Abstract

Supply chain industries are involved with a lot of transactions concerning various parties. To maintain a relationship between wholesalers and suppliers, each party should have trust in the transaction. Which mean that the wholesalers should believe that the suppliers will be capable and credible to fulfil their responsibility in the transaction, while suppliers should believe that wholesalers will not misuse the information shared when doing transaction for instance, infer wholesale pricing strategies and other supplier parameter that could be used to manipulate future negotiation. In this research, currently VehGro rely on third party to check on the obligation of their supplier and they put their trust mainly based on personal connection that the CEO had with the supplier. Hence, they are thinking to implement blockchain in their operation as a platform that is seen to be able further enhance the trust in their business transaction. This research aims to help an organic food wholesaler, Vehgro, convince their suppliers to accept their blockchain implementation plan within the supply chain process. This research uses the framework of blockchain-related trust attributes to address this issue.

After conducting qualitative research based on the blockchain-related trust attributes derived from Kochovski Model by looking through literature and interview with a half-structured with CEO of VehGro, Blockchain Expert, and Information System Expert, the author found out that blockchain does contribute to trust, especially its capability to be traceable and immutable that are not seen on the current system used by VehGro. However, not all blockchains are suitable for supply-chain, the only appropriate type of blockchain is permissioned blockchain. In addition, to ensure privacy and security of the blockchain system, the system should be built with viewing keys or private smart contract. Furthermore, to make sure that information shared within the blockchain is credible, the blockchain system should allow users to add correction data on top of wrong data. Moreover, to make suppliers switch to the new system, it is advised to make an incentive plan that can be achieved by creating a token inside the blockchain with a particular utility. Next alternative is to also put into account a possibility of better public image due to implementation of blockchain that will give a feeling that the supply chain environment is secure and credible. Other possibility is creating a hybrid system with a mixture of the current operating system and some part of the blockchain system to make it easier for people to accept the change. In the end, the system that will be implemented should make everything easier and bring advantage over the previous ones, not the other way around.