

Blockchain Companies in Marketing Communication: The Study on 4C Framework of Strategic Marketing Analysis

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Abstract: *This paper aim to introduce 4C framework of strategic marketing to analyze how blockchain companies are working in marketing communication and advertising. The 4C framework of strategic marketing includes: customer, cost to the customer, convenience and communication. Based on our study, we would be able to have the conclusion that using the blockchain technology in business marketing would be able to build and maintain good relations with customers through customer loyalty plans and reward plans. Blockchain technology could also lower the cost of the product and service, hence lower the cost to the customer eventually. Using blockchain technology is more convenient since the blockchain technology could build more connection between different brands and companies. Both internal and external communication will be increased since blockchain technology does not need support from intermediate agents. Blockchain technology also could make communication more effective and efficient.*

Keywords: *Blockchain, Marketing communication, 4C framework (Customer, Cost, Convenience, Communication), Strategic marketing*

1. Introduction

This paper aim to introduce 4C framework of strategic marketing to analyze how blockchain companies are working in marketing communication and advertising. The 4C framework of strategic marketing includes: customer, cost to the customer, convenience and communication. In this paper, we will survey most recent literatures which discussed the marketing issues of blockchain companies and understand how blockchain companies are doing their advertising and marketing communication.

We have done the literature review based on the 4C framework of strategic marketing to answer the question: how blockchain technology would change and reshape business marketing communication in the future. Our literature review have four parts individually. These four parts answered the sub questions of our topic. For example, these four sub questions are: how blockchain technology would have influence on customer, cost to the customer, convenience and communication.

2. Literature Review

2.1 Customer

The core of advertising for blockchain companies is to get and maintain their customers. Marketers nowadays are facing the challenges to learn new technologies in a fast speed such as blockchain technology. Although blockchain technology has been emerged decade ago, the researchers in marketing fields are rarely noticed of this new technology. The blockchain technology has special characteristics that could be quite beneficial in marketing, such as transparent, decentralized and unchangeable. Through applying blockchain technology it could help build a more secure and customer centric open markets^[1]. In order to obtain more new customers and maintain good relations with customers, companies usually have the customer loyalty plan. The plan encourages customers to continue purchasing companies' service and goods or related products^[2]. For example, the Starbucks rewards plan will reward free coffees based on the number of coffee that purchased. The American Airline will reward tickets to a certain amount of miles that have filed. Customers could have many membership cards. Companies used blockchain technology developing a blockchain loyalty plan. Under this plan, customers do not need to bring many membership cards with them anymore. This blockchain loyalty plan linked the customer memberships with their cellphone number. Therefore, from companies' perspectives, using the

blockchain technology would be able to decrease the indirect cost related to the administration and management fees of the loyalty plans, which will be benefit to the companies^[2].

The customer centric marketing strategy is essential in the survival of companies under B2C business environment^[3]. From the perspective of customer centric point of view, blockchain technology could dramatically increase consumer relations by increasing the transparency of data quality, data access, as well as increasing the data privacy and security^[4]. In the times of big data, companies are collecting and storing data mainly through their consumer loyalty plans^[5].

There are some disadvantages of the consumer loyalty plans, however, these disadvantages could be solved by the blockchain technology. For example, customers sometimes forgot to use their rewards and felt frustrated when their rewards expired^[6]. Also, another disadvantage is that there isn't a consumer loyalty plan that could embrace different brands^[7]. The blockchain technology would be able to integrate different parts together, such as consumer royalty plan operators, marketers, consumers, information system managers, call centers, sales department and other departments which take part in this consumer royalty plan. Through integrating different parts of information together, blockchain technology could help to change the way of design, track and deliver useful information to consumers, therefore blockchain changes the customers' experience, increasing the degree of brand loyalty^[4]. Blockchain technology could also integrate information among different brands. Different brands and companies would be able to design, develop the consumer loyalty plans together, even be able to exchange reward points altogether to give consumer better experience of shopping^[8].

2.2 Cost to the Customer

Using the blockchain technology could possibly lower the price of the product to the customer eventually. For example, in the coffee industry, the cost of paper work and physical detection could be up to 0.91 dollars per pound. However, the cost could be dramatically lowered by the data offered through blockchain technology^[9]. Today, there are some internal system, such as ERP, MRP, WMS and CRM. These systems could enhance the operation fluency, moreover increase efficiency and lower the cost of the price. However, blockchain integrated with IOT would be able to communicate among different organization both internal and external, which would be able to offer a better and cheaper solution^[10].

Many blockchain system could be the supply for service. The cost of the service is calculated by the transaction data per unit. However, because blockchain technology does not need the infrastructure in the early stage and could be used in the platform, therefore many companies would be able to afford such service. The cost is mostly driven by the number of sensors and amount of data, however the advantage is that it could bring companies the benefit of no early stage cost and the lower maintenance cost^[10]. Blockchain technology is seen as a digital supply chain method which is more secure and cost efficient. Generally speaking, blockchain technology is used to build many to many integrated model on internet. It integrated in the cloud to increase efficiency of secure transactions and decrease the cost^[11]. Blockchain technology would be able to cut down the cash transaction fees. The traditional intermediate cash transaction is peer to peer model. By applying the blockchain, the settlement fees could be cut down. Compared to traditional model, the blockchain model is more secure, fast, easier to access, transparent and with lower transaction cost, which in the end decreases the price and make the product or service cost more efficient to customers^[12].

Another advantage of using blockchain application is to certify whether the advertisement actually delivered to target customers. Therefore, it saves the money to avoid delivering advertisement that are not aimed at target customers. By using blockchain, the marketers would be able to know more exact information about where the advertisements are put and also know the number of clicks of the advertisements at real time. The number of clicks would be a criteria to know how valuable the advertisements are^[13]. Using the blockchain, in the long run it reduced the need for intermediate advertising agents^[14]. A platform like AdEx would allow users choose to add advertisements and ensure that the company only pay for the advertisements that actually been clicked on the internet by the customers. Once the blockchain certified that the users looked at the advertisements, the contract system will automatically pay the fees^[15].

2.3 Convenience

The combination of blockchain and IoT (the Internet of Things) is powerful. The innovation will change many industries. For the business which required uniform and trustful intermediate agent can now use the decentralized blockchain. In the blockchain system, there is no need of using centralized

utility. Telecommunication, exchange of values could be conducted through artificial contracts, which brings a lot convenience for business^[16]. Blockchain could offer immutable audit tracking thus save the cash for expensive audit. Blockchain is useful in managing digital capital and would be able to track the sources. It increases the usage of the data and protect the data's privacy. It is benefit in keeping the data and in continuously use. It also enhances the data's security and privacy^[17]. There is a research to investigate how the blockchain influences the customer loyalty plans. The researchers sent out 450 surveys to the clients and airplane company's managers. The percentage of effective responses from the clients and airflight company's managers is 79.7%. The results of the survey showed that the blockchain technology enhances the company's consumer loyalty plans^[18]. The driven engine for digital business is the business efficiency and consumer experience. To give consumers better experience, it is essential to make the business more convenient in iteration, innovation in products and service, higher quality of products. As an innovative technology, blockchain would be able to give consumers better experience than before^[19].

2.4 Communication

Business communication means more interaction in transaction. The new technology such as blockchain could lower the cost of interaction hence increase the speed of communication. Another criteria to evaluate the business communication is to increase the effectiveness and efficiency of communication. Blockchain has the potential to increase the effectiveness and efficiency of business communication. The methods of communication using blockchain includes: message authentication, digital record, digital signature, digital registered letter, digital contract, digital order, and smart contract. Another essential in business communication is trust. With the solution that blockchain provided, business communication would be more effective since the trust in the communication is improved. Digital business normally involved a large amount of technical design. On the other hand, if business is lack of the trust and is involved untrusted parties, the reputation of the business will be damaged^[20]. Using Blockchain in social media is a way to increase the business communication, because blockchain could provide secure messaging platform. Some communication should be crucial and secure, such as: exchanging trade secrets, making business referrals and strategic business decisions. Protecting the information exchanged during business communication is essential for doing business. Using this new decentralized technology, blockchain would provide more privacy and secure communication environment^[21].

3. Conclusion

Based on our study, we would be able to have the conclusion that using the blockchain technology in business marketing would be able to build and maintain good relations with customers through customer loyalty plans and reward plans. Blockchain technology could also lower the cost of the product and service, hence lower the cost to the customer eventually. Using blockchain technology is more convenient since the blockchain technology could build more connection between different brands and companies. Both internal and external communication will be increased since blockchain technology does not need support from intermediate agents. Blockchain technology also could make communication more effective and efficient. In the future, we will collect data from the public blockchain companies to further testify.

There is still a lot of work to do in the future as this blockchain technology is still new. In the future, the large application of blockchain technology in corporations, required more knowledge and implementation in international law, information technology, and maybe also in other disciplines. This type of research still needs more empirical research and data collection. The industries could involve business, technology, and science. Besides corporations, some country governments also have projects in implementing blockchain. This study is mostly focused on marketing. In the future, there could be more studies focusing on medium and small-size firms. Innovation helps the company to grow and there is a great need for innovations in the market as well. The technology of blockchain will continue to develop, providing better business services in the future.

References

[1] Gleim, M.R., & Stevens, J.L. (2021). *Blockchain: A game changer for marketers? Marketing Letters*, 32(1), 123-128.

- [2] Dominguez Perez, L. J., Ibarra, L., Alejandro, G., Rumavor, A., & Lara-Alvarez, C. (2020). A loyalty program based on waves blockchain and mobile phone interactions. *Knowledge Engineering Review*, 35.
- [3] Sheth, J. N., Sisodia, R. S., and Sharma, A. (2000). The antecedents and consequences of customer-centric marketing. *J. Acad. Mark. Sci.* 28, 55–66.
- [4] Rejeb, A., Keogh, J. G., & Treiblmaier, H. (2020). How blockchain technology can benefit marketing: Six pending research areas. *Frontiers in Blockchain*, 3, 3.
- [5] Cvitanović, P. L. (2018). “New technologies in marketing as competitive advantage,” in 2018 ENTRENOVA Conference Proceedings (Split: ECONSTOR), 294–302.
- [6] Colman, A. M. (2015). *The Oxford Dictionary of Psychology, 2014th Edn.* Oxford: Oxford University Press.
- [7] Allaway, A. W., Gooner, R. M., Berkowitz, D., and Davis, L. (2006). Deriving and exploring behavior segments within a retail loyalty card program. *Eur. J. Mark.* 40, 1317–1339.
- [8] Meyer-Waarden, L., and Benavent, C. (2001). Loyalty programs: strategies and practice. *FEDMA Res. Day Madr. Sept. 14*, 1–33.
- [9] Kshetri, N. (2019). Blockchain and the economics of customer satisfaction. *IT Professional*, 21(1), 93-97.
- [10] Banerjee, A. (2019). Blockchain with IOT: Applications and use cases for a new paradigm of supply chain driving efficiency and cost. In *Advances in computers (Vol. 115, pp. 259-292)*. Elsevier.
- [11] Korpela, K., Hallikas, J., & Dahlberg, T. (2017, January). Digital supply chain transformation toward blockchain integration. In *proceedings of the 50th Hawaii international conference on system sciences*.
- [12] Rühmann, F., Konda, S. A., Horrocks, P., & Taka, N. (2020). Can blockchain technology reduce the cost of remittances?
- [13] Kshetri, N. and Voas, J. (2019), “Online advertising fraud”, *Computer*, Vol. 52 No. 1, pp. 58-61.
- [14] Mougayar, W. (2016), *The Business Blockchain: promise, Practice, and Application of the Next Internet Technology*, John Wiley and Sons, New York, NY.
- [15] Boukis, A. (2019). Exploring the implications of blockchain technology for brand–consumer relationships: a future research agenda. *Journal of Product & Brand Management*.
- [16] Karikari, A., Zhu, L., & Dara, R. (2018, November). Blockchain: The next step in the development of The Internet of Things. In *2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)* (pp. 341-345). IEEE.
- [17] Dimitrov, D. V. (2019). Blockchain applications for healthcare data management. *Healthcare informatics research*, 25(1), 51-56.
- [18] Udegbe, S. E. (2017). Impact of blockchain technology in enhancing customer loyalty programs in airline business. *International Journal of Innovative Research and Advanced Studies*, 4(6), 257-263.
- [19] Schlegel, M., Zavolokina, L., & Schwabe, G. (2018, January). Blockchain technologies from the consumers’ perspective: what is there and why should who care? In *Proceedings of the 51st Hawaii international conference on system sciences*.
- [20] Buldas, A., Draheim, D., Nagumo, T., & Vedeshin, A. (2020, November). Blockchain technology: intrinsic technological and socio-economic barriers. In *International Conference on Future Data and Security Engineering* (pp. 3-27). Springer, Cham.
- [21] Ellewala, U. P., Amarasena, W. D. H. U., Lakmali, H. S., Senanayaka, L. M. K., & Senarathne, A. N. (2020, December). Secure Messaging Platform Based on Blockchain. In *2020 2nd International Conference on Advancements in Computing (ICAC)* (Vol. 1, pp. 317-322). IEEE.