Bitcoin influence on E-commerce

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Abstract. The purpose of this research is to identify the development of e-commerce technology in the business world, and the benefits of the application of e-commerce in the online business. The method used in this research was the descriptive method to present a complete overview of the situation related to some variable situations examined. The result of this research is to give clear identification of how far the development of e-commerce technology in the world of online business, as well as the benefits provided by the application of e-commerce in the world of online business. In the end, bitcoin gives mutual connection to expand the business of E-commerce.

1. Introduction

The influence of Bitcoin on e-commerce use of bitcoin as a payment method that is safer, faster, easier and minimal costs can be supported by e-commerce. Because with these things more helpful for consumers in the transaction. The use of Bitcoin that allows consumers to buy without having to worry about paying the payment. This uses you to do business efficiently. Bitcoin is a different currency that does not have significant and open bitcoin. Bitcoin is open-source and peer-to-peer. A study explains that open source means the currency that can be developed by emissions that want it [1].

While Peer-to-peer is a place to transaction on a computer network directly, unlike banks or sellers like other existing payments [1]. Bitcoin is a peer-to-peer based electronic cash system that does not make use of central authority [2]. In the Bitcoin network, each node represents one of potentially many public keys belonging to Bitcoin users and communicates directly with each other node [2]. Bitcoin system is based on cryptocurrency, and the technology used is a peer-to-peer network and cryptography is used to maintain data security [3]. Bitcoins are owned by Bitcoin addresses, which are public keys from a keypair [3]. In order to assign Bitcoins, or some fraction thereof, to a new owner, the current owner must sign the transaction with the private key of the keypair [4]. One of the basic concepts in the bitcoin mining is to be done in examining all transactions monometer which in turn creates bitcoin as a present [5]. Bitcoin has a way of working by sending an address. They will give a unique address to receive and store one-time payments from other senders, rather than using one static address as we do with a bank account [6]. Otherwise, the public can infer how much money each address and how the owners spent to see the history of the public.

With this decentralisation, users can register their users, and do it themselves. Fleishman explains even users do not need to give any names [7]. It also does not provide specific names that are needed. One day the user wants a new identity, people can immediately make it, and as many as the user wants [7]. Randel explains that create a new identity, using it only temporarily, if completed, then do not use it anymore [8]. According of one research, it says that customers who tend to curate trust the
new payment method that is done online and this is because they believe that they face the risk of fraud/theft, hacking, password theft [9-11]. This study aims to determine how much influence the use of bitcoin for e-commerce. The method used is a case study research method that aims to describe and understand what is being inspected and examine how this can happen.

2. Method
The method used was a case study research method that aimed to describe and understand what was being inspected and examine how this can happen. So it could analyse how big the influence of Bitcoin technology in e-commerce.

3. Results and Discussion
Existing technology is emerging and creating an e-commerce sector that has had an impact. The use of bitcoin is done with users from official bitcoin sites. After that, the user must wait to block everyone who can be downloaded. All transactions carried out will be stored in the network block. This bitcoin wallet will later make money that can be spent and also for transactions that are allowed by the user. This is one form of bitcoin that can be issued by the user can be seen this is in Figure 1 of the bitcoin wallet.

![Figure 1. Bitcoin wallet](image)

Bitcoin is based on public-key cryptography where each transaction is referenced by two keys: a public key that encrypts incoming payments and the private key that decrypts them. These keys are represented by large numbers to establish secure encryption of a rough guess. Although it is possible to use the same account (public key) for all incoming and outgoing transactions, people who want anonymity will generate a unique public key for each transaction.

They will give a unique address to receive and store one-time payments from other senders, rather than using one static address as we do with a bank account. Otherwise, the public can infer how much money each address and how the owners spent to see the history of the public. The public key acts as an
actor in the system. The public key can be used to provide a statement by affixing the signature of the owner on it. As in the picture above can be seen that the public key that is owned by the user can be used as this security. Security makes bitcoin system is safe in its use as a medium of payment. In Figure 2 below is the flow of the process of running bitcoin from beginning to end.

Moreover, the payment method using bitcoin is much faster than the payment transfer system because when making a payment system via bank transfer or through a third party the bank will do it. According to a study conducted in Indonesia, using the theory of planned (behaviour TPB) to determine one's intention to do something - trade transactions gave the attitudes, subjective norms and behavioural control are known. Bitcoin transaction system itself is the key exchange and the user's address when the transaction sender and receiver must give the keys first and the address for the exchange of transaction processing if there is no exchange first the transaction will not proceed. With the key exchange system and address on the transaction to give users a sense of security when they want to conduct bitcoin transactions. So with this security, the transaction on bitcoin lies in the key and address of the bitcoin.

By exchanging the valid key and the validity of which has been done between the sender and recipient of the transaction goes well. In Figure 3 below is the flow of the transaction process that occurs in bitcoin from the beginning to the end.
In the picture above is a presentation of the payment cycle carried out by payment method by transfer or through a third party. From the picture above can be seen that in order to make a purchase or ordering a product, only buyer must through long process. This is not to mention including the length of time the bank needs to verify the transaction process, because in some banks this cannot be done at that time. This means that it less effective and efficient, which means making e-commerce web takes more time to validate the payment process that enters the web. Of course, with a very long path, it is very time-consuming. Also, the seller has yet will perform the process of packaging products to the web validate payment process because this is quite risky for the seller where the buyer may cancel the purchase after product delivered. sometimes this is what makes a consumer reluctant to make the purchase process online.

With this decentralisation, users can register their users, and do it themselves. Even users do not need to give any names. It also does not provide specific names that are needed. If one day the user wants a new identity, you can immediately make it, and as many as the user wants. If the user wants an anonymous identity for a new user, the user can do it. Create a new identity, using it only temporarily, if completed, then do not use it anymore. According of one research, they say that customers who tend to curate trust the new payment method that is done online and this is because they believe that they face the risk of fraud/theft, hacking, password theft [9].

While it still a payment method that is most popular in Indonesia, bank account transfer has several challenges, including security issues - the seller's account is displayed on the Internet can be abused, making it difficult for buyers - consumers will have to confirm the payment, human error as possible - the seller should check the manual for transfer, confirmation, and the nominal transfer and delayed delivery of products process - confirmation of payment from the seller is mostly only done on weekdays. Method of payment by transferring money between banks to process until funds are available in the recipient's account. There is still another process of sending these funds from two different banks, which can take longer. This could hamper the business process by way of payment, bitcoin payments can be completed at that time without the need for a long time.

4. Conclusion

Bitcoin is also a separate currency that can be used safely. Although there is no need to fear there is more funding due to third party financing or banks. The use of this bitcoin payment method also makes it easy for transactions with different locations and currencies. This also allows users or less-demanded customers to use this payment method. because they believe that they face the risk of fraud/theft, hacking, password theft. Because users or buyers frequently purchase cancellations because in a sense the payment process for too long so that the items in the message in a much longer time. It can be
concluded that bitcoin has a considerable influence on business development and business expansion which of course has an impact on the e-commerce sector.

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