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### RESEARCH ARTICLE

#### FACTOR AFFECTING OF MANAGERIAL BLOCKCHAIN TECHNOLOGY AND CRYPTOCURRENCY FOR DIGITAL ASSET BUSINESS IN THAILAND

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#### Abstract

The research intends (1) To study factors affecting of managerial blockchain technology and cryptocurrency for digital asset business in Thailand and (2) To study the perception of using blockchain technology and Cryptocurrency in digital asset business. The researcher uses quantitative research methodology. The questionnaire is the tool for collecting data from related personnel and digital asset business operators. The researcher takes the mean from the data, calculates the Standard Deviation, and data analysis with the severity index. The study found that factors affecting managerial blockchain technology and Cryptocurrency in digital asset business and e-commerce help make electronic commerce more convenient. It was the most important factor that is at a very agreeable level ( $\bar{X} = 3.787$ ), the severity index is at  $SI = 78.811\%$ . Overall, it found that the perception of the stakeholders in the management of Blockchain technology and Cryptocurrency in the digital asset business is at a very agreeable level ( $\bar{X} = 3.702$ ) and the severity index is at  $SI = 77.045\%$ .

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#### Introduction:-

The advancement of financial technology is the important factor that makes "money" and electronic payment systems continually develop and help people spend and have more convenient payment channels.

Recently, financial innovations have increased the opportunity for the private sector to create various forms of digital currency, including cryptocurrencies with high price volatility and one that is pegged to the base currency or to another asset called stablecoins. These private cryptocurrencies and stablecoins offer a new alternative to consumers besides fiat money (BOT, 2021).

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As technology becomes more advanced and modern, the pattern of payment and electronic payment methods are developed to be more secure and efficient. Cryptocurrencies become more widespread and individuals or groups can transact without having to go through banks or financial institutions, use any intermediary to verify and record money transfer information. Currently, many countries around the world have taken a positive stance and accepted the use of cryptocurrencies, such as the United States and Canada, etc. (The Office of the Council of State, 2021)

Thailand has enacted the Emergency Decree on Digital Asset Businesses B.E. 2018. There were Cryptocurrencies in depreciation of goods or services, Token Offering (Initial Coin Offering: ICO) by granting the right to exchange goods or services (utility tokens) or investment rights (investment tokens) or business operations trading, exchanging digital assets, etc. at that time. The purpose of such legislation provides protection to the public by regulating digital token offerings. And digital asset business operations prevent money laundering including investigating unfair actions in the digital asset market. It is legislation that covers the entire process. It was the first country in the world to have a regulatory model from securities law.

After the Emergency Decree on the Assembly of Digital Assets came into force, the world of digital assets is constantly evolving and making leaps and bounds. At present, an asset can be used in several ways being both a medium for payment redemption and giving the right to redeem goods or services. There are new applications of digital assets, including tokenization of assets such as carbon credits, e-vouchers, and concert tickets, among others. Non-function tokens (NFTs) are also issued, which NFT holders have the right to own. And the right to back up the token, such as land in the Metaverse characters or item games, works of art, or real estate, etc. (SEC Office, 2023)

This law comes into force, the researcher investigated the comparison with the development of the digital asset world that has continuously developed. The Emergency Decree on Digital Asset Business Operations is still an issue that can be improved. And to be able to protect the public business operator efficiently, and appropriately. Along with facilitating the use of technological innovation for the development of the country and the changing financial ecosystem. This is a strong incentive for the researcher to do this study.

## Literature Review:- Blockchain technology

Blockchain is a shared database storage technology, also known as "Distributed Ledger Technology (DLT)" (Tamas, *et al*, 2022). It is the data format that guarantees security that previously recorded data cannot be altered or tampered with, so all users can see the data with the same series in order to create a mechanism of trust for users of the system. (Stephen Chan, *et al.*, 2020) Blockchain technology was first created by the presentation of "Satoshi Nakamoto" in 2008. (Hangwei Feng *et al*, 2022). The paper Bitcoin: A Peer-to-Peer Electronic Cash System, presents the concept of creating a platform that can create a secure digital currency exchange called "Bitcoin" by using the theory of Cryptography and Distributed Computing. (Sak Sekkhuntod, 2021)

## Digital assets

Digital assets are divided into 2 types: cryptocurrencies and digital tokens which has characteristics and the different directives are the following:

Cryptocurrency is a digital coin that is used as a medium of exchange (mean of payment) in order to obtain goods, services, or any other rights or exchange between digital assets such as Bitcoin, Ethereum, etc., including cryptocurrency that has a value (peg) attached to the asset which is known as "stablecoin".

Digital tokens are digital coins that give rights to coin holders. It is divided into 2 types:

- (1) Investment token gives the right to participate in any project or business, such as projects of Sansiri.
- (2) Utility tokens give holders the right to acquire specific goods, services, or other rights. In addition, utility tokens are divided into 2 types: (1) the utility token is available immediately from the initial offering date, and (2) the utility token is unavailable" is not yet available for redemption or utilization of that product or service. The coin holders have to wait for the right to exercise in the future because the proceeds from the sale of utility tokens must be used to provide products or develop services. (NopNualpan Pawasan., 2021)

**Digital asset business operators**

It means a digital asset business operator who has obtained a digital asset business license . However, this shall not include digital asset business operators who are commercial banks under the law on financial institutions business , Life insurance companies according to the law on life insurance , and Securities companies under the Securities and Exchange Act as follows:

**Digital asset exchange**

It means the center or any network provided for the purchase or exchange of digital assets. The center can match or find a contract partner or organize a system or facilitate those who wish to buy, sell or exchange digital assets to make an agreement or match with each other. The center acts as normal trade . However, this does not include a center or network as specified in the notification of the SEC.

**Digital asset broker**

It means a person who provides services or demonstrates to the general public that they are ready to provide services as a broker or agent in order to buy and sell or exchange digital assets for another person in the ordinary course of business and receive a fee or other compensation. This does not include being a broker or an agent in the manner specified in the notification of the SEC.

**Digital asset dealer**

It means a person who provides services or demonstrates to the general public that they are ready to provide services for trading or exchanging digital assets on their own behalf as a normal trade. The dealer acts outside the digital asset trading center but does not include the provision of services in the manner specified in the notification of the SEC.

**Digital Asset Advisory Service**

It means a person who advises the public directly or indirectly on the value of digital assets or the suitability of investments in relation to such digital assets or relating to the purchase, sale , or exchange of any digital assets in the ordinary course of business . This person earns a fee or other remuneration but excludes the provision of advice as part of or in connection with the operations of the digital asset exchange Digital Asset Brokerage , digital asset traders, or digital asset fund manager or giving advice to the public in the manner specified in the notification of the SEC.

**Digital Asset Fund Manager**

It means a person who manages funds or shows to the general public that they are ready to manage funds for other people to exploit digital assets by acting as a normal trade . This does not include the management of digital asset funds in the manner specified by the SEC . (NopNuanphan Pavasant., 2020)

**Electronic commerce (E -Commerce)**

Electronic commerce is a commercial transaction through electronic media related to the process of buying goods, delivering goods , exchanging goods, services , and information via the Internet . (L Ismanto, *et al.*, 2018) Now the digital economy era existing innovations and digital payment services have been developed largely (Oksana S., *et al.*, 2021) since the outbreak of COVID- 19. The digital payment service is fast and convenient and is a protection for maintaining a distance between people (Social Distance) as well among digital asset business operators . The business platform has been developed by applying blockchain technology and digital currency in the process of commercial operations and electronic devices all over the world . (Ahmed Jeibi, *et al.*, 2021).

E-commerce business in Thailand , when the tourism industry began to recover , the value of online commerce rebounded again including other ecosystems . From the value report on electronic commerce during the year 2020 by ETDA, the figure dropped by 6.68%, mainly due to Thailand's e-commerce coming from tourism, travel, airlines, and manufacturing. The epidemic COVID affects the overall picture of electronic commerce in Thailand which has decreased in value .

Therefore, when Thailand began to open country in 2023 , the number of electronic commerce began to recover . It is expected that in 2023 the value will return to full positivity coupled with the momentum of businesses going fully online in the post-Covid era as a result, the number of e-commerce businesses in Thailand grows by leaps and bounds.(ETDA, e-Commerce Report, 2023)

### Key Factors Affecting the Management of Blockchain Technology and Cryptocurrency in the ecosystem modern finance

The changing socio-economic context has created new geopolitics around the world. Creating and demanding the same people and geopolitical groups to use their own currencies has resulted in competition and trade barriers such as the case of the issuance of a digital yuan for the Republic of China and the adoption of digital currencies by different countries. This shift needs to do research in order to help people to adapt to keep up with changes. There are important factors affecting the management of blockchain technology and digital currency in the ecosystem of modern financials as follows:

Blockchain technology and Cryptocurrency help in making business transactions faster.

1. Blockchain technology and Cryptocurrency promote the creation of opportunities for entrepreneurship.
2. Blockchain technology and Cryptocurrency help to reduce the cost of transactions related to finance.
3. Blockchain technology and Cryptocurrency help electronic commerce more conveniently and faster.
4. Blockchain technology and Cryptocurrency help Smart contracts to be efficient, faster, and accurate.
5. Blockchain technology and Cryptocurrencies are used for Digital assets business and Engineering forensics.

### Objective:-

1. To study factors affecting the management of blockchain technology and digital currency under the modern financial ecosystem in the digital asset business and e-commerce in Thailand.
2. To study the perceptions of stakeholders towards the management of blockchain technology and digital currency in digital asset business.

### Research Methodology:-

This research is Quantitative Research collecting relevant data from related research documents and articles on factors affecting the management of blockchain technology and digital currency in digital asset business and electronic commerce to define variables that manage to create query tools. The reliability of the questionnaire was tested by Cronbach analysis before being used as a tool to inquire about relevant people, including digital asset businesses, entrepreneurs, users of electronic commerce services, policy makers, legislators as well as regulators for digital asset business operations.

### Sample group

The sample size determination was based on data from the proportion of digital asset operators and those with relevant duties which are more than 100,000 people. Information from the Securities and Exchange Commission (SEC) as of March 2020. The researcher found the sample group by using the method of a graph showing the sample group at a 95% confidence level and discrepancy which the researcher can accept is equal to 5%. Persons involved in digital asset business totaling 400 samples. (Krejcie., & Morgan., 1970) Collecting data from the sample group, the researcher collects data from the questionnaire through fieldwork at the seminar on blockchain technology and digital currency and sends it via E-Mail using an electronic platform to the sample group.

### Data Analysis

The researcher uses the reliability of data by the Cronbach method to find Cronbach's alpha coefficient. To test the reliability of questionnaires and to collect data, the alpha reliability coefficient is 0.97.

Mean analysis (Arithmetic Mean--  $\bar{X}$ ) to find the central mean.

Calculate the mean from the data ( $\bar{X}$ ).

$$\bar{X} = \frac{\sum X}{N} \dots \dots \dots (1)$$

where  $\sum X$  = total sum of points

$\bar{X}$  = mean score

$N$  = number of questionnaires from all samples

Analysis of standard deviation (SD)

$$SD = \frac{\sqrt{\sum x^2 - (\sum x)^2}}{N(N-1)} \dots\dots\dots (2)$$

where  $\sum X$  = total sum of points  
 $X$  = number of points  
 $N$  = number of questionnaires from all samples

Data analysis with severity index (SI) Factors affecting adoption Blockchain technology and cryptocurrencies used to operate digital asset business for electronic commerce.

$$SI = \frac{\sum_{i=1}^A W_i X_i}{AN} \times 100\% \dots\dots\dots (3)$$

$W_i$  = the criteria for measuring the level of agreeing with the value of level 1-5.  
 $X_i$  = number of responses for each criterion  
 $A$  = criterion used to measure the highest value equal to 5  
 $N$  = number of questionnaires

The criteria for analyzing factors affecting the management of blockchain technology and digital currency in digital asset business for electronic commerce and perceptions of stakeholders in digital asset business set the average as follows.

- The average score 4.51 – 5.00 means the most agreeing level.
- The average score 3.51 – 4.50 means very agree level.
- The average score 2.51 – 3.30 means moderately agree.
- The average score 1.51 – 2.50 means a low level of agreement.
- The average score 1.00 – 1.50 means the least agree level.

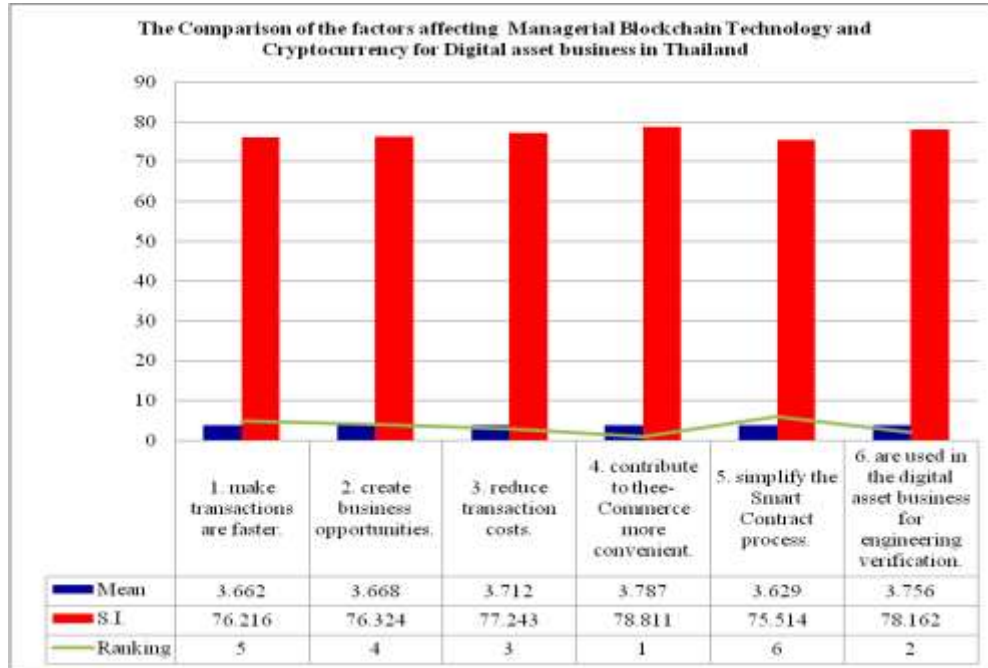
**Research Results:-**

From the study, it found that the factors affecting on the management of blockchain technology and cryptocurrencies in Digital asset business and for electronic commerce Details are as follows: (See Table 1)

**Table 1:-** Mean and Standard deviation of factors affecting Managerial Blockchain Technology and Cryptocurrency For Digital asset business in Thailand.

No.	Perceived Managerial	Mean ( $\bar{X}$ )	Standard Deviation: SD(%)	Severity index	Comments	Ranking
1	Blockchain technology and Cryptocurrency, transactions are faster.	3.662	0.877	72.216	High Agree	5
2	Blockchain technology and Cryptocurrency create business opportunities.	3.668	0.899	76.324	High Agree	4
3	Blockchain technology and Cryptocurrency reduce transaction costs.	3.712	0.913	77.243	High Agree	3
4	Blockchain technology and Digital currency contribute to the e-Commerce is more convenient	3.787	0.970	78.811	High Agree	1
5	Blockchain technology and Cryptocurrency simplify the Smart	3.629	0.993	75.514	High Agree	6

	Contract process and make it efficient, fast and accurate.					
6	Blockchain technology and Cryptocurrencies are used in the Digital asset business for Engineering forensics	3.756	0.997	78.162	High Agree	2
<b>Mean</b>		<b>3.702</b>	<b>0.942</b>	<b>78.162</b>	<b>High Agree</b>	



**Graph 1:-** The comparison of the factors affecting Managerial Blockchain Technology and Cryptocurrency for Digital asset business . in Thailand .

**The analysis of factors affecting the management of blockchain technology and the digital currency in digital asset business in Thailand**

From table 1 the chart of the comparison of the factors affecting the management of blockchain technology and digital currency in digital asset business . The results of the analysis revealed that overall of the factors affecting the management of blockchain technology and cryptocurrencies in Digital asset business and for electronic commerce as follows:

The prominent factor affecting the management of blockchain technology and digital currency in the digital asset business is blockchain technology and digital currency which contribute to making electronic commerce more convenient at a very agreeable level ( $\bar{x} = 3.787$ ), the severity index is at (SI = 78.811%). Followed by the overview of confidence in blockchain technology and digital currency in the Digital asset business for Engineering Forensics is at a very agreeable level ( $\bar{x} = 3.756$ ). The severity index is at (SI = 78.162%). In terms of helping to reduce the cost of financial transactions is at a very agreeable level ( $\bar{x} = 3.756$ ). The severity index is at (SI = 78.162%). The aspect of creating new business opportunities is in the level of agreement ( $\bar{x} = 3.668$ ). The severity index is at (SI = 76.324%). Blockchain technology and digital currency contribute to faster business transactions at are very agree level ( $\bar{x} = 3.662$ ). The severity index is at (SI = 76.216%) and the aspects contributing to reducing the smart contract process with efficiency, speed, and accuracy at is very agreed level ( $\bar{x} = 3.629$ ). The severity index is at (SI = 75.514%).

Overall considering the factors affecting on the management of blockchain technology and cryptocurrencies in digital asset business and electronic commerce in the area of awareness of the policy and supervision of digital asset business from blockchain technology and digital currency are at a very agreeable level ( $\bar{X} = 3.702$ ). The severity index is at (SI = 77.045%)

**Table 2:-** The relationship of the stakeholder perception in managing blockchain technology and digital currency in digital asset business in Thailand .

No.	Perceived Managerial	Digital asset business operators	Entrepreneurs and service users e-Commerce	Securities and Exchange Commission (SEC)	Bank of Thailand (BOT)
1	Blockchain technology and Cryptocurrency make transactions faster.	4.51 – 5.00	3.51 – 4.50	3.51 – 4.50	3.51 – 4.50
2	Blockchain technology and Cryptocurrency create business opportunities.	4.51 – 5.00	3.51 – 4.50	3.51 – 4.50	3.51 – 4.50
3	Blockchain technology and Cryptocurrency reduce transaction costs. .	3.51 – 4.50	3.51 – 4.50	3.51 – 4.50	3.51 – 4.50
4	Blockchain technology and Digital currency contribute to making e-Commerce more convenient.	3.51 – 4.50	3.51 – 4.50	1.51 – 2.50	1.51 – 2.50
5	Blockchain technology and Cryptocurrency simplify the Smart Contract process and make it efficient, fast and accurate.	4.51 – 5.00	3.51 – 4.50	3.51 – 4.50	3.51 – 4.50
6	Blockchain technology and cryptocurrencies are used in Digital asset business for Engineering forensics.	4.51 – 5.00	4.51 – 5.00	4.51 – 5.00	4.51 – 5.00

**The result of the analysis of the relationship of people involved in the management of blockchain technology and digital currency in the digital asset business**

From Table 2, the relations of those involved in the management of blockchain technology and digital currency in the digital asset business include digital asset business operators, entrepreneurs, users of electronic commerce services, the Securities and Exchange Commission (SEC), and the Bank of Thailand (BOT).

The analysis results found that digital asset business operators know how to manage blockchain technology and digital currency transactions more quickly, create opportunities for modern business and reduce the process of making a smart contract efficient, fast, and accurate. The most agreeing opinions were at 4.51–5.00. The Securities and Exchange Commission (SEC) and the Bank of Thailand have opinions at the level of 3.41–4.40 on blockchain technology and cryptocurrencies reducing transaction costs and used in Digital asset business for Engineering forensics. All four groups have a strong opinion of 3.51–4.50. In the aspect of the blockchain technology and digital currency contributing to making electronic commerce more convenient, the group of digital asset business operators, business operators and users of electronic commerce services has a high level of opinion at 3.51–4.50. The Securities and Exchange Commission and the Bank of Thailand have a low consensus of 1.51–2.50. They consider that blockchain technology creates the potential for the third-party autonomous and independent transaction processing. The foundation of trust counts on the code of blockchain technology and smart contract. It uses an open-source software development model to create transparency and allow all users to supervise together. It could be said that the unique nature of blockchain technology puts the power of data control in the hands of the user and the inability of cryptocurrencies to be accepted as a medium of settlement because of problems with instability in value. In addition,

it lacks the physical characteristics of money which are the most important properties of money and makes cryptocurrencies not suitable to be defined as money as required by law. It is necessary to use a stable coin (Central Bank Digital Currency: CBDC) issued by the Bank of Thailand.

Both agencies play a key role in policy-making and regulation regarding digital assets and cryptocurrencies. That is, the Bank of Thailand (BOT) is an agency that plays an important role in regulating financial markets in the digital age. In terms of monetary policy formulation establishing or supporting the establishment of a payment system and supervising and monitoring financial institutions involved in digital currency transactions ; therefore, In order to maintain the country's financial condition and maintain overall economic stability , The Bank of Thailand has taken steps to prepare and support the digital asset business related to financial institutions in many ways, such as formulating a strategic plan of the Bank of Thailand. Moreover, there is one challenge to support ing the trend of developing digital currencies both domestically and internationally. The Bank of Thailand makes the determination of digital asset business guidelines for financial institutions and companies in the financial group of that financial institution and implementation of specific policies for regulating stablecoins of Central Bank Digital Currency under the Inthanon Project.

The Securities and Exchange Commission (SEC) is the most important Thai government agency in regulating digital assets and cryptocurrencies in both trading and trading. It also regulates the exchange or any other transactions related to cryptocurrencies and digital tokens. The SEC Office operates a regulatory mechanism to monitor and develop the country's investment market and has the duties and powers specified in Section 19 of the Securities Act and the Stock Exchange of Thailand. (Surapha Srimuang, 2019)

### Conclusion:-

This research article discusses factors affecting the management of blockchain technology and digital currency applications in digital asset business and electronic commerce . According to the study, today's digital currency or virtual money in digital form Cryptocurrency (Hilman, G., 2016) is increasing the interest in the society. The amount of Bitcoin used for transactions has increased because it can be used to exchange goods, services, and physical currency. The number of merchants accepting Bitcoin as a medium of exchange for goods and services has expanded from its popularity. Bitcoin could buy online game items in the early days. To day the E-Commerce and Quick Service Restaurants accept Bitcoin. Moreover, Bitcoin ATMs are now available in the United States and Canada.

Blockchain technology and Cryptocurrency is a good idea to reduce the barriers and costs of financial transactions and promote the online trading activities in the borderless digital economy era but we have to admit that this mechanism has to wait to be proven in many points. First, the cryptocurrencies are lack of legal recognition and transaction control. In addition, standard rules are another important factor for those who are interested in using cryptocurrencies. It is necessary to carefully consider the sentiment of the value of cryptocurrencies , including issues of security risks. Cryptocurrencies are virtual money in the digital world and no real identity. As a result, the storage may face threats in the cyber world, such as being stolen by hackers , computer virus threat. The risk of being used as a means of money laundering by holding a Bitcoin wallet will go unchecked due to the lack of regulatory authorities resulting in criminals in an illegal way .

Over the past year, the digital asset market has experienced the demise of the LUNA coin (Terra) and the digital cryptocurrency platform FTX. The Fed increase the high-interest rate dramatically which affected the financial business so the bank run crisis would affect all types of investments including the cryptocurrency market in Europe and the United States . However, after the government and central banks of different countries came to carry the bank crisis then investing in the cryptocurrency market, especially Bitcoin returns as high as 68-70%, which is higher than risky assets like stocks.

Thai digital asset business operator said that the interest in the Cryptocurrency market in Thailand , investors are increasing with more than 2.91 million user accounts opening with Thai digital asset exchanges. At present, the development of Thai asset law is still in its early stages. To promote this government agencies and related regulatory agencies are ready to listen and adjust various regulations for the benefit of businesses and people . Moreover, they try to foster technological innovation that promotes economic and social activities and increase funding channels for businesses along with investor protection to ensure fair and transparent trading of digital assets. (Krungthep Turakij, March 5, 2023)



The global economic situation and the rapidly changing business environment require the use of blockchain technology in transactions ; for example, smart contracts increase the potential ways of competition cybersecurity and create an ecosystem to support the socio-economic development of the country to progress according to the 20-year national strategy . Unfortunately, nowadays it is found that Thailand does not have a specific law regarding intelligent contracting . (Sawettathapong D., Kongsong, W., Srithammasak, B., & Trerutphicharn, S., 2018).

The adoption of blockchain technology and cryptocurrencies in the construction industry must take into account the issue of trust . Which extremely important because there are many elements such as data security , legal effects to minimize disputes , data processing for transparency , and speed in checking data processing, etc. (Boonpheng, A., Kongsong, W., Usahanunth , N., & Pooworakulchai, C., 2020).

In conclusion, this research found that factors affecting the management of blockchain technology and digital currency in the digital asset business are the most important. It helps in making electronic commerce more convenient at a very agreeable level ( $\bar{X} = 3.787$ ), the severity index is at (SI = 78.811%). Followed by the overview of confidence in blockchain technology and digital currency in the digital asset business for engineering verification is at a very agreeable level ( $\bar{X} = 3.756$ ), and the severity index is at (SI = 78.162%). Overall, considering the factors affecting the management of blockchain technology and cryptocurrencies in the Digital asset business and for electronic commerce in the area of awareness of the policy and supervision of digital asset business from blockchain technology and digital currency is at a very agreeable level ( $\bar{X} = 3.702$ ) The severity index is at (SI = 77.045%).

The relationship of those involved in the management of blockchain technology and digital currency in the digital asset business in Thailand . Found that digital asset business operators know how to manage blockchain technology and digital currency transactions more quickly , creating opportunities for modern business . And reduce the process of making a smart contract efficient, fast, and accurate. The most agreeing opinions were at 4.51–5.00. The Securities and Exchange Commission (SEC) and the Bank of Thailand (BOT) have many opinions at the level of 3.41-4.40 in terms of reducing transaction costs and used in Digital asset business for Engineering forensics. All four groups had a high level of agreement at 3.51-4.50 and contributed to making electronic commerce operations more convenient. The group of digital asset business operators and business operators and users of electronic commerce services has a high level of opinion at 3.51-4.50, while the Securities and Exchange Commission and the Bank of Thailand have a low consensus at 1.51-2.50. Cryptocurrencies are eligible for acceptance as a medium of settlement due to issues with instability in value . And lack of the physical characteristics of money which are the most important properties of money . To make cryptocurrencies unworthy of being defined as money as required by law, it is necessary to use a stablecoin (Central Bank Digital Currency: CBDC) issued by the Bank of Thailand.

### **Suggestion:-**

This research found that existing laws cannot be immediately applied to new technologies or innovations. The government sector needs to consider looking for a way to supervise by amending the law as well as setting guidelines to deal with problems that arise. However, in case of the Bank of Thailand interprets the Currency Act B.E. 2501 to prohibit the use or exchange of digital currency. The state itself must lose the opportunity to use the system of blockchain technology and digital currency as well .

The World Economic Forum of Report 2023 states that in the next 10 years, GREEN Changes will use positive and negative incentives (Carrot and Stick approach) and reward and punishment mechanisms in doing more business in all industries. (WFE's Report, 2023) It is a huge opportunity because every country is driving Carbon Net -Zero. Bitcub, a major digital asset operator in Thailand has a policy to create applications using blockchain technology . That is on a new protocol called Digital Money, not only cryptocurrencies . However, it can lead to tokenization, carbon credit, or even bonds, stocks, and forex swaps, expanding into other businesses and including the world of Metaverse. (Krungthep Turakij, March 31, 2023)

So the government needs to reinvent the infrastructure of the financial landscape in order to support changes and create competitive advantages in the digital economy era . Supporting and promoting Thai digital asset business operators, the government has to take policies from the Asia-Pacific Economic Cooperation Summit ( Asia-Pacific Economic Cooperation) or APEC 2022 hosted by Thailand, one of the issues discussed in the meeting has to push Bangkok's Goals on the economy BCG (Bio-Circular-Green Economy or biological economy, circular economy and green economy) . APEC Leaders' support is included in the Declaration of Leadership. It is a declaration of the

success of the BCG economic concept that Thailand has tried to push. In addition, it is like a n engine that drives sustainable economic development according to the goals of the United Nation in the long term.

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