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Blockchain Technology for Cashless Investments and Transactions in Digital Era With SWOT Approach

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Abstract

One of the most visible information technologies in today's digital age is transaction and investment technology, where users or the public are facilitated in transactions by no longer using cash. Users also feel safer because they do not need to carry cash. Moreover, the current digital era makes it easy for users or the public to invest anywhere and anytime without disrupting other businesses. Blockchain technology can be used as an alternative to non-payment transactions or commonly known as cashless transactions. Blockchain technology can also be used as an investment in electronic money. The methodology used to provide an overview and evaluate the benefits of blockchain as an alternative to digital payment and investment activities in the cryptocurrency industry uses a SWOT approach. Based on the SWOT approach that has been taken, it can be concluded that with internationally recognized safeguards of confidentiality and the ease of conducting investment transactions and activities without payment, the Weaknesses and threats can be controlled for more investors to enter the world. Of electronic money.

Keywords: *Blockchain, Cryptocurrency, Investment, SWOT, Technology*

1. Introduction

In the current digital era, information system technology has developed rapidly, bringing many conveniences in daily life; one of the information technologies that can be clearly seen in the current digital age is the transaction and investment technology, where users or the public are facilitated transactions such as no longer using cash. Hence, users are also more secure because they do not need to carry cash. In addition, it may make it less complicated for customers or the general public to make investments everywhere and whenever without different traumatic activities [1]. Blockchain is a virtual ledger that records hard and fast information controlled with the aid of a gadget. The blockchain gadget includes transactions and blocks, which might be a sequence of cryptographic hashes in addition to community block hashes. Blockchain records immutable information, and blockchain can also be used in areas other than finance, as McKinsey created a Blockchain Opportunity Board for

various sectors in 2018 where the fields are telecommunications . Communications, media, and healthc[2]. Existing Blockchain technology can be used as an alternative to non-payment transactions, commonly known as cashless transactions. Blockchain technology can also be used as an investment activity in cryptocurrency [3].

In contrast, we know cryptocurrency is widely used, including the founder of Tesla. One of the transactional technologies in cyberspace is virtual money, commonly known as cryptocurrency [4]. This technology is not limited by space and time and has no inherent state power like ordinary money. Blockchain is inseparable from bitcoin as we now know that bitcoin is a digital currency or cryptocurrency overvalued compared to conventional currencies. Based on data on blockchain usage in the financial sector, it is estimated that blockchain-related finance and banking is 30%.

In comparison, it is 13% in the public sector, while for the medical sector, the economy is 8% and insurance is 12%. In 1990, the virtual currency was born using the ecash system in DigiCash company [5]. Based on quotes from nian and Chun, cryptocurrency or virtual currency is inseparable from the virtual payment system that existed in previous years. There are different types of digital currencies in cryptocurrency; some are commonly heard and have good reputations and significant market share, including Bitcoin, Dogecoin, Litecoin, Ethereum, Dash, etc. Bitcoin is currently a cashless payment method that can be used in many countries without exchanging money for purchases in one country[6]. Currently, bitcoin is also used as an easy-to-learn investment asset [7], [8]. Non-payment transactions are still widely abused and rampant fraud, so people fear digital transactions. Currently, many people are unfamiliar with digital investments, so they still use conventional methods such as buying gold from offline stores, which can inadvertently endanger the community itself and must provide a safe storage location [9].

In this study, the author presents and discusses the benefits of blockchain as an alternative to digital payments and cryptocurrency investment business [10]. Where the current digital payments and investments in the crypto space are growing and have a wide following. Therefore, the author team conducted a study on the effectiveness and efficiency of blockchain technology using the SWOT method [11].

2. Research Method

In this study, the author presents and discusses the benefits of blockchain as an alternative to digital payments and cryptocurrency investment business. Where the current digital payments and investments in the crypto space are growing and have a wide following [12]. Therefore, the author team conducted a study on the effectiveness and efficiency of blockchain technology using the SWOT method. A SWOT analysis has been designed; companies can use that to analyze other competitors without industry-wide data or competitor intelligence data. The data collection method uses literature studies from journals, books, websites, and other print media related to blockchain, organic, digital investments, and SWOT [13].

Building on the discussion that has been described using the SWOT method in the development of this study in the blockchain field, the advantages of a SWOT analysis include a more general view of the assessment, a simple analysis, ease of understanding, and can be used in small business and large enterprise analysis [14]. The existence of internal and external factors in the SWOT analysis makes the analysis more detailed. SWOT analysis also helps companies understand the weaknesses of their business and can prevent or mitigate threats from competitors. Look at the strengths, weaknesses, opportunities, and threats in cashless operations and investments [15].

The SWOT analysis was devised between 1960 and 1970 by Albert Humphrey, using data from many of the world's leading companies, namely an academic who led a research project at Stanford University. When using the SWOT analysis technique, Albert Humphrey's goal was to identify problems in a business plan that could go wrong [16]. The research results

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identify several areas, and the tool used to look at all the most critical areas is called SOFT analysis. Albert Humphrey and his team used Satisfactory, Opportunity, Fault, and Threat rules. Then, the following year, in 1964, Urick and Orr, at a conference, changed the letter F to W, becoming the analysis known as SWOT [17]. A SWOT analysis systematically identifies the various elements aimed at a company's strategy. In general, SWOT is an analysis based on an effective strategy, in which strengths and opportunities are optimized as much as possible while weaknesses and threats can be minimized.

Figure 1. SWOT Analysis

Figure 1 above shows that the SWOT analysis has 4 strategic elements, which are:

2.2 Strengths
This factor is a force factor that the company owns in business activities including products, human resources, etc., thus making the company stronger than competitors to satisfy market demands.

2.3 Weakness
This factor belongs to the company; the limitations, existing quality, and human resources capacity create obstacles for the company.

2.4 Opportunities
This factor is an opportunity factor for the business's success because seeing external objects bring profits to the business.

2.5 Threats
This factor is a threat factor that is not profitable for the business that, if not overcome, threatens to endanger the business itself.

The above elements are the author's reference for discussing issues related to blockchain technology for payment transactions and investments.

3. Result and Discussion

Cryptocurrencies are cryptographically protected digital currencies that cannot be counterfeited.

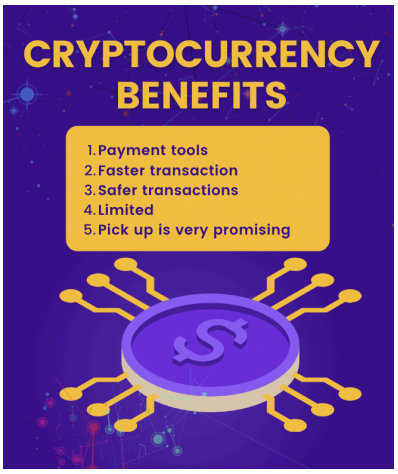

Figure 2. Cryptocurrency Benefits

Based on the above Figure 2, it can be concluded that cryptocurrencies have significant advantages as payments, safer and faster payment instruments—process Bitcoin transactions or exchanges without intermediaries like banks. At the time of transfer of Bitcoin, it is sufficient to update the blockchain network.

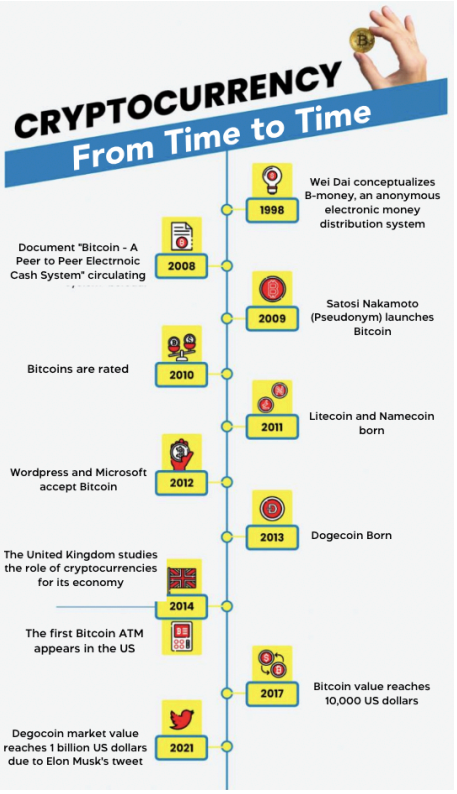

Figure 3. Cryptocurrency Development

The image above shows the chronological cryptocurrency that in 1998 Wei Dai conceptualized B money for an anonymous cryptocurrency distribution system. In 2008, the Bitcoin document, a peer-to-peer electronic payment system, was released [18]. Then, in 2009, Satoshi Nakamoto launched the Bitcoin currency, and in 2010, Bitcoin gained value. Then in 2011, Litecoin and namecoin appeared, and in 2012, WordPress and Microsoft accepted payment in bitcoin. Also, in 2013, Palmer and Mark officially launched Dogecoin. In 2014, Great Britain or Great Britain researched cryptocurrency for its economy and was accompanied by the arrival of the first Bitcoin ATM in the United States [19]. The following year 2017, the value of Bitcoin reached 10,000 US dollars, or the equivalent of 143 million rupees. In 2021, Dogecoin reached a market value of US$1 billion due to the comments on Elon Musk's Twitter account. Transactions on blockchain technology are like chains linked together and without the intervention of a third party. This is how blockchain works, namely:

- Data folder: Transactions on cryptocurrencies take advantage of blockchain technology. The user has a folder to store data for each transaction.
- Data transaction: Each user will record and save new data when a transaction is made.
- Data validation: Data will be validated on blockchain cryptocurrency by using a hash function, where the function will be formed when the transaction is declared valid.
- Verified transaction: These transactions may involve cryptocurrencies, contacts, notes, or other information.
- Transaction complete: In the following stages, the transaction has been completed.

Blockchain technology has its impact on those who use it as an investment and do not pay with cryptocurrencies; in this study, the author will discuss Blockchain technology with the following SWOT analysis method :

a. Strengths Analysis

The power of blockchain technology in terms of cashless operations and investments can provide convenience in data security, as blockchain technology provides good cryptographic protection. Hence, it is vital for security and data logging [20]. Users can easily trade as cashless activities and investments by simply scanning the QR code for transactions and viewing candlestick charts for investment. Moreover, cashless digital currencies or cryptocurrencies are applicable in many countries, so there is no need to exchange. Cryptocurrencies are legal in some countries as cashless and investment.

b. Weakness Analysis

The blockchain has marketing and understanding gaps in cashless operations and crypto investments. Cryptocurrencies have one weakness compared to other cryptocurrencies: a very high risk of unlimited value reduction. And cryptocurrency is also not a physical currency; it becomes a cryptocurrency without strong fundamentals like economic conditions, macroeconomics, and interest rates because So crypto-assets cannot be analyzed fundamentally. In crypto investing, everything
is managed by the blockchain system. It has no human authority to set regulations or restrict exchanges, leading to a lack of investor protection and investor services should an accident occur. Deal with crypto assets.

c. Opportunities Analysis

Blockchain technology is now global, so cryptocurrency transactions are an investment option, and in Indonesia, cryptocurrency regulations have been recognized and regulated by CoFTRA No. 5 of 2019 as a commodity. Commodities can be traded in the futures market. Moreover, investing in cryptocurrencies can make signing up as a new investor easier. There are no minimum margin rules, which give investors special attention when entering the world—of electronic money. Cryptocurrencies present in the world as non-cash and investment for economic activities have been recognized as convenient and internationally recognized, so many investors are interested in investing.

d. Threats Analysis

In some crypto countries, there is no legal basis and denial, which leads to the weakening of the value of crypto assets.

4. Conclusion

The growing quantity of noncash transactions displays that the general public has started to interchange to a cashless transaction mechanism that does not require coins in each monetary transaction activity. This is mediated withinside the assistance of the Central Government, which maintains to supervise the virtual transformation accomplished for users. In general, the advantages of cashless are (1) realistic and straightforward, as it does now no longer require coins in transactions, except that it has also taken into consideration more excellent hygiene; (2) complete access, due to the fact transactions are accomplished via virtual means, in order that noncash transactions are taken into consideration able to achieve a much wider area; (3) transaction transparency, via noncash transactions the transaction procedure will become more tremendous obvious and may be accounted for accurately; (4) foreign money efficiency, each transaction accomplished is capable of lessening the value of coping with Rupiah (from printing, circulating and destroying foreign money) and coins handling; (5) transaction making plans is greater systematic, each transaction made may be recorded in total, each in phrases of making

plans and realization.

From the SWOT technique to blockchain generation for payless transactions and funding activities, it may be concluded that with privateness safeguards which are the world over diagnosed and the convenience of accomplishing payless transactions and funding activities, therefore, weaknesses and threats may be managed well in order that many buyers dive into the arena of cryptocurrencies.

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