Culture and Arts Administration Governance for Blockchain-based Initiative

Hye-Young Ko, (The Performance Planner of Jeju Arts Center, S. Korea)

Abstract

This study is to think about how to invite a model of culture and arts administrative governance for Blockchain-based Initiative in the nearer future. In particular, it was conceived only in the field of performing arts and was intended to be proposed by referring to the situation in Jeju.

Four major governance models were devised. The first is subsidy-related governance. Second, governance related to donations and support, third, governance related to artistic activities, and fourth, governance models for securing customers and resonating between performers were proposed.

There are factors to keep in mind to establish governance based on blockchain technology, which is such a future technology. Jeon Myung-san (2017) proposes elements to keep in mind when introducing blockchain technology into the administrative domain in a book called Blockchain Gourbonment. Accepting the proposal, this paper also intends to present matters to be noted in order to build a blockchain gubernator in the conclusion.

Among the fields of culture and arts administration, a step-by-step approach will be needed to establish blockchain-based governance of performing culture. First of all, in the first stage, local governments, related organizations, artists, and associations must work on governance construction offline. In the second stage, the blockchain base is learned and governance activities begin within the blockchain base. The third stage should involve citizens as audiences to operate governance.

Key words :
Culture and Arts Administration, Governance, Blockchain-based, Co-evolution.

Introduction

As individualism and liberalism advance in our society and future society, blockchain-based technologies will create a cooperative and positive virtuous cycle structure for the state and each subject (An Moon-seok, 2018:59). In particular, in situations where methodological individualism is accepted, blockchain-based systems will play their role.

Kim Yoon-young et al. (2020, 74) argue that the form of a democratic state in the future will be from the appearance of government to governance, and again in the form of blockchain governance. It is predicted that the form of a state as well as government services in a digital society will develop into a virtual state such as 'bitnation'. Here, governance is not dependent on the system of government, but rather a system that utilizes a cooperative network between the government, the private sector, and the non-profit sector (Lee Jong-soo et al., 2012: 146).

□ BitNation

BitNation is a country in the virtual world built using blockchain technology. It is also called the Voluntary Nation or Crypto Nation. It was founded in July 2014 by Susanne Tarkowski Tempellhof. The headquarters is located in Switzerland, and the operation method is similar to that of the company. Susan Tarkovsky Tempelhoff is the CEO.

Bitnation is the Decentralized Borderless Voltage Nation (DBVN), a country of decentralized, borderless supporters operating on the Ethereum blockchain. For the first time in the world, it provides services such as blockchain marriage registration, blockchain birth certificate, real estate registration, and blockchain refugee status registration card, and has a DBVN constitution.

Bitnation is an online cyber country where there is no president or prime minister, and anyone in the Internet world can become a citizen by simply registering. It is a country where anyone can overcome the limitation that they should only be a citizen of the region where they were born and become a citizen of the country they wish.

Sources : Hashnet, http://wiki.hash.kr/index.php/

Bitnation

The virtual state of Bitnation has the characteristics of being borderless, decentralized, and spontaneous (Yoon Young Kim et al., 2020:88). "No borders" means that everyone has the right to the best government service, regardless of where citizens are. Decentralized means that it operates based on the blockchain. This distributed ledger, used by millions of people, guarantees individual-to-peer autonomy. Bitnation, "voluntary," means that people are platforms that develop and create entirely new government systems on their own.

The purpose of examining the concept or substance of bitnation was to examine the need for a blockchain-based governance approach in the field of culture and arts administration.

Ahn Moon-seok (2018) argues that the encryption and anonymity provided by the blockchain will create many cyber virtual groups and create a blockchain-based cyber state beyond the borders of real world countries. With the existing government and administrative system, it will be difficult to lead this virtual world and virtual national situation. Therefore, it is time to anticipate various market conditions in culture and arts administration and to consider and make efforts for the operation of various forms of governance.

Blockchain's structural characteristics and governance implications

1) structural characteristics of blockchain

In order to understand the blockchain, several concepts must be schematically premised. In this section, I would like to briefly examine each characteristic of the blockchain.

(1) meaning of blockchain

Blockchain is a collection of blocks one after another. Blockchain has the characteristics of a data structure that connects to an existing block by forming a new block every certain time (10 minutes in case of Bitcoin) (Yoon-Seung Ko et al., 2017: 18). Each block is a structure composed of a header and a body, and the header includes newly formed intra-block transaction information and a hash value of

the previous block. The previous block contains the hash value of the previous block. Since the hash value stored in each node is generated by being influenced by the values of the previous blocks, it is very difficult to modulate the registered content. Participant nodes distribute and store books that can be shared and reproduced, and these participants mutually verify the validity of transaction information, thereby forming and operating a security system.

(2) Meaning of Bitcoin Virtual Currency

Bitcoin is an Internet protocol and a digital virtual currency that allows anonymous transactions between peer to peer (P2P) without intermediary intervention. Bitcoin records virtual currency issuance and transaction details within the blockchain. The recorded information is simultaneously held by nodes (participants) participating in the net quark, and the same transaction details are distributed and managed. Therefore, blockchain is sometimes referred to as Distributed Ledger Technology in other words (Yoon Seung Ko et al., 2017: 17).

(3) Meaning of Smart Contract

Smart contracts refer to programs that allow any type of contract to be executed automatically, such as real estate transactions, used car transactions, and trade transactions, by pre-coding contract periods, amounts, and conditions using a programming language called solidity (Hashnet, 2022). A smart contract is a structure in which terms and conditions or contracts are programmed and recorded on the blockchain, and the contract is automatically executed (Jeong Gun-oh, 2019:5).

Smart contracts were first proposed by Nich Szabo but could not be implemented, and services became possible with the development of Ethereum, a smart contract platform, by Vitalik Buterin. If existing Bitcoin used blockchain technology to create a cryptocurrency that can store and deliver value, Ethereum went one step further and created a smart contract platform that can automatically execute all kinds of contracts that humans can imagine using blockchain technology.

(4) characteristics of blockchain

The characteristics of the blockchain are summarized as follows, citing the research of Ko Yoon-seung et al. (2017, 19-20).

First, it is de-mediated. De-mediation is the use of services and distributed file system technology to enable personal transactions without an authorized third-party brokerage agency. This de-intermediation not only eliminates transaction costs that may be incurred by intervention by intermediaries, but also reduces system construction and maintenance costs. As a result, payment processing speed can be improved.

Second, efficiency. It will reduce infrastructure investment costs to prevent system errors and prevent security accidents such as hacking, etc. without the need for manpower and resources to establish and operate reliable third-party institutions.

Third, it is scalable. Blockchain is excellent in scalability because it can easily build and connect blocks and easily accept new ideas.

Fourth, security. Since there is no central server where all information is concentrated, and there is no organization in charge of it, it is safe from malicious attacks from inside and outside such as hacking. In addition, since the ledger is disclosed to all participants, there is no possibility of information leakage at the source.

Fifth, stability. Blockchain distributes and manages files containing the same information to all participants, so there is stability that does not affect the entire blockchain even if a part of the network fails.

Sixth is transparency. Blockchain technology discloses all transaction records, so it has high transparency, easy transaction tracking, and low regulatory compliance costs.

Seventh, irrevocable and immutable. Since it is almost impossible to change the blockchain, it increases the reliability of information and thus reduces opportunities for fraud. Since the transaction is irrevocable, the accuracy of the record can be secured.

2) concept and orientation of governance

(1) concept of governance

The concept of governance is the need for discussion because one subject cannot solve various

problems in urban problems and culture and arts administration. The logic is to participate together and solve the problem.

Since problems in the administrative domain are wicked problems that occur across various levels, multi-jurisdiction, and multi-functional, it is a general logic that it is very difficult to solve with only one level of government, one region, or one policy function (Kim Dong-wook. 2021: 150). No cutting-edge technology can solve these administrative challenges at once. It has become a situation in which governance capabilities that can be realized by connecting everything such as technology, individual ability, and group power must be present.

Governance is a system for solving administrative problems, and is sometimes called 'public-private cooperation' or used as the term 'public-private cooperation'. It can be said that it is a concept that encompasses the process of cooperating with various subjects with a common goal.

The appeal of the concept of governance is inclusiveness. It is a concept that can comprehensively explain the interactions of various actors. It includes the inclusion of various policy-related groups, horizontal relationships of each subject, voluntary cooperation, and democracy of opinion coordination. In this way, governance will be maintained as participants exchange, agree, cooperate, and coordinate with each other to solve problems shared by many people in various and complex political and economic environments (Ha Sang-gyun et al., 2021: 252).

Therefore, in the governance mechanism, it appears in a form that values communityism and network, trust, direction, coordinator, cooperation system, and joint supply of services (Lee Jong-soo et al., 2012: 147).

(2) concept of cyber governance

Cyber governance is another form of governance being formed in a virtual community. A virtual community can be said to be a group of people who exchange words and thoughts through the mediation of a computer network. These virtual communities have a wide variety of ties in all areas, such as large-scale meetings, locality, commerciality, anonymity, or abandonment if necessary. Cyber governance is constructed by combining this virtual community with the paradigm of governance.

In one national system, cyber governance moves to the following system. Active and transparent information, parties faithful to democratic values, citizens and NGOs with strong citizenship, and companies and markets armed with rationality and efficiency operate in a cooperative system (Kwon Ki-heon, 2009:25).

(3) application of governance

In this section, we looked at cases of administration through governance approaches by governments.

The first is the case of the Minneapolis-Satepol metropolitan area. The Metropolitan Area Committee proposed a joint project for video shooting that encompasses two cities and seven county areas, and established a spatial information cooperative called MetroGIS.

The cooperative group was divided into four propulsion groups. It consists of a policy committee to discuss policy and financial issues, a coordination committee to discuss tasks and projects, a technical advisory team to review and study technical issues, and a work group in charge of data production and certification. When the policy committee presents a vision, it collects projects to be implemented by the mediation committee, and the technical committee prepared a budget reduction plan through technical support. The technical advisory team and the work group shared knowledge and information on technology (Kim Dong-wook et al., 2021: 198).

Second, it is an example of governance for the creation of a national smart city in Sejong City and Busan City in Korea. A separate business corporation was created as a promoter (Kim Dong-wook et al., 2021: 204-205). This corporation is in charge of creating smart cities and building services. It is a business corporation jointly invested by public sector operators and private sector operators. The Ministry of Land, Infrastructure and Transport will jointly establish a special purpose corporation (SPC) or business corporation to solve the low market maturity, regulation, and financial investment burden, which are factors that local governments avoid participation. This business corporation aims to increase sustainability by overcoming the chronic

deficit and lack of profit models by the previous U City business corporation.

In the case of Sejong City, it was carried out step by step. In the first stage, private businesses, public sector businesses (Sejong City, Korea Land Corporation), and the Korea Transport Institute signed a priority business agreement, and after implementing the Living Lab-type transportation demonstration project as a preliminary project, a business corporation (SPC) is established.

The business applicant must meet the company establishment standards in accordance with the Commercial Act and present appropriate amounts of capital in consideration of state funding, real estate development profits, income and services. The business corporation carried out the project for 15 years, including 5 years of construction and 10 years of operation of the pilot project district from the date of establishment, and then allowed the project to be extended every 5 years. A business corporation performs overall business management, and co-investing private sector operators and public sector operators (Sejong City, Korea Land and Housing Corporation) participate in the operation of the business corporation through the board of directors. The investment ratio shall be 20% for public sector operators and 80% for private sector operators, and the investment ratio of the top three people constituting private sector operators shall be at least 50%.

Regarding the establishment of a business corporation, the Ministry of Land, Infrastructure and Transport is in charge of reviewing and coordinating the business plan of the business corporation. Public sector operators such as Sejong City and the Korea Land and Housing Corporation establish and invest private sector operators and business corporations. Public sector operators support administrative procedures and permits related to the establishment of business corporations. Public sector business operators recommend audits to dispatch employees to business corporations after their establishment and supervise the operation of business corporations. Private sector operators will participate in the establishment of business corporations with public sector operators, invest a certain percentage in business corporations, dispatch employees to business corporations after the establishment

of corporations, and participate in smart service construction and operation.

The governance characteristic of Sejong-si is to create and operate a new business corporation, but to create a corporation in which the private and public participate together.

Third, as an example of festival governance, it is an example of Wonju Dynamic Dancing Carnival governance. One of the characteristics of the dancing carnival is a citizen-participating festival in the way of a street parade contest. From the festival planning stage, it is establishing a governance system that actively reflects the ideas of citizens such as citizen planners, civic judges, and volunteers, as well as the opinions of co-hosted military units. Co-hosted by the 36th Division of the Army stationed in Wonju, the venue is also co-hosted by the Mayor of Wonju and the 36th Division, and a horizontal governance system is being established (Lee Eui-shin, 2016:313-314).

The main drivers of the dancing carnival governance can be divided into local governments, civic groups, and military units. Wonju, a local government, is the host of the festival, but plays a role as an applicant, including government-level financial support and manpower support during the festival. The Wonju Cultural Foundation participates in the entire process of planning, operation, and evaluation of the festival, but in practical progress, it took the form of mutual cooperation through networks with citizens and the military, leading to integration with different organizations.

The private sector, as a consumer and producer of the festival, participates in various forms such as performers, visitors, volunteers, and civic judges. It contributes to the revitalization of local living culture and the spread of participation in local communities.

Military units can lead the festival to success by increasing the active exchange activities of civil and military officers and the resulting intimacy through the Dancing Carnival. Soldiers participate in participation as dancers, facility support, and event management support.

What is important as a success factor for the dancing carnival is that a place for communication through meetings between the public, private, and military was sufficiently prepared. What is particularly

needed in this process is that intermediary organizations or institutions that will play a problem-solving or coordinating role need to make efforts.

Fourth, it is an example of the creation of a comprehensive transfer center for Seoul Station promoted in cooperation with the Seoul Metropolitan Government and Hyundai Card (Gong Yong-taek, 2012: 19-20). This governance was connected to the Seoul Station Art Shelter through public offerings. Hyundai Card expressed its intention to donate its design talent in terms of social contribution, and Seoul was also born as an art shelter at Seoul Station that combines transportation and art by allowing public spaces to companies.

The Seoul Metropolitan Government provided policy problems and public places, and Hyundai Card donated bus stops with original designs without damaging the scenery of Seoul history by inviting experts. Hyundai Card not only played a large role in promoting the new concept of bus transfer center by actively utilizing the marketing means possessed by companies before and after the opening of the Seoul Station Art Shelter.

The implications of this governance case are that it is possible to newly divide and promote operating entities by function, and to create and operate new corporations by related entities. In addition, in order to operate governance, it is recognized that the role of a mediator or a mediating organization is important. Yoo Young-chul et al. (2015, 131) argue that a policy officer system should be created to play the role of this mediator.

(4) characteristics of governance as a form of social adjustment

Lee Myung-seok (2007, 21) suggests the following basic premise of governance as a third social adjustment style beyond the mechanism for providing public services in which governance replaces the government.

① Various members of society share knowledge, information, and resources necessary for solving social problems.

② Due to the increase in the complexity of social problems, no member of society can successfully solve social problems alone.

③ The boundaries and responsibilities between the government and civil society are blurred.

④ Interdependent actors make strategic choices to solve social problems.

⑤ Autonomous networks can efficiently solve social problems.

⑥ Governance is an artifact created by a variety of interdependent actors.

⑦ Through the continuous evolution of complex organizations made by democratic citizenship and public entrepreneurship, the problem of collective behavior related to governance can be successfully solved.

⑧ Collective actions related to governance can be resolved voluntarily depending on conditions, so compulsory control is not always required. In addition, since collective behavior is not always possible, attention is required to the possibilities and limitations of collective behavior.

⑨ The dependence of power and resources among various actors is a prerequisite for maintaining a multi-centered and stable political and social structure that can promote human welfare.

Through this premise, various social members, sharing, cooperation in solving social problems, weakening boundaries, autonomy, complex organization, collective behavior, and multiple psychological characteristics can be found from governance, which also serves as a social coordination style.

3) characteristics of blockchain governance

Adding the characteristics of when governance became the basis of the blockchain, it is as follows.

First, blockchain de-intermediation has the characteristic that interest groups constituting governance are directly connected to each other. In the blockchain base, there is no intermediary or central management office of a third party, so they are connected to each other and have an open and horizontal relationship. For example, Switzerland and Finland are experimenting with "O2O (Offline to Online) Politics" that combines online and offline through blockchain systems. In principle, Switzerland has a representative democracy, but if necessary, it implements a complementary system of voting rights and resolutions to meet with residents in person. In particular, Finland is said to have developed this

and implemented it as an online platform called the "open cabinet" (Heo Tae-wook, 2017, 107-108). It can be said that this form of an 'open cabinet' has a governance character.

Second, when cultural and artistic governance is connected to the blockchain, it is characterized by granting freedom from power to sponsored artists. The existing artist sponsorship system was also in the position of "B" in the relationship of power to sponsors sponsored by sponsored artists. Among blockchain-based governance, in the artist sponsorship system, a horizontal relationship between the sponsor and the sponsored artist does not need to be in a power relationship is maintained. Lee Eun-mi (2018, 344) summarizes the contents as shown in the following table.

〈table 1〉 Comparison of Traditional Sponsorship and Blockchain-Based Sponsorship Platforms

Characteristics	Traditional Sponsorship	Blockchain-Based Sponsorship Platforms
Sponsorship for Whom	Limited Group and Individual	Whoever do sponsorship
Sponsorship Amount	Most Cases over Certain Amount	Limitless
Information about the amount	Most Case Closed	Completely open
Power relationship	Donor has more power rather than sponsored artist in general	equal relationship between donors and sponsored artists
Sharing Achievement	Unreasonable sharing achievement happens	Clear and fair sharing achievement possible
Sponsorship stability	Unstable	Stable if we keeps blockchain

Reference Source : Lee Eun-mi (2018).

It can be seen that transparency is secured when the sponsorship system is implemented based on the blockchain. It can also be seen that transparency has the advantage of freeing artists from subordination from power that was disadvantageous to artists.

4) Requirements for blockchain-based governance

Blockchain-based governance can be said to be a political mechanism such as decentralization, decentralization, decentralization, etc. In order for this governance to be properly established, social maturity at various levels must be guaranteed.

Kim Young-ha (2021, 142-143) stressed that the establishment of a legal system, civic awareness and political consciousness, and citizens' qualities and capabilities to utilize blockchain are necessary as successful requirements for blockchain-based governance.

Park Chi-sung et al. (2017, 299) emphasized the role of government mediator. It is to create an environment that can enhance cooperation between major projects of culture and arts support organizations. The role of the government as a mediator is not to manage individual support projects for each institution, but to operate an integrated cultural and artistic support system that enables business linkage between institutions. It can be seen that support for culture and arts also requires the role of a mediator to secure effectiveness and efficiency. Behind this mediator's role, it should not be linked in the same form as the blacklisting of the Ministry of Culture, Sports and Tourism in the past. The mediator should be faithful to ideologies such as public, justice, and equity.

Kim Eui-young (2011, 221) presents the factors that governance should have, citing the evaluation criteria of governance. The questions are shown in the following table.

〈table 2〉 Requirements for governance evaluation criteria

objective	evaluation criteria
Participation	■ the extent of residents to participate ■ quantity and quality of participation – Number of residents to participate governance network – Representation of residents to participate governance network – Vocies and influences of residents to participate governance network.
Decentralization	■ the extent of what do residents have power to present their ideas ■ issues of real power and influences of residents – the real contexts of what do residents to participate decision making processes – the power of residents to make policy agenda – democratic responsiveness of residents' voluntary organizations to involve governance networking
Responsibility	■ the extent of what do residents have a power to review executive group about policy issue. ■ Issue of responsibility – the extent of what do residents a power to review governance processes of leaders. – the extent of democratic responsibility what do residents authorize their power to raise responsibility of their leaders relating to policy agenda implementation.
efficiency and effectiveness	■ which is more efficient between bureaucracy and free market mechanism? ■ what kinds of effectiveness we have except critical issue? – Do we resolve critical issues after managing conflicts between governments and residents? – What kinds of invisible or different riffle effect we have relatively except critical issues?

Source : The table in p.221 of Kim Eui-young (2011) was revised and presented. Kim Eui-young has a conceptual approach that emphasizes the participation of residents in the expression 'good governance', but in this study, it was included in the concept of governance.

These questions and requests encourage citizens to participate in governance, in particular. It can be said that citizens are important among the requirements for blockchain governance.

Role of Governance Subjects in the Culture and Arts

Referring to the characteristics of blockchain-based governance discussed above, the roles of each subject constituting governance in the field of culture and arts are summarized as follows.

These roles will play various roles in the governance system.

1. roles and activities of administrative parts

Here, the administrative part can be said to be the role of the central and local governments, and the state.

First, it is necessary to change from the existing perception that the government should solve social problems to the perception that it should solve them like various subjects in society. Lee Myung-seok (2007, 24) presupposes that it is difficult to recognize the governance paradigm with the existing bureaucratic paradigm of mind, and argues that bureaucrats should change their perception that governance is uncertain and disorderly.

Second, as Oh Seok-hong (2007, 4), the government should be prepared to respond to fluctuating pressures such as politics, privatization, globalization, localization, and openness. It is important to recognize the "primitive complexity" of this society, which is Oh Seok-hong's expression, and to create flexible governance to respond to rapid fluctuations.

The second is the provision of laws and systems. Laws and systems are still insufficient for blockchain-related or governance-related contents. It is necessary to have a law that can recognize blockchain within the institutional sphere. With the revision of the Personal Information Protection Act in 2020, the foundation for activating blockchain by creating special cases for the use of alias information has begun, but regulations for institutionalization of electronic voting are also needed (Kim Young-ha,

2021: 142).

In the case of the United States, legal grounds for recognizing status as electronic documents are prepared for distributed ledger through detailed provisions of the Framework Act on Electronic Transactions (UETA). In Korea, it is necessary to include distributed/sharing relationships along with recipient specifications under the Framework Act on Electronic Documents and Electronic Transactions, and it is also important to secure legal stability of blockchain transactions by establishing a common blockchain standard. Through this, when issuing various civil complaint certificates, it is necessary to use the blockchain system to issue them in the form of electronic files and transmit them directly to administrative agencies (He Tae-wook, 2021: 61).

Third, the government may be the subject of governance construction, but it should play a role in establishing policies to support companies, art organizations, audiences, and citizens to utilize blockchain technology.

Fourth, it is necessary to provide various incentives for residents' participation. In particular, efforts are needed to systematically specify the role of supporting the Mecenat activities of private companies (Han Seung-joon et al., 2012: 285).

Fifth, the government should also serve as a mediator between the subjects constituting governance (Kim Young-ha, 2021: 142).

Sixth, community assets should be utilized and prepared to provide an asset mapping and matching fund (Kim Young-ha, 2021: 142).

2. Corporation

Corporate participation and roles are as follows.

First, companies begin with the role of receiving and supporting local artists in terms of cultural marketing.

Second, companies play a role in supporting artists and donate to the Mecenat business so that they can eventually provide financial support to artists.

Third, companies should give members of the company an opportunity to enjoy culture and arts. Club activities or local performances should be allowed to participate and enjoy as visitors.

These corporate activities will create an artist's contact point in governance.

3. art foundation

The local Culture and Arts Foundation focuses on the mediating role of connecting the government with artists, the government with companies, and artists.

First, the Culture and Arts Foundation works to raise funds that are difficult for bureaucrats to do.

Second, it distributes government subsidies and resources collected from companies to artists and amateur artists.

Third, it can serve as a medium for governance.

Fourth, it can serve as a researcher on the entire system of governance. Research parts can be established within the Culture and Arts Foundation, or local experts can be invited to conduct research in the same format as the committee.

4. association NGO

There are many cultural and artistic associations and NGO activities in the community. It includes the Federation of Arts, the Federation of Democratic Arts, and associations of various genres.

First, this association and others should create an organization such as (tentative name) a social empathy and cooperation center so that it can play the role of a social mediator (Lee Myung-seok, 2002: 326).

Second, it plays a role in gathering and planning artists.

Third, it plays a role in protecting artists' rights.

Fourth, it serves to convey artists' opinions to the government or foundation.

5. a government-affiliated art organization

Art organizations in the form of corporations can be defined mainly as organizations led by professional artists or led by professional artists, and their roles can be examined.

First, in the case of organizations belonging to local governments, they can engage in activities to unite and unite local art organizations with the strength of organizations or administrative systems.

Second, members of art organizations belonging to local governments should play a role in actively supporting amateur art organizations in the community.

6. small-scale club-type art organization

An art organization in the form of a club that gathers amateur activists and acts as a performance, learning, and audience.

First, art organizations in the form of small clubs learn and play the role of performance organizations through club activities.

Second, it also provides a space for artists to work.

Third, it also serves as an audience.

7. audience and citizens

First, audiences and citizens should develop the knowledge to participate in the blockchain governance system by strengthening their capacity to adapt to the changes of the times. In addition to the technology to access the blockchain, knowledge such as communication technology in cyberspace, empathy technology, and manners should be developed.

Second, it should participate in storytelling and delivery and also play a role as a countervailing force (Kim Eui-young, 2011: 222).

Third, citizens should change from consumers to active owners in a centerless society. In other words, it can be the leading subject of governance (Lee Myung-seok, 2002: 325).

Fourth, since civic cooperation can be an element of governance, citizens should become 'cooperative partners', as Jang Woo-young et al. (2011, 139) argue.

8. community college

Local universities can be in charge of research and coordination functions in addition to producing artists.

First, Kim Heung-hee (2009, 15) argues that local universities based in the region need to act as mediators. It is necessary to host an industry-academic cooperation group in the university, and to present the direction in which university professors from related fields participate to form governance, and to play the role of coordinator.

Second, it performs research functions. It should play a role as an important axis in governance while conducting research on governance, research on blockchain, and research on contents such as co-evolution of artists and audiences.

Culture and Arts Administration Governance Track Initiative

Gong Yoo-taek (2012, 17) defined cultural governance as a "process and regulatory mechanism for cultural-related actors such as local governments, cultural organizations, companies, and civic groups to form a cooperative network for regional identity and cultural development."

Studies related to the governance of the culture and arts administration were mainly in the following areas. It is a study related to creative support for artists, international cultural exchange, cooperation between major organizations such as public and private, policies to increase the efficiency and effectiveness of the support system, and business cooperation between creative support organizations and concert halls and exhibitions.

Kwon Ki-heon (2009, 32) conducted a study to categorize policies in consideration of governance analysis units and policy ideologies. The frame is shown in the following table for reference.

⟨Table 3⟩ Governance Analysis Unit and Governance Policy Ideology Analysis Framework Example

Governance Analysis Unit / Governance Policy Ideology	State (Government)	Market (Cooperation)	Civil Society (NGO)
Effectiveness (Productivity)			
Democratic Process			
Equity			
Ethics (Reflection)			

source : Only the framework of Kwon Ki-heon (2009, 32) is cited.

With reference to these preceding studies, this study proposes the following four governance models in consideration of the framework of blockchain governance.

1) subsidy-related governance
Subsidy-related governance is for interested parties to establish governance in the process of subsidizing art organizations or artists by central and local governments.

The Culture and Arts Foundation is centered, and the government takes the form of contributions or providing matching funds. Art groups and artists can receive support, and universities can also receive support. At this time, the university should also be in charge of research for the smooth operation of this governance as a whole as well as performances
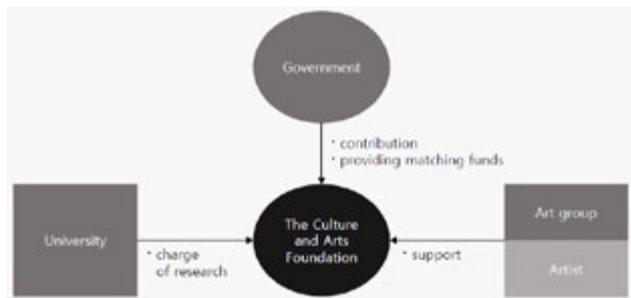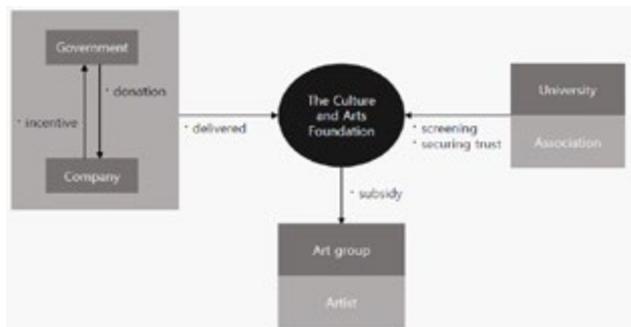

⟨picture 1⟩ art subsidy-related governance framework

2) governance related to donations and support
Governance related to corporate donation and support for artists is a framework of governance that focuses on corporate donation.

Companies donate to the government, and the government provides incentives to companies. This incentive is within the scope of laws and systems and may appear as a policy. When the donation is delivered to the Culture and Arts Foundation, universities and associations will support screening through consultation with the Culture and Arts Foundation, establish a basis for securing trust, and then support artists other than art organizations.
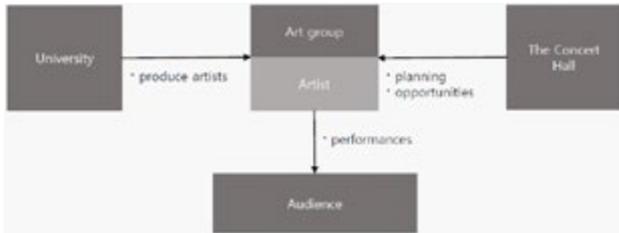

⟨picture 1⟩ art subsidy-related governance framework

3) art-related governance
Governance related to artistic activities is structured by focusing on areas that support art organizations and artists to focus on performing activities

Universities produce artists and propose various repertoires. The concert hall provides opportunities for various performance activities through planning, etc. Through this process, the audience enjoys the performance program. These activities take place within blockchain-based governance.


⟨picture 3⟩ art-related governance framework

4) Governance for securing customers and resonating between performers

Governance for customer acquisition and resonance among performers focuses on allowing performers or art groups to help each other by volunteering to secure audiences or by providing various forms of information or education to the audience. If an art organization or artist works only as a separate track from the audience, it is not easy to secure a local audience, so it is to exchange information through communication and activities with each other, and as a result, participate in the performance and help each other. The results will produce the results of co-evolution that evolves and develops with each other.

At this time, the government is in charge of public relations, marketing, and education so that this governance can be successful. The Culture and Arts Foundation implements efforts to support subsidies, and universities provide various contents to improve the level of performance. The concert hall provides a concert hall or supports the planning department.
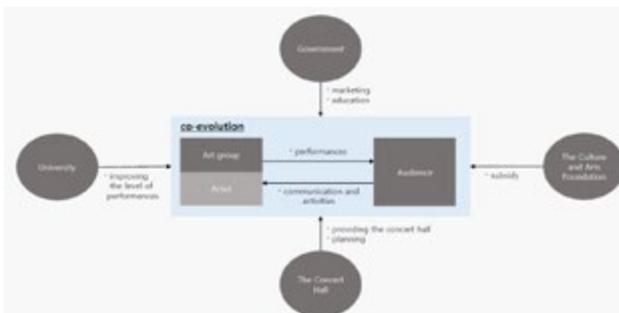
⟨picture 4⟩ governance framework for securing customers and resonating between performers

conclusion

This study was to propose a model of culture and arts administrative governance based on blockchain as a conceptual dimension. In particular, it was conceived only in the field of performing arts and was intended to be proposed by referring to the situation in Jeju.

Four major governance models were devised. The first is subsidy-related governance. Second, governance related to donations and support, third, governance related to artistic activities, and fourth, governance models for securing customers and resonating between performers were proposed.

There are factors to keep in mind to establish governance based on blockchain technology, which is such a future technology. Jeon Myung-san (2017) proposes elements to keep in mind when introducing blockchain technology into the administrative domain in a book called Blockchain Gourbonment. Accepting the proposal, this paper also intends to present matters to be noted in order to build a blockchain gubernator in the conclusion.

First, it is necessary to establish blockchain written law. It is necessary to make good blockchain-based ground rules (rules) to operate in real life.

Second, transparent disclosure must be guaranteed. Blockchain technology and its implementations to be used by the government also fully disclose the source.

Third, forgery and alteration must be prevented through an automated process. It is necessary to establish an automated government process by utilizing blockchain technology that cannot be forged or altered.

Fourth, direct democratic governance should be pursued. The governance we want to pursue should aim for direct democracy, a philosophy inherent in the blockchain.

Fifth, a distributed autonomous government (DAG) should be established. It is necessary to establish a government system as an information processing machine of a government that directly operates democratically as a social management infrastructure of the community and a community that makes and executes decisions autonomously.

Among the fields of culture and arts administration,

a step-by-step approach will be needed to establish blockchain governance of performing culture. First of all, in the first stage, local governments, related organizations, artists, and associations must work on governance construction offline. In the second stage, the blockchain base is learned and governance activities begin within the blockchain base. The third stage should involve citizens as audiences to operate governance.

This study has limitations in not taking an empirical approach. However, this idea is expected to help artists and audiences develop and enjoy their works in the near future.

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