

Application of Blockchain Technology to Theme Park Industry

Mahnwoo Kwon* & Samseob Choi**

*School of Media Content, Kyungsoong University, South Korea¹

**Daewon Plus Group, Busan, South Korea²

1. Introduction

Blockchain Technology is evaluated to have the destructive power to reverse the order of the existing industrial ecosystem. The global blockchain market is expected to grow 61.5% annually from \$130 million in 2015, reaching \$3.74 billion in 2022. In the case of Korea, the blockchain market is about one-tenth of the global market, and it is expected to grow 61.5% annually from \$10 million in 2015, reaching \$320 million in 2022.

While there are countries that strengthen regulations on blockchain, there are countries where the government takes the lead in supporting technology development and introducing it to the public sector. Blockchain is expected to create economic and social values in various fields such as finance, industry, public sector, content, and media.

In the financial sector, the simplification of the financial transaction certification and verification process is expected to reduce the time required for liquidation or settlement of transactions and reduce the cost of building and managing large-scale systems. In the manufacturing and distribution sectors, it is expected to contribute to securing reliability and information transparency in the distribution process in terms of

1 Mahnwoo Kwon is a Professor at Kyungsoong University. E-mail: mahnwoo@ks.ac.kr

2 Samseob Choi is a Chairman of Daewon Plus Group. E-mail: ceo@daewonplus.co.kr

supply chain management, and in the public sector, it is expected to increase transparency and efficiency of government budget execution.

In the music and content industry, the introduction of blockchain can prevent copyright infringement in the industry and cause fundamental changes in the distribution and profit structure. The decentralized system of blockchain in terms of ride-sharing, car lease services, real estate transactions, sports management, gift certificates, and point provision is expected to bring about changes in ways that are different from the way existing products and services were provided. Improvements in content distribution structure and changes in profit structure are expected to increase creators and authors' income, and the emergence of new media based on blockchain technology heralds a shift from advertising revenue or sales revenue to completely different revenue sources.

2. Needs of blockchain in theme park industry

Blockchain technology is expected to be a "destructive innovation technology" that shakes the foundations of all industries such as economy, society, education, and healthcare as a factor that accelerates the emergence of a hyperconnected society that connects people, people, things, and things. Therefore, it is necessary to respond quickly to this in the theme park field.

Due to the rapid growth of the blockchain market, the demand for professionals such as planning, development, and managers is rapidly increasing in the theme park industry as well as in industries such as finance, distribution, media, medical, bio, and cultural contents. Blockchain-related personnel in the theme park field are far from sufficient worldwide. If blockchain professionals are not trained, innovation throughout the fourth industrial revolution in the theme park field is expected to be reduced and competitiveness will decrease. It is urgent to analyze the status of professional manpower training and prepare policies for countermeasures.

Blockchain is a technology that secures the reliability of data by jointly recording, verifying, storing, and executing the movement of information and values by participants in the network. In particular, as it changes from the existing structure that used to manage data centrally to decentralized and distributed, it is possible to secure reliability without an intermediary. The biggest strength of the blockchain is that it sends transaction details to all users participating in the transaction and uses a method to prevent data forgery by contrasting them every transaction. Due to these characteristics, blockchain has been applied mainly to virtual currency and has exploded, but it has great potential in the theme park industry in the future.

3. Implications and suggestions to theme park industry

Due to upper characteristics, blockchain technology is building an environment in which providers (theme parks) and consumers (users) can meet directly without a intervening marketing platform in the theme park industry ecosystem. In particular, blockchain technology is expected to play a big role in theme parks that use content as a medium, such as movies, animations, and games.

Profit processes such as character IP management, original authentication, and copyright revenue in the theme park can be distributed transparently. In addition, there is little transaction cost in the process of generating and distributing such revenue, and revenue distribution can be automated based on smart contracts.

Users can also conduct customized marketing by using data from their activities at the theme park. Discount coupons can be provided to users to visit the theme park again, or new rides or event information can be delivered. It is up to the theme park to analyze and utilize such accumulated offline-oriented data online.

Unlike the urgent movement of games, entertainment, and financial companies, theme park companies are cautious about new businesses using blockchain. The reason is that the theme

park industry has been restructuring over the years due to the COVID-19 pandemic. Moreover, in the past decade, non-face-to-face experiences such as YouTube and OTT have become important, and efforts to settle strategically in the new blockchain ecosystem have been insufficient. Therefore, it can be seen that the theme park industry has recently collaborated with blockchain technology companies to examine the market's response on a trial basis in areas such as payment.

References

KISTI(Korea Institute for Science and Technology Information), (2017). KISTI Market Report 2017-4; Blockchain.

You, K. (2018). The present and future of blockchain media. *Broadcasting and Media*, 23(3), Korea Broadcasting and Media Engineering Society.

Kwon, M. et al., (2020). *Service innovation and design*. Seoul Institute Publishing Company.