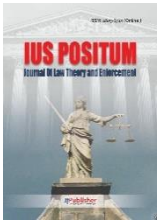

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Corporate or Seller Accountability in Blockchain and Cryptocurrency Corporate Investments

RR. Ella Evrita H[1] **, Eny Maryana**[2]**, Efridani Lubis**[3]
[1]*e.evrita@sae.edu* [2]*enny@yahoo.com*, [3]*efridani@yahoo.com*
Faculty of Law, As-Syafi'iyah Islam University

ABSTRACT

The utilization of Information Technology, media, and communication has changed both the behaviour of society and human civilization globally, and the role of law is to regulate social life. At the same time, the digital world provides unlimited space and time for its users, one of the digital developments is related to cryptocurrencies. Cryptocurrency is a digital currency that secured by cryptographic security system. Crypto money can generally used to buy various kinds of digital goods. One of the uses of owning a cryptocurrency is for investment. Currently, the development of cryptocurrencies in Indonesia is swift. Generally, people from upper-middle class already know about the term. The same thing happened in international market. With the background of the rapid development of this cryptocurrency in community, in terms of growth, the obstacles and constraints found, the authors conducted this research, and it is technically challenging to identify the role of each party in current digital business in Indonesia and the existence of a knowledge gap between consumers and producers. This research is descriptive research with normative juridical method, meaning that in discussing existing problems, researchers will look at legislation's provisions.

Keywords*:* Cryptocurrencies, Education, Climate Change Corporate Crimes; Global warming; Environmental law; Economic Activity.

INTRODUCTION

COVID-19 pandemic has forced us to reduce our activities outside the home. This pandemic also causes us to further improve our internet capabilities that makes everything is digital. Likewise, the currency that become the innovations in financial sector. The human interaction in all fields is effortless and very dynamic with the internet technology. Since unlimited internet access is no longer rare, everyone has taken the advantage of internet facility that gives more comfort and convenience in accessing everything without any limitations. But with that convenience, it will also become the main factor for some people to easily commit cybercrimes. In financial sector, there is a digital currency called Cryptocurrency. This currency began to be in demand by many people, one of them is because of the high profits. This causes lazy people to flock to trade and invest in this currency.

Cryptocurrency is a digital asset designed to work as a medium of exchange using strong cryptography to secure financial transactions, control the creation of additional units and verify asset transfers. Where the transaction system is peer to peer, i.e. transactions are made from one person to another virtually or online and direct or direct. This exchange transaction uses a cryptographic technology that is useful for securing transactions and controlling the amount created and the transaction verification process. Each user will not be able to know the transactions made, by whom, to whom and for what purposes. This digital transaction is unique. Cryptocurrencies have brought a new sense to live in an increasingly modern era. The existing paradigm is undoubtedly attractive because it is considered a freedom from the current conventional patterns. Cryptocurrencies aim to bring about a paradigm shift in the monetary and financial system by eliminating trust in third parties and replacing them with tokens or cryptographic systems. The new system initiated is an expected benefit for those who need it. This new system also remains necessary for criminals to see loopholes in their favour.

In addition, the decentralized nature of cryptocurrencies means that the currency in circulation is entirely dependent on the market and does not have a central authority that can regulate it. For this reason, the rapid circulation and emergence of cryptocurrencies around the world can also have great potential to affect the world economy. Due to the highly volatile prices and circulation, it is feared that it could affect the stability of the international economy when it left unchecked.

The cryptocurrency trading process has a mechanism for personal accountability by Crypto users. People will run their servers and manage their trade transactions. Sales, purchases, and prices are determined by both parties in the form of an agreement. This decentralized system makes the user's computer a server so that everyone is responsible for their wealth, then the losses such as wallet theft that occur does not the state responsibility. The decentralized system in blockchain

mechanism will make no institution or country fully control and master the cryptocurrency technology.

Another problem that may occur is that this Cryptocurrency, which is sent from person to person (peer-to-peer) does not have an adequate security system in the currency circulation process, and all transactions that occur cannot be undone. This makes it an advantage for people who want to commit fraud; once the transaction will not be able to get the money again. This is where no bank or credit card company can be asked for help.

There is the possibility of Bitcoin Theft from Bitcoin Wallets and users are very vulnerable to hackers and viruses. They are prone to getting lousy faith from fellow Bitvoin activists or in terms of transactions because they are unknown or pseudonymous[1].

RESEARCH METHODOLOGY

With the background of rapid development of this cryptocurrency in the community, both in terms of growth and obstacles, the problem statement of this research are Corporate responsibility for digital business crimes, where the assumptions used are the regulations that cover it are not clear (the ITE Law has not been formed to answer the problems). i.t is technically challenging to identify the role of each party in digital business, and the knowledge gap between consumers and producers

Meanwhile, the problem formulations related to cryptocurrencies in Indonesia are what is the legal certainty in transactions conducted by corporations in digital businesses through Crypto Assets, How to identify the roles played by the parties in digital business, and how do the society deal with knowledge gaps to reduce coporate crime in digital business

[1] Timbo Mangaranap Sirait, "THE IMPLEMENTATION OF PROCEDURAL LAW OF RESPONSIBILITY ENFORCEMENT OF CORPORATE CRIME IN INTEGRATED CRIMINAL JUSTICE SYSTEM," *Jurnal Dinamika Hukum* 17, no. 3 (October 24, 2017): 342, http://dinamikahukum.fh.unsoed.ac.id/index.php/JDH/article/view/769.

RESULT AND DISCUSSION

Legal Certainty in Transactions Conducted by Corporations in Digital Business through Crypto Assets

Economic Growth and Digital Era Development

The digital era from era 1.0 to the latest are called society 5.0. The digital age is a time that has experienced developments in all aspects of human life and has become digital from analogue to all digital by using technology that makes people easier to get various information via Internet with adequate device support. These changes and developments will go on with society demands that things become more practical, faster and more efficient. These change will undoubtedly have a positive and negative impact on people's lives.

In general, the digital era is a condition of life or a period where all things and all activities are easier through the technology. The past technology is replaced with more practical and modern technology, then the acceleration of information and needs can be obtained quickly.

In general, digital itself is a picture related to state number which consists of the numbers 0 and 1 or off and on, which is a binary number or binary digit. Digital is a data or signal symbolized in digits 0 and 1 and is usually represented by various physical quantities, called magnetic polarity or voltage. Digital can also be interpreted as an electronic technology capable of storing, generating, and processing multiple data contained in two conditions, called positive and negative. Where favourable conditions will be represented or expressed by number 1 and harmful will be represented by number 0. Then, the data stored with digital technology is represented by the strings 0 and 1, and each digit of status will be called a bit, the computer will automatically handle a series of bits. The standalone as a group, i.e. bytes.

Before digital, electronic transmission was only limited to analogue technology, which could convey data in electronic signals of various frequencies or amplitudes added to waves that carrying particular frequencies. For example like broadcast and conventional telephone transmission. The primary users of digital technology are the latest communication media, such as fibre optic or fibre optic transmission and satellites. For example, a modem is used to convert digital information on a computer device into an analogue signal for a telephone line and convert an analogue telephone signal into digital data on a computer device.

The Understanding of Digital Age and its impact on life

Digital etymologically comes from the Greek "digitus", which means the fingers or toes of humans whose number is 10. In this case, the value of 10 consists of 2 radices, namely 1 and 0. Digitization or Digital is a form of change from analogue mechanical and electronic technology to digital technology. This form of digitization has been implemented since 1980 until now. The digital era began to emerge because of a revolution that initially triggered by teenagers generation in 80s. The presence of digitalization is the beginning of the digital information era or technological developments, which are currently much more modern. Digital is a form of modernization of technological use. It is often associated with the presence of Internet and computer technology or sophisticated equipment to facilitate human affairs. The company of current digitalization era does not necessarily occur quickly and instantaneously since it goes through various stages of change.

Benefits of the Digital Age for life

A digital revolution is a form of globalization, namely the integration process that implemented internationally due to the exchange of world views, thoughts, products, and various other cultural aspects based on the increase in internet telecommunications infrastructure and transportation modes. While some other benefits of digital era for us are as follows:

a. Ease of Communication

Almost all people are surrounded by sophisticated digital devices such as smartphones. Children, teenagers, and parents all certainly have a smartphone in their daily life. With smartphones, every human being can connect with other humans through the internet technology. This is an example of ease communication in digital era.

b. Mobile and Flexible

In addition to ease of communication, it is also easy to do everything without any limitations of space and time. People can watch various events in any part of the world without attending it. Also, people can do anything on mobile. For example, the admission of new students can be made without having to be present at the campus concerned. Ordering goods or products do not require the presence of consumers in market or shopping directly.

c. Internet dominates over pulse usage

People, especially millennials, prefer to run out of credit rather than run out of internet data packages since the data package can be used to surf in cyberspace and as a communication medium cheaper than credit.

d. Ease of Shopping and Getting the things you need

Nowadays, with the Internet, various electronic commerce and online stores make it easier for people to shop or get multiple things they need and want without going outside their home. Online stores also help to find sellers and buyers even though they are far apart.

Positive and Negative Impacts of Digital Era

In the development of digital technology, there are many impacts, both positive and negative impacts. The positive impacts of the digital era include:

1. The information needed can be accessed faster and easier.
2. The growth of innovation in various fields oriented towards digital technology facilitates the process in people's work.
3. The emergence of digital-based mass media, especially electronic media, as a source of public knowledge and information.
4. Increasing the quality of human resources by developing and utilizing information and communication technology.
5. The emergence of various learning resources such as online libraries, online learning media, and online discussions that able to improve the education quality.
6. The emergence of e-businesses such as online stores that provide various goods to consumers based on their needs and are easy to get.

The negative impacts of the digital era that must be anticipated to avoid harm include:

1. The threat of Intellectual Property Rights (IPR) violations due to easy access of data and causing plagiarism to commit fraud.
2. Threat of shortcut thoughts where children are trained to think short and lack of concentration.
3. Threats of knowledge misuse to commit criminal acts such as breaking through the banking system and others (decreased morality).
4. Not making information technology effective as a learning tool, for example, apart from downloading electronic books (e-books), but printing them, not only visiting digital libraries, but visiting library buildings, and others .

The Differences in digital and analogue technology and the advantages and disadvantages of digital technology

Digital technology is a speedy calculation system conducted by processing information in the form of digital codes or numerical values or numbers. Before processing, a particular sensor is needed to convert accurate data into a series of digital codes. After that, the results of digital data processing will be processed, and the information will be displayed on the screen. Digital technology is only a simple tool, namely a program that has been arranged in such a way with unique settings, as is the case with analogue computers. Analogue computers are measuring instruments used in various machines and will automatically provide information and control. One of the weaknesses of this technology is that it is no longer able to measure accurately, and takes a long time to process the information. In addition, the advantages of digital technology are as follows:

Advantages of Digital Technology

1. Data storage will not be affected by bad weather or specific noise since it is transmitted through a digital signal.
2. The emergence of various types of communication systems will be available
3. Economical because of lower maintenance costs, more practical, and more stable.

Disadvantages of Digital Technology

1. There is potential for errors when converting analogue signals to digital signals.
2. There is potential to hack critical digital data, such as work data, account numbers, etc.

It will have a disproportionate addictive effect on its users, thereby inhibiting empathy and social sense in the real world.

The Development of Digital Age

a. Communication

The development of communication in digital era began to occur with smartphones that have very sophisticated features. One of the most important parts is the function of Internet, which has become much more optimal and is used for communication to connect with other people, communicating online via video calls that previously could not be done.

b. Applications for Doing Business

Digital technology makes it easier for companies to reach their consumers. The impact is that entrepreneurs who are not ready for the digital era will become outdated. To anticipate competition and product sales progress, the sellers must switch to digital technology

c. Fintech

Digital Wallet Financial Technology finally emerged with the development of digital technology and business progress. This development is still related to application-based business. Financial Technology or fintech relies heavily on applications to provide services to its users

d. Electronic Commerce (E-Commerce)

E-Commerce is present as a service provider of products and goods online via an application or website digitally. People are no longer need to go to the mall to buy goods since they able to buy directly via smartphones, it also helps the sellers to increase their purchases.

Must-have things in the Digital Age

The essential things needed in today's digital era are as follows:

a) Cognitive skills. the skills to acquire knowledge based on experience and information. For cognitive abilities in digital field is skills in internet technology and must understanding of current technology.
b) Social skills related to how to control emotions.
c) Specific skills related to work that ranging from personal development, sales and marketing, finance, business, and lifestyle to health.
d) Communication skills are the primary skills that must be possessed. Communication skills can help to improve speaking skills and build a person's confidence, making it easier for people to communicate and negotiate with clients.
e) Leadership skills, systematic thinking skills and networking skills. Leadership skills through the action when faced with problems and finding solutions to overcome these problems. That is the ability to lead supported by critical thinking.

The Digital Age and its influence on consumer behavior

a) Demands Quality Products.

Consumers in the digital era will be easier to get information from a product. they want a quality product by comparing it via Internet. Therefore, producers must be able to provide quality products to consumers.

b) Easy Purchase and Payment

The digital era will also make consumers want an easy way of ordering and paying. Because, of course, they want an efficient manner and it doesn't require a lot of time to buy a product.

c) Up-to-date information and don't want to be out of style/fashion

Consumer behaviour will continue to follow the current style or fashion. This behaviour will make it easier for producers to find what consumers want and need. Society demands something more sophisticated. Although, of course, there are some repercussions behind it.

h) Forms of Corporate Crime in the Modern Era

Corporate crimes are committed without violence (non-violent crimes) but are always accompanied by fraud (deceit) and misrepresentation of reality. Concealment of facts), manipulation, breach of trust (beach of faith), deception (fraud), and circumvention of regulations (illegal circumvention) to distinguish it from civil and administrative cases. From this classification, the forms of corporations can be classified as follows:

The modern forms of corporate crime are: Public Corporations established by the government to fulfil administrative tasks in public affairs. For example, district or city government, Private Corporations Corporations are established for private/private interests, which can be engaged in finance, industry, and trade.

These private corporation shares can be sold to the public and added with the term go public, Quasi Public Corporations that serve the public interest (Public Service). Examples include PT Kereta Api Indonesia, State Electricity Company, Pertamina, and Drinking Water Company .

Based on the conditions that occur in society, corporate crime is divided into several forms, namely corporate crime in the modern era involving administration, environment, finance, labour, goods products, and dishonest trading practices; these crimes can also be described as follows :

1. Administrative violations include non-compliance with the requirements of a government agency and court, such as disobeying orders from government officials, for example building environmental pollution control facilities illegally, and unauthorized gains, for example, violations related to letters or valuable information through digital media namely providing wrong information to the primary guardian, issuing false statements
2. Hunting violations can be divided into four types, namely labour discrimination (race, gender and religion), worker safety, unfair hunting practices, wages and work violations
3. Serious violations The factory fee involved three government agencies, namely: the consumer product safety commission responsible for violations of the ageing AVT poison prevention package, the flammable fabric law, and the consumer product safety law, the national highway traffic administration, the motor vehicle manufacturing community. or assigning defects to owner's agents, buyers and dealers so that the manufacturing community (factory) has to repair defects, defects including machinery due to faulty installation parts – improper installation, system malfunctions and poor design
4. Dishonest trading practices, including abuse of competition (monopoly, incorrect information, price discrimination) and false and misleading advertising, are essential in dishonest trading practices. Or as a result of unlawful acts committed by the corporation.

Blockchain is a technology used as a digital storage system or data bank connected to cryptography. Its use is inseparable from Bitcoin and other cryptocurrencies. But many other sectors can also use this technology−block, which means group, and chain, which means chain. The meaning of the naming of this technology reflects how Blockchain. Where the technology utilizes computer resources to create connected blocks (chain). The interconnected blocks are later used to execute a transaction. This technology is indeed quite interesting because it is not centralized. Blockchain can run itself using computer algorithms without any particular system that regulates it.

Cryptocurrency is a digital currency system that is secured using cryptography, thus, the currency cannot be counterfeited by irresponsible people.

And these crypto-assets use a technology called the Blockchain. So, a blockchain is a database that cannot be changed or changed. Blockchain is a technology used to store digital data connected to cryptography.

Cryptocurrencies are different but related. Where crypto is a digital currency and Blockchain is the technology and digital data storage connected to cryptocurrency transactions. Technology has a decentralized nature, this technology does not have a single authority with complete control. Still, it is divided into each computer that has been installed with special software or software. Miners bitcoin, people who prepare special computers to perform mathematical calculations to open new block gaps in the Blockchain. It will calculate a unique hash value based on the combination of the previous cryptographic hashes and later, when there is a transaction between an online store that provides a Bitcoin Wallet and a buyer, the transaction will be sent to the miners or miners' bitcoins. So that a new block will be created and store bitcoin in the transaction[2].

The impact of digital era on corporate crime development in Indonesia

1. Security (in line with anti-money laundering and anti-terrorist funding programs)

The technology used by Blockchain is very transparent and makes transactions easier. Every new technological development certainly has its element of excellence. Likewise, in the field of Blockchain. The advantages that its users can obtain are pretty diverse[3].

a) Transparent
   Technology Blockchain has secure and transparent transaction data. Because when we make transactions, there will be public access that we can see without other people having access to join. This transparency is not contained in the banking or financial system or pattern in general.
b) Excellent data protection.
   In addition to being transparent, this technology also has a very secure data protection system because there is a verification system by every miner or miner when making a transaction, namely before it will be executed on many computers later, and the database structure is append-only or can only add and have no edit command access. This is what makes hackers unable to hack or social engineering to change their data.
c) Efficiency and Fast

[2] Klaus Schwab, *Revolusi Industri Keempat* (Jakarta: PT. Gramedia Pustaka Utama, 2019).

[3] Behzad Esmaeilian et al., "Blockchain for the Future of Sustainable Supply Chain Management in Industry 4.0," *Resources, Conservation and Recycling* 163 (December 2020): 105064, https://linkinghub.elsevier.com/retrieve/pii/S0921344920303815.

In general, the conventional currency transaction process will take quite a lot of time, and there is a human error factor involved in it. Technology blockchain, transactions become more efficient, fast and, of course safe.

d) Guaranteed security
Technology Blockchain is equipped with the advantages of encryption with cryptography. So, transaction security is not a problem. By using cryptography, transaction history cannot be changed because it is encrypted. To minimize fraud.

e) Excellent Audit System

In addition, an essential function of Blockchain is its audit capability. Everyone can view and track transaction data, making it possible to know the audit trail of an asset. There is no longer any potential for embezzlement of corruption funds because transaction data are public, immutable and only supplementary.

Based on the various advantages of Blockchain, it is highly coveted by economic actors and the government because this technology is very much in line with anti-money laundering and anti-terrorist funding programs. Blockchain is helpful as a tool in new anti-money laundering solutions for fraud and reduces risk across financial institutions. This is because the data stored in the framework cannot be changed. In a blockchain, incoming data cannot be edited or modified. Instead, they can only be added after entering the system. This is especially useful in monitoring Anti Money Laundering (AML) transactions as it prevents criminals from trying to cover up their transactions to prevent their crimes from being detected. Commerce will always exist on the Blockchain, no matter what criminals do to try to change them. Technology Blockchain and its distributed ledger should be incorporated into new fraud and risk compliance solutions for financial institutions worldwide. This creates opportunities for greater transparency between financial institutions and regulations in the long term. Using Blockchain will make it easier for financial institutions to report suspicious activity with worldwide laws. This transparency will create new opportunities for financial institutions and rules to work together. By encouraging standardization using Blockchain, they can simplify the creation of anti-money laundering solutions that work. Together, they can make a difference in curbing money laundering in the global economy[4].

[4] Yasanur Kayikci et al., "Critical Success Factors for Implementing Blockchain-based Circular Supply Chain," *Business Strategy and the Environment* (April 27, 2022), https://onlinelibrary.wiley.com/doi/10.1002/bse.3110.

2. Convenience (knowledge gap to reduce the occurrence of corporate crime)

The knowledge gap is a gap, meaning that there is no regulation to face the challenges of new technology. This is the challenge of implementing new technology in Indonesia, making the government need to issue regulations that can optimize the potential of technology and simultaneously mitigate the risks of using technology. Conditions like this can cause these technologies to develop and converge quickly without adequate supervision and protection for their operation, causing people to feel worried and uncomfortable using digital technology. To fill the knowledge gap that exists in Indonesia, the Directorate General of Informatics Applications, Ministry of Communication and Informatics (Dirjen Aptika Kemkominfo) and the Center for Innovation Policy and Governance (CIPG) conducted studies to:

a. Understand the development of big data, artificial intelligence, blockchain, and financial technology in Indonesia
b. Describe the practices of these technologies in Indonesia, their implications, and the challenges they face
c. Describe what policy principles should be accommodated in technology governance over Big data, artificial intelligence, blockchain, and Financial technology were chosen because we see that these four technologies are the main preconditions that lead to the emergence of various technological phenomena and new technological innovations.

3. Halal (the legal status of cryptocurrency based on Islamic law)

Cryptocurrency has become the first implementation of Blockchain technology, and its potential is not limited to payment systems. Decentralized applications affect areas of life such as economics, science, education, art, culture, and others . The first cryptocurrency to be introduced was Bitcoin, and it started operating in 2009. Public interest is high, resulting in the price of Bitcoin soaring. Recorded in July 2010, the price of Bitcoin was USD 0.04951 and reached its highest on April 17, 2021, which was USD 63,223.88 or up 127,699,212.28 percent from the first record price. Despite the promising prospects with futuristic technology, Bitcoin and other cryptocurrencies harm various sectors. In Indonesia, there are pros and cons to using cryptocurrencies as a means of payment transactions. This is because cryptocurrencies have not met the criteria as applicable currencies in Indonesia as regulated in Law Number 7 of 2011 concerning Currencies. From a sharia perspective, there is a debate about the existence of virtual currencies. The religious authorities of the Turkish Government and the Grand Mufti of Egypt have declared that virtual currency is haram or prohibited. Rather it is the fatwa center of the Islamic Seminary. According to Supramana, the conditions for an object to be used as money are that the object must be generally accepted (acceptability), a material that is used as money must also be durable (durability), and the quality tends to be the same (uniformity), the amount can meet

the needs of the community and is not easily faked. Scarcity), money must also be easy to carry (portable), easily divided without reducing its value (divisibility), and has a value that tends to be stable over time (stability of value)[5].

The verses of the Koran that represent economic activities or activities in general, including cryptocurrencies, can be found in the Koran an-Nisa verse 29: "O you who believe! Do not eat each other's property with vanity (not right), except in Trade which is carried out based on consensual between you. And don't kill yourself. Indeed, Allah is Most Merciful to you." (QS. An-Nisa 4:29)

The verse above explains that every transaction activity must be avoided from vanity. The word batil itself has a broad meaning in understanding it. Every transaction carried out must be by the values of Islamic teachings or not violate Islamic teachings. About the use of cryptocurrency, currently, cryptocurrency users use it more as a means of speculation. And trading. It aims to profit from investing and trading activities with speculation. This Islam contains elements of gharar, maysir, and usury. In the Quran, Surah al-Maidah verse 50 describes investment and trading activities with speculation. This Islam contains elements of gharar, maysir, and usury. In the Quran, Surah al-Maidah verse 50, it is explained that cryptocurrencies currently still contain high price volatility and instability to very high fluctuations in value; this is synonymous with speculation on price differences. So that the intention to get results or profits from the price difference is included in the elements of gharar and maysir if used for investing and trading cryptocurrencies[6].

4. Barriers to Blockchain development in Indonesia

Blockchain technology has become well-known as one of the most significant innovations in the modern era. In its simplest form, a blockchain is a distributed ledger that facilitates data exchange on a peer-to-peer network. Blockchain technology is a very secure method of storing and maintaining records. Once a transaction is created and validated by all parties involved, it becomes immutable and cannot be modified or reordered. On the other hand, blockchain technology is still in its infancy, so it has several limitations that become blockchain technology barriers, including scalability, security, privacy, and energy consumption. Consequently, these barriers must be removed to ensure effective technology

[5] Isti Nuzulul Atiah Prima Dwi Priyatno, "Melirik Dinamika Cryptocurrency Dengan Pendekatan Ushul Fiqih," *JURNAL ILMIAH EKONOMI ISLAM (JIEI)* 7, no. 3 (2021).

[6] Shamil Shovkhalov and Hussein Idrisov, "Economic and Legal Analysis of Cryptocurrency: Scientific Views from Russia and the Muslim World," *Laws* 10, no. 2 (May 10, 2021): 32, https://www.mdpi.com/2075-471X/10/2/32.

integration. It's important to understand the potential barriers to blockchain adoption in a corporation and how they will interact[7].rconomy

a. Technology

   It can be seen as an emerging innovation surrounded by uncertainty and immaturity of the technology, which arises from a lack of awareness of its practicality and incorporation transitions. The slow rate of blockchain adoption can increase managers' risk and uncertainty and reduce or hinder the wide-scale implementation of the technology in corporations .

b. Scalability Issues

   Blockchain scalability is one of the most critical barriers to technology adoption. These problems stem from the increasing number of transactions, lack of protocol consensus, communication malfunctions among network participants, linear transaction records, and data storage are examples of scalability problems .

c. Security risks

   False information can still be entered into the blockchain, which casts doubt on the validation and certification process outside the blockchain, a necessary mechanism to verify the data uploaded on the blockchain. This is necessary to ensure that the relationship between digital archives and physical entities is properly established and that the information uploaded on the blockchain is accurate. Blockchain needs, in addition to human-related security loopholes, double spending, and inappropriate mechanisms to protect private keys, are prompting corporate stakeholders to implement more secure consensus algorithms to strengthen system security and resilience against cyber attacks.

d. Privacy Risks

   While current developments in blockchain advocate the anonymity of user identities through digital signatures, transactional confidentiality through cryptography remains challenging. Privacy issues can be raised in an inter-enterprise context to manage and control enterprise-related data in the blockchain. In addition, information related to assets and resources may be considered confidential and sensitive to the company; thus, sharing data via blockchain may be risky .

e. High Energy Costs

   One disadvantage of implementing blockchain is the significant cost required to power the application. By nature, existing blockchain protocols are computationally intensive. Blockchain is a tremendous consumer of electricity. This type of blockchain can increase environmental degradation

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[7] Centre for Innovation Policy and Governance (CIPG), *Big Data, Kecerdasan Buatan, Blockchain, Dan Teknologi Finansial Di Indonesia Usulan Desain, Prinsip, Dan Rekomendasi Kebijakan*, 2018.

through high levels of electricity consumption and emissions, thereby preventing companies from adopting blockchain .

f. Cost investors

The blockchain technology adoption process consists of several phases: design, development, implementation, migration, and maintenance. Despite the long-term benefits of blockchain, investment costs can prevent companies from adopting digital technology circulars. The development costs required to manage a blockchain system can be quite high.

5. Regulations (regulations are still scattered)

The role of the law is to regulate social life. In developing countries, the progress of people's lives cannot be separated from the role of orderly implementation of the law. Regarding infrastructure and law governing policies in cyberspace, the government has prepared supporting facilities and infrastructure such as the Information and Electronic Transactions Law (ITE). The penetration of the internet and smartphones triggers people's enthusiasm to live in a digitalized world, as evidenced by the increasing use of smartphones every year. The digital world provides unlimited space and time for its users. The underlying legal umbrella is contained in the Electronic Information and Transactions Act (UU ITE) of 2008, which is still being refined. One of the purposes of the Electronic Information and Transactions Law (UU ITE) is to protect people's data in cyberspace from the threat of misuse of information by irresponsible parties.

From the company's legal perspective, several regulations can be used for digital economy actors to carry out their business activities, starting from regarding Trade, concerning Amendments to Law Number 7 of 1992 concerning Banking, concerning Investment, concerning Micro, Small, and Medium Enterprises, Law on Financing Institutions. Meanwhile, in terms of technology, there are Telecommunications, Information and Electronic Transactions, and System Operations and Electronic Transactions. In addition to the legal umbrella that can be used as a business activity, two other important aspects need a legal umbrella, namely from the perspective of the actors or legal subjects and the associated impacts. Regulations that support this development must meet the following criteria:

a. based on technology-neutral criteria;
b. based on the principles of competition rules (transparency and non-discrimination);
c. non-economic regulation should be avoided;
d. if an economic regulation is required, it is only intended to eliminate bottlenecks or data flow process crashes due to certain reasons;
e. encourage innovation and Investment;
f. support legal certainty;
g. focused on services and not on technology;

h. avoid market fragmentation; and
i. balance between harmonization and innovation.

The convergence will also eventually encourage the consolidation of organizers. Development of similar infrastructure by different providers will only lead to investment inefficiency. On the other hand, the use of infrastructure that different operators have built will increase the company's value. This third wave of reform needs to be anticipated by adequate policies and regulatory instruments to ensure a seamless change process so that despite fundamental industry changes, the willingness, quality, and price of services to the public are maintained, as well as the continuity of the operator's business as a provider services .

Blockchain has rules in the form of blockchain's way of changing the world, which is said to be a new technology that can change the world. This technology has its charm in the eyes of its users, such as the following points[8]:

1) Improve P2P Interaction
   With this technology, peer-to-peer (P2P) interactions can be continuously improved without an intermediary. Such as digital currency exchanges or cryptocurrencies that no longer require the presence of a professional broker.
2) Full Control of Assets
   Assets stored on the blockchain through cryptocurrencies do not have rules over asset control like banking. If the bank goes bankrupt, the stored assets may not be returned, in contrast to crypto assets stored using blockchain technology. Everyone has complete control over their assets without getting hung up on the policies of the central bank or local government. Users can manage themselves through a crypto wallet that is freely accessible at any time.
3) Encouraging Scientific Advancement
   Blockchain technology can change the current scientific progress by giving everyone access to real-time data and eliminating large companies, institutions, or foundations from controlling important information. Thus, data on an open blockchain can be accessed and managed for research purposes by all groups.
4) Offers Stability
   Inflation and instability are always experienced by fiat currencies that are commonly used in various countries. Inflation is caused because the government, through the central bank, can print as much money as they

[8] Raji Ajwani-Ramchandani et al., "Towards a Circular Economy for Packaging Waste by Using New Technologies: The Case of Large Multinationals in Emerging Economies," *Journal of Cleaner Production* 281 (January 2021): 125139, https://linkinghub.elsevier.com/retrieve/pii/S0959652620351830.

want. However, crypto assets stored with blockchain technology can avoid such inflation because of their resilience to inflation. Bitcoins cannot be produced forever, and there are only 21 million worldwide.

5) Boost Fundraising
   Fundraising is an increasingly popular way for entrepreneurs to raise money for their products. Investors can make small investments to reduce risk during the company's fundraising process. Crypto assets can be used for fast, efficient, and systematic fundraising because they use a blockchain network that is strong and difficult to fake. Local players have sprung up to create CS crypto products, not wanting to be left behind. Aerochain, a community-based blockchain that announced its assets, has recently entered the blockchain forum. Aerochain appears by providing advantages like Ethereum, Bitcoin, and Binance, and is even said to be able to compete with other crypto products. What should be proud of is that this product is a local product, aka a product made in Indonesia. Aerochain CEO Samuel Tabuty said that his product is able to offer faster transaction speeds than what Binance and Ethereum currently offer.

One hundred percent of community-based aerochain with blockchain technology utilities, such as peer-to-peer (P2P) trading and other outstanding blockchain features. This product offers a wide range of services for crypto enthusiasts and investors. Please note, Aerochain is audited and has KYC status. This is done to ensure the security of its users so that they can invest or transact safely without being disturbed. Aerochain is claimed to be able to offer transaction speed. With an experienced behind-the-scenes team with long-term potential, Aerochain can enhance the blockchain space by offering increased value for money. One of the focuses of the Aerochain team is to invest heavily in marketing, advertising, and promotion. Then, it can be said that their team has prepared the capital to do marketing.

The concept of Corporate/Seller Liability in Blockchain and Cryptocurrency Investments

Several systems of corporate criminal liability in international conventions

The areas of business development and human rights cover various ways the impunity gap can be bridged by increasing corporate accountability for human rights violations. One aspect of corporate accountability is the controversial development of corporate criminal liability at the international level. None of the contemporary international criminal courts has explicit jurisdiction over legal entities such as corporations. Over the years, the international criminal courts have developed a solid body of jurisprudence dealing with violations of the administration of justice and have taken them very seriously. Most importantly, what is at stake in this process is not just a vague and perhaps difficult to understand the notion of respecting the Tribunal or judge.

There is no doubt that corporations such as digital-based corporations enjoy rights under international law, including rights under international human rights treaties. Two examples illustrate this point. The corporation has rights under the European Convention for the Protection of Human Rights and Fundamental Freedoms. It has filed a claim before the European Court of Human Rights ("ECHR") alleging that these rights have been violated . Companies can also bring international claims against the United States, Mexico, and Canada under the North American Free Trade Agreement. Corporations are also subject to obligations under international law, both directly and indirectly. International law also requires states to regulate their citizens, including corporations, thereby indirectly imposing corporate obligations rooted in international law. In fulfilling this obligation, and sometimes on their initiative, states impose responsibility on their corporate citizens for acts committed outside their territory.

Corporations must be held criminally responsible for three reasons, collective actions are likely to result in greater harm than individual actions; the individual actions of each company employee may not be sufficient to hold one of them liable under international law, even if a clear wrong has been committed; and effective prevention of collective action requires systemic punishment.

Integrated System Model in Eradication of Corporate Crime

Digital investment-based corporate fraud is a new crime that has metamorphosed in various business activities of companies, and its types are also increasingly diverse, such as in the economic sector. Comply with court decisions, do not pay court fines, investment fraud schemes, Ponzi scheme fraud, mass marketing fraud, health care fraud, fictitious after-sales services, bribes, separation of tests and services to generate higher costs, durable medical care fraud equipment, diversion of pharmaceutical drugs, fraudulent outpatient surgery, and internet pharmacy sales, and sector financial institution fraud such as fictitious bank accounts, securities/commodity fraud, financial fair, illegal banking transactions, corporate fraud and many more .

The criminal policy is one way to overcome the problem of corporate crime. Therefore, criminal sanctions against corporate crimes must be considered for their urgency and effectiveness,6 in particular; criminal procedures must be systematic and integral to realize a simple, straightforward, and low-cost corporate justice. In addition, it does not create disparities in the provision of sanctions and variations in applying different models of criminal responsibility at the time the judge makes a decision; court.

The rapid development of corporate crime needs to be anticipated by making an integral criminal procedure law in the Indonesian criminal justice system to create an impartial and impartial judiciary. Although there are various forms in the material of legislation governing corporate crime, if the criminal procedure law is still fragmented, it becomes the main obstacle in the enforcement of legal, structural

institutions. 'Systematic' means establishing a system within the legal division in a particular or general area of law. It can be assumed that various regulations are not like forests which are difficult to cut down; however, it is like an orderly garden and beautiful plants so that it provides maximum utility for the community", especially this can be a systematic legal procedure on the procedures for handling integrated corporate criminal cases, starting from investigation, investigation, prosecution, as well as sentencing and sentencing by judges in court.

Legal regulation (sanctions) model and actions to prevent the corporate crime

The criteria by Clinard and Yeager are as follows :

a. The Degree Of Loss To The Public (The degree of loss to the public)
b. The Duration of the Viola does not on. (The duration of the violation committed by the corporation);
c. The Frequency of The Violation By The Corporation. (Frequency of violations committed by the corporation);
d. Evidence of Intent To Violate. (Evidence intended to commit a violation)
e. Evidence of Extortion, As In Bribery Cases. (Evidence in extortion cases or bribery cases);
f. The Degree of Notoriety Engendered By The Media. (The degree of public knowledge about the negative things caused by media coverage);
g. Precedent in Law. (Jurisprudence);
h. The History of Serious, Violation By The Corporation. (History of serious violations ever committed by the corporation);
i. deterrence potential. (possibility of prevention);
j. The Degree of Cooperation Evinced By The Corporation. (The degree of cooperation shown by the corporation that committed the crime).

Therefore, Packer further emphasized that the conditions for optimal use of criminal sanctions must include The prohibited acts, in the view of most members of the community, are conspicuously dangerous to the community and are not justified by whatever the community considers important; The application of criminal sanctions against such acts is consistent with the purposes of punishment; The eradication of such acts will not hinder or hinder the desired behavior of the community; Such behavior can be dealt with in an impartial and non-discriminatory manner; Arrangements through the criminal law process will not give the impression of being burdensome both qualitatively and quantitatively; There are no reasonable options for criminal sanctions to deal with the behavior in question.

Digital Legal Basis

From the various scopes of cybercrimes that have penetrated various activities of people's lives, several categories need to be a point of attention, namely :

1. Broadcasting in public spaces through social media forms of criminal acts that can be carried out include ridiculing, (mocking), humiliating, slandering, defamation, misleading, lying, inciting, insulting, violence, pornography, gambling (gambling), drug abuse, neglect of religious values (neglecting religious values), human dignity and jeopardizing international relations;
2. Morality, variations of decency crimes include pedophilia (pedophilia), sexual exploitation of children (sexual exploitation of children), live sex shows, obscene and indecent transmission, and obscene and indecent telephone calls.
3. Telematics illegal access (hacking), cracking, illegal interception, data interference, system interference, misuse of equipment, computer-related forgery, fraud using the internet.
4. Intellectual Property Rights Violations can be copyright infringement (copyrights infringement), cybersquatting, cyber parasites, typosquatting, and domain hijacking.
5. Privacy, especially for personal data and information, forms of criminal acts often carried out, such as identity theft, illegal access and dissemination of privacy, and sensitive personal data (illegal access and dissemination of privacy and sensitive personal). Data).
6. Terrorism Terrorism in cybercrime is a new form of crime called cyber terrorism. Cyber terrorism acts with political motives against official websites of a country, information, computer systems, and data that results in violence against civilians and is carried out by sub-national groups or secret groups.
7. Trade and finance Trading and financial activities in the form of criminal acts carried out include: spamming, internet scams, carding, page jacking, phishing, security fraud, cyber laundering, and illegal trafficking of alcohol and drugs.
8. Taxation in the field of taxation is criminal acts that are usually carried out in the form of tax evasion or tax evasion (tax embezzlement) against tax objects carried out through internet transactions.

In the view of legal expert Barda Nawari Arief, offenses are categorized as cyber crimes; concerning the Convention on cybercrime from the Council of Europe (Council of Europe) Number 25 of 2000, it can be explained that the crime includes computer crime, and The offenses referred to are as follows :

1. Offenses against confidentiality, integrity, and availability of data and computer systems, namely:
   a. Accessing computer systems without rights (illegal access);
   b. Illegal access to capture/listen to transmissions and broadcasts (illegal /intercept);
   c. Illegal access to damage data (data interference);
   d. Illegal access to interfere with the system (system interference);
   e. Misuse of devices
2. Offenses related to computers: forgery and fraud (computer related of ence, forgery, and fraud).
3. Offenses contain child pornography (content-related essences, child pornography).
4. Offenses related to copyright (of ence–related to copyright infringement).
5. Corporations in running their business, with the policy of the Industrial Revolution 4.0

In today development, the paradigm have changed regarding the use of information technology, media, and communication, which has changed both the behavior of society and human civilization globally. The development of information and communication technology has also caused world relations to become borderless and caused significant social, economic, and cultural changes too quickly. Information technology is currently a double-edged sword because, in addition to contributing to the improvement of human welfare, progress, and civilization, it is also an effective means of violating the law. A new legal regime has been born, known as cyber law or telematics law. Cyberlaw or cyber law is internationally used for legal terms related to information and communication technology. Likewise, the law of telematics is a manifestation of the convergence of telecommunications law, media law, and informatics law. Other terms also used are the law of information technology (law of information technology), the law of cyberspace (virtual world law), and the law of cyberspace. These terms were born considering the activities carried out through a network of computer systems and communication systems locally and globally (the internet) by utilizing computer system-based information technology. This electronic system can be seen virtually.

Corporate Legal Liability in Information Crime and Electronic Transactions (ITE)

Corporate crimes are associated with criminal acts regulated in Law Number 19 of 2016 concerning Electronic Information and Transactions (ITE), where it is stated that corporations can be individuals or legal entities, as contained in Article 1 points 21 and 22, which states: Person is an individual, whether Indonesian citizens, foreign nationals or legal entities, while Business Entities are individual companies or partnership companies, both legal entities and non-legal entities. Almost all crimes/crimes related to Information and Electronic Transactions are highly biased by humans and can also be carried out by corporations; even though cooperatives are subject to criminal law just like humans, they are artificial legal entities, so several offenses can be done by humans, but is not biased or impossible for a corporation to do.

Corporations as legal entities certainly have their own legal identity. The legal identity of a corporation or company is separate from the legal identity of its shareholders, directors, or other organs. In the rules of civil law, it is stipulated that a corporation or legal entity that is a subject of civil law can carry out buying and selling activities, make agreements or contracts with other parties, and sue and be sued in court in civil relations.

Shareholders enjoy the benefits derived from the concept of limited liability, and the activities of the corporation are continuous, in the sense that its existence will not change despite the addition of new members or the cessation or death of existing members. However, until now, corporations' concept of criminal liability as a person (corporate criminal liability) is still a matter of debate. Many parties do not support the view that a pseudo-corporation can commit a crime and have a criminal intent that creates criminal liability. In addition, it is impossible to present in the corporation with actual physicality in the courtroom and sit on the defendant's chair to undergo the judicial process.

Legal Certainty of Corporate Transactions in the Cryptocurrency Asset Business

One of the important factors in transactions and activities through information technology facilities is protecting personal and confidential data. Personal data includes data concerning very private matters such as medical record data and family data and other very personal information such as the biological mother's maiden name, transaction data and credit card payments, and others potentially used by others for criminal acts for illegal profit. For example, data regarding how many balances are still available at a credit card facility can be identified if the party contacting the credit card provider's care center can disclose these data. Digital technology directly helps accelerate the delivery of information needed by companies in running their business.

With digitalization techniques, it is easier for companies to access the data they need, starting from employee data, performance data, and other data. The digitalization application system can be adapted to the needs of the company. Broader problems also occur in civil matters because e-commerce transactions have become part of national and international commerce .

The emergence of crypto assets or cryptocurrencies began with the emergence of blockchain. Blockchain is the technology that underlies the development of cryptocurrencies such as bitcoin, Ethereum, or other forms of crypto assets. The benefits and functions of blockchain are not only for cryptocurrencies but also for various other fields related to technology and digitization. The main purpose of blockchain is to allow digital information to be recorded and distributed irreversibly. Thus, blockchain is the foundation on which a ledger or ledger cannot be changed, deleted, or destroyed. This is why blockchain is known as distributed ledger technology (DLT). Some of the targeted sectors are generally related to data decentralization efforts in certain sectors, which encourage the issuance of tokens or digital currencies (cryptocurrencies) as platform commodities. According to Wikipedia, a crypto asset is a digital asset designed to work as a medium of exchange using strong cryptography to secure financial transactions, control the creation of additional units and verify asset transfers. So this crypto asset is a digital asset that does not have a physical presence and only exists in cyberspace. This asset can also function as a medium of exchange, which means it can be used to exchange goods and services or with other currencies. At the same time, this asset transaction system is peer-to-peer, carried out online and directly. And the transaction exchange uses cryptographic technology to secure transactions and control the amount created and the transaction verification process. Neither the buyer, seller, nor user can know the transaction was made by whom and for what.
The advantage of this digital currency is that it can be accepted in every country because it is global. Users can also use transactions or exchanges freely between countries without indicating changes in exchange rates between these countries. This transaction also does not involve third parties, so it is very safe, and everyone is only responsible for their money. The system is decentralized, or there is no centralized server, thereby reducing the risk of data loss or corruption. The data is stored on local servers belonging to the miners or the miners who created the blocks. The fundamental value of cryptocurrencies will increase as more companies or shops accept this currency as a means of payment. The value of cryptocurrencies also increases due to the enactment of the law of demand and supply, where the amount of digital money is limited. In contrast, the demand for this digital money continues to grow. This is what causes this cryptocurrency to continue to rise in value. This increase ultimately encourages many people to be more and more reluctant to enter this asset because they pursue high-profit potential.

In addition, several financial institutions or institutions do not yet have a single voice regarding the legal existence of this cryptocurrency. Its development

requires modern regulation of banking and finance, which emphasizes the potential externalities of financial activities and especially focuses on risk-based regulation, which tends to minimize the potential risks or externalities of bitcoin. Whereas in the cryptocurrency ecosystem, most of the externalities of cryptocurrencies arise when they interact with the real world. The risks discussed previously are also a tangible form of the interaction between a virtual and real system. Since such interactions are often carried out by criminals who have worked for a long time, there is a need for regulation that minimizes risk by focusing on intermediaries that facilitate interactions between the real economy and the cryptocurrency market. Regulation can be explained as a form of indirect regulation. In contrast to direct regulations that target business entities, this regulation refers to partners as third parties when bitcoin will be exchanged into legal currency in a country.

Roles Played by Parties in Digital Business

1. Central Bank (Bank Indonesia)

Previously, Bank Indonesia strictly prohibited the use of cryptocurrencies by all financial institutions. Not only using but financial institutions are also prohibited from facilitating bitcoin and other transactions. Bank Indonesia prohibits all financial institutions, especially those working with BI, from using this cryptocurrency as a payment instrument or financial service. Cryptocurrencies are not legal payment methods under the Constitution (UUD), the Currency Act (UU), and the BI Law. Cryptocurrencies are assets and not fiat currencies. Today's cryptocurrencies need to be recognized by governments and central banks as legal tender. There are several reasons why neither the government nor the central bank approves the currency, including the central bank's own responsibility to control the money supply to control inflation and economic growth. Therefore, when this encrypted digital currency emerges as a trading tool, it will inevitably weaken the central bank's functioning and lead to the failure of monetary policy. Central banks do not accept these cryptocurrencies and prohibit them as legal tender[9].

2. The Government

The government emphasizes that the risk of cryptocurrency circulation will not become a new crime arena or be used to exchange for other criminal transactions such as drug trafficking, prostitution, terrorism, or even money laundering. Since this method of cryptocurrency transactions is encrypted, transactions cannot be tracked by other parties, including governments. This is why governments are currently reluctant to allow cryptocurrencies to circulate.

[9] Supramana, *HukumUang Di Indonesia* (Bekasi: Gramata Publishing, 2014).

3. Financial Services Authority (OJK)

OJK is an independent financial institution with the authority, responsibility, and functions related to regulation, supervision, inspection, and investigation of the activities of the financial services industry. This includes capital markets, banks, and non-bank financial service providers. Call it financial institutions, insurance, and fintech. In other words, OJK focuses on maintaining stability and improving Indonesia's economic competitiveness in the financial services sector. The agency allegedly banned cryptocurrencies because they did not meet the requirements to become a currency. Furthermore, as an investment vehicle, it must be legally enforceable, have a clear fundamental value, and be used according to its function. From a tool perspective, it's clear that cryptocurrencies aren't there yet. So, it is not correct to say that cryptocurrency is an investment but speculation. Moreover, it is also known that cryptocurrency is a very high-risk instrument. The increase occurred because of an imbalance of supply and demand, which could explode at any time when the perpetrators realized the price was far from the fundamental value. When this happens, cryptocurrency players should be prepared to risk losing money.

4. Commodity Futures Trading Supervisory Agency (CoFTRA)

BAPPEBTI is an acronym for a government-owned institution under the auspices of the Ministry of Trade of the Republic of Indonesia. The Commodity Futures Trading Regulatory Agency has the task of supervising and regulating futures trading. And the legal basis is Law No. 32 of 1997 concerning commodity futures trading. The same applies to cryptocurrencies under this agency. CoFTRA itself is under the auspices of the Ministry of Trade. BAPPEBTI focuses on monitoring and regulating future trading activities regarding the cryptocurrency itself. Some of the commodities under the supervision of this institution include non-financial primary products (mining and energy products and agricultural products) and non-financial non-primary products (bonds, foreign exchange, interest rates, and crypto-assets). CoFTRA and OJK are two institutions that oversee different financial sectors.

5. MUI – Indonesian Ulema Council

As an organization born by Muslim scholars, Zuma, and intellectuals and growing among Muslims, the Indonesian Ulema Council is a community movement. In this regard, the Indonesian Ulema Council is no different from other social organizations among Muslims, which have an autonomous existence and uphold the spirit of independence. The independence of the Indonesian Ulema Council does not mean that it prevents it from establishing relations and cooperation with other parties, both from within and outside the country, as long as it is carried out based on mutual respect positions and does not deviate from the vision, mission, and functions of the Indonesian Ulema Council. This relationship and cooperation

show the awareness of the Indonesian Ulema Council that this organization lives in a very diverse nation's life order and is an integral part of that order which must coexist and cooperate among the components of the nation for the good and progress of the nation. The attitude of the Indonesian Ulema Council is one of the efforts to realize Islam as rahmatan lil alamin (Rahmat for All Nature).

The MUI has raised the legal status of cryptocurrencies based on Islamic law because currently, there are three provisions of the Islamic law that the MUI has issued a fatwa on cryptocurrencies in Indonesia. There are three provisions of Islamic law. The first use of cryptocurrency as a legal currency is haram because it is gharar, dharar, contrary to Law Number 7 of 2019 and BI Regulation Number 17 of 2015. In addition to forbidding, MUI also declares crypto money as a commodity. or digital assets are not legally traded. Because crypto contains gharar, dhahar, and qimar.

Based on sharia literature, gharar or taghrir is a term in the study of Islamic law which means doubt, deception, or action that aims to harm others. At the same time, dharar is a transaction that can cause damage and loss so that it can result in a vanity transfer of ownership rights.

Meanwhile, qimar is a contract of ambiguity but is usually used for betting. In addition, it also does not meet the syar'i sil'ah requirements, namely: there is a physical form, has value, the amount is known with certainty, property rights, and can be handed over to the buyer. However, MUI calls crypto money a commodity or asset with several legal conditions to be traded. Cryptocurrency is a commodity/asset that qualifies as sil'ah and has an underlying and has clear benefits that are legal to trade.

How to deal with the knowledge gap to reduce the occurrence of corporate crime in digital business

In Indonesia, Cryptocurrency is only used as a commodity asset or investment tool whose trade is regulated by BAPPEBTI (Commodity Futures Trading Supervisory Agency). And not as a means of payment or a medium of exchange because it is related to Law No. 7 of 2011, which states that Indonesia Indonesia prohibits the use of currencies other than Rupiah. Because of this, it is necessary to have a mutual agreement and legal umbrella to regulate the adoption. The legal umbrella will issue regulations where these regulations will regulate the movement of cryptocurrencies in Indonesia. But the making of regulations in Indonesia always depends on the country's political economy[10]. Although a policy is very beneficial for the community, if political actors do not support it, the state cannot implement the policy. Although Indonesia has obstacles in terms of legalizing cryptocurrencies, the government must be able to move quickly in considering this.

[10] Sumantoro, *Hukum Ekonomi* (Jakarta: Penerbit Universitas Indonesia, 1986).

The development of cryptocurrencies in Indonesia is significant because the existing rules are still confusing and not yet synchronized between one agency and another. However, the existing obstacles and challenges do not rule out the possibility that cryptocurrencies in Indonesia may also experience increases and decreases. That is why new players are needed who are interested in learning about cryptocurrencies so that they become experts and can continue developing cryptocurrencies in Indonesia because this prospect is limited to domestic and abroad. The prospect is still a very big development.

The education regarding the development of this cryptocurrency is needed. Education can be carried out by educational institutions or bodies related to crypto itself, where this education can be held both by the government and the community. Investors and traders are expected to have a high initiative to continue learning and enrich themselves by seeking information related to cryptocurrencies so that they can learn quickly. The world of education, especially universities, is also expected to have a special space to develop digital asset trading literacy, including crypto.

Whether all people are able and have the opportunity to learn these new things. For this reason, the role of the government and institutions such as CoFTRA is expected to also participate in educating the public so that they are not trapped in the adoption of cryptocurrencies and can strengthen literacy in cryptocurrencies. Literacy that will help how Crypto and blockchain applications work, the benefits and risks, so people are not only lazy to follow this technology but to understand more so that they are rational in conducting Crypto asset transactions. Because at this time, people are just talkative and rely on emotions alone in conducting Crypto asset transactions in Indonesia. It's just the intended prestige, and talkative crowds have migrated to make this transaction, even though they have not mastered and recognized this Crypto asset. There is a science to plunging into this asset transaction economically, technically, and psychologically. Because in general, at this time, what must be considered is that the community's financial literacy is still relatively low. And this is what often becomes the emergence of digital crimes such as Ponzi Schemes in the community and other frauds related to this Crypto asset transaction.

CONCLUSION

The cryptocurrencies are generally not legal as a means of payment in Indonesia, they can still be used, stored, and traded as assets by the public.

Blockchain technology has indirectly facilitated the entire digital transaction process with various advantages such as data security and transparency issues. In its application, blockchain technology will have diverse and fast applications. For this reason, the government must be able to make regulations that can adjust the speed of technology. In making regulations, the government should pay attention to how to make these regulations flexible (agile regulation) because regulations will be left behind with the development of the times that are so fast. In Indonesia, we should see that Crypto assets are commodities, not currencies, because according to the law, the only legal tender is Rupiah.

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