisher.
- Zulkifli, M. A. (2018). Bayan Linnas #153: Hukum Penggunaan Mata Wang Bitcoin. Pejabat Mufti Wilayaj Persekutuan. https://www.muftiwp.gov.my/artikel/bayan-linnas/2773bayan-linnas-153-hukum-penggunaan-mata-wang-bitcoin.