EVALUATION AND PROMOTION PATH OF EQUALIZATION OF URBAN AND RURAL BASIC PUBLIC CULTURAL SERVICES FROM THE PERSPECTIVE OF SMART CITY IN CHINA

Li Yang[1], Kamolporn Kalyanamitra[2],
Satit Niyomyaht[3], and Nattawat Siriphornwut[4]
Faculty of Political Science, Bangkokthonburi University[1-4]
China,[1] Thailand[2-4]

Email: leeyong87123@163.com,[1] sopha818@hotmail.com[2]
biglion@outlook.co.th,[3] turkey2turkey@hotmail.com[4]

Abstract

The research objectives were three-fold: (1) to study a measurement model for the equalization of basic public cultural services in urban and rural areas, (2) to comprehensively analyze the imbalance between urban and rural basic public cultural services from the perspectives of government resource supply and residents' cultural access sense, and to provide a comprehensive understanding of the status and problems. This study was mixed-method research. (1) the measurement and analysis from the perspective of government resource supply, quantitative analysis was adopted, and Guangdong Province, Hubei Province, and Gansu Province were selected as sample provinces, and 2019-2021 was taken as the study cycle. The statistical analysis was mean, frequency, and standard deviation for measurement and analysis. (2) From the perspective of residents' sense of cultural access, qualitative analysis was adopted, combining interview survey and questionnaire survey data for analysis. There were 30 users of public digital cultural services in the interview survey. A total of 586 questionnaires were collected.

Major findings: (1) A measurement model for the equalization of basic public cultural services in urban and rural areas in China was low overall, especially in the areas of cultural capital input and cultural product supply; China's mobile cultural facilities as a whole showed a serious lack of status of; there was a serious lack of digital resources in rural areas; and there was a high degree of equalization of mass cultural institutions. (2) The comprehensive analysis of the imbalance between urban and rural basic public cultural services from the perspectives of government resource supply and residents' cultural access sense, and to provide a comprehensive understanding of the status and problems that rural and urban residents had a low level of equalized access to

culture, caused by the dual factors of insufficient participation and insufficient satisfaction. The gap between rural residents' sense of access to culture and that of urban residents was obvious. A comparison of participation and satisfaction revealed that participation and satisfaction in public cultural services were interdependent, with lower (or higher) participation in public cultural service programs often corresponding to lower (or higher) satisfaction.

Keywords: Model; Measurement; Equality; Public Cultural; Smart City, Culture; Smart City

Introduction

In recent years, China had attached great importance to the construction of a public cultural service system, and the promotion of the equalization of basic public cultural services was one of the main goals and tasks of building a modern public cultural service system. However, the current situation of equalization of basic public cultural services was not as satisfactory as it should be, and the Chinese government had already realized the urgency of solving this problem. In this context, academic research on the issue of equalization of basic public cultural services became very necessary.

Under the strong support of the state, the pace of Smart City construction had been constantly accelerated, and new pilots, new plans, and new policies had been gradually carried out. Local governments had also introduced more innovative, practical, and adaptive Smart City construction plans in the process of continuous exploration, to accurately implement the construction and effect output of Smart City pilots in the region. It could be predicted that Smart City construction would continue to influence China's economic development and the aspects of public life at present and soon. The key to brakes through the development dilemma of the efficient scale of supply and equalization of basic public services might no longer be limited to the one-way incentive role played by the government's financial support, but rather to realize the breakthrough of the bottleneck of the development of basic public services by relying on the transformation of the urban and rural governance model and the application of innovative technologies in the digital information age.

The combination of Smart City construction and public cultural services had not only deepened the understanding of the concept of digital public services in the context of service-oriented government construction, but also created a large number of networked public cultural service products in the course of practice, such as "digital cultural halls", "online exhibition halls", and "digital book resources", which had optimized the channels and ways in which

the public could access basic public cultural services. At the same time, it also improved the information parity between basic public cultural services and the public. On the other hand, in the context of Smart City construction, the integration of digital technology and urban governance enabled the government to be more agile and precise in perceiving the public's demand for basic public cultural services, and to be able to quickly discovered the shortcomings of public cultural services, optimized the allocation of resources for basic public cultural services and improved the production efficiency of basic public cultural services, among other things. The supply level of basic public cultural services could be improved more scientifically, efficiently, and comprehensively.

Through the construction mode of the Smart City, the way to improve the supply level of basic public cultural services was no longer limited to the traditional political system, economic development, social environment, and other factors, but formed a fusion of information and communication technology applications, realized the intelligent innovation of the original supply path. However, the current academic research on Smart City construction and the level of supply and equalization of basic public cultural services was limited to conceptual discussions. Whether the Smart City construction model, represented by the development and application of digital technology, could have a positive impact on the enhancement of the level of basic public documentation service provision and the improvement of equalization during the construction process of the last decade remains to be verified. In the process of modernizing the national governance system and governance capacity, Smart City construction would undoubtedly continue to lead Chinese cities to continue implementing digital transformation strategies.

Therefore, under the requirements of the historical mission and the development of the times, we got to strengthen the cultural construction in the development of the Smart City, to enhance the efficiency of the cultural construction, especially the public cultural services, by meant and in a wise way, and to realize the value goal of the public cultural services for the masses and the benefit of people, included the characteristics of the equalization, the transparency, the refinement, the convenience, and the participation, and so on. The verification of Smart City construction on the supply of basic public services and the improvement of the efficiency for the equalization of basic public services not only had a very important theoretical value and practical significance for the improvement of people's livelihood and the dissolution of social contradictions but also could avoided the path of Smart City construction from falling into the situation of only focusing on the technology but not on the service goal.

Significance of the Problem 1) From the perspective of Smart City research. Exploring the equalization of public cultural services in the development of Smart City was conducive to enriching the research system of Smart City, analyzed the driving mechanism of Smart City affecting the equalization of basic public cultural services, and improved and enriched the theoretical framework of the existing construction of basic public services. It expanded the support of people's livelihood from the material level to the whole field of people's livelihood demand, including the material level and the spiritual level, improved the explanatory power of the concept theory of smart city to the practical problems of basic public cultural services, and also expanded and divided the research perspective of urban digital transformation. It provided a convincing theoretical model for studying the influence of the innovation effect of Smart City on the equalization of basic public cultural services. 2) From the research perspective of equalization of urban and rural public cultural services. A systematic analyzed the basic theories and related concepts of urban and rural basic public cultural services was helpful for people to deeply understand the connotation of equalization of urban and rural basic public cultural services, and arouse people's attention to the equalization of urban and rural basic public cultural services in terms of thoughts and concepts. To promote in-depth research on the equalization of urban and rural basic public cultural services. 3) From the perspective of equalization of basic public digital culture. The equalization of basic public digital cultural services was a practical work that needs theoretical support. However, the existing research at home and abroad mostly focuses on the practice itself, and rarely studies the theory. This study enriched the theoretical research content of the equalization of basic public digital cultural services and broadened the theoretical research perspective.

Practical Significance 1) The study helped the Smart City builders to realize the positive significance of attaching importance to the development of public cultural services in the process of Smart City promotion, and verified the objective evidence that Smart City construction had a positive effect on the provision and balance of basic public cultural services. 2) It provided decision support for the strategic practice of Smart City construction in the aspect of basic public cultural service. 3) It took the equalization evaluation and promotion path of urban and rural basic public cultural services as the research content. This topic was based on the country's attention to social practical problems, based on the supplement of the evaluation theory of equalization of urban and rural basic public cultural services, and based on the evaluation and analysis to reveal the current situation and existing problems of equalization of urban and rural basic public cultural services. To explore practical and feasible

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policy ways to promote the equalization of urban and rural basic public cultural services.

Research Objectives

1. General Objective: Established a measurement system for the equalization of basic public cultural services in urban and rural areas.

2. To resolve the elements of Smart City that could play a role in the provision of public cultural services.

3. To know the influence of Smart City construction on the equalization of basic public cultural services in urban and rural areas.

4. To propose a policy way to promote the equalization of basic public cultural services between urban and rural areas in China. From the perspective of government resource provision and residents' sense of access to culture.

Literature Reviews

Smart City: Graham and Marvin (1996) believed that ICT needs to be regarded as a key infrastructure of the city, which had the same status as urban systems such as water supply, sewage, energy, etc. Chourabi (2012) believed that a Smart City should include eight factors: technology, organization, policy, community, government governance, natural resources, infrastructure, and economy. Wang Han (2013) considered that the elements of a Smart City system were "strategic system, social activity system, economic activity system, technology system and spatial system", and analyzed the coupling relationship of the above elements.

Public Cultural Services: Chen Lixu (2015) believed that the equalization of public cultural services referred to the fact that regardless of geography, income, ethnicity, gender, and other status differences, all citizens had access to public cultural products and services that were appropriate to the level of economic and social development, and that were provided by the government and public cultural institutions or other social organizations with roughly equal opportunities and results, the equalization of basic public cultural services referred to the equalization of the most basic part of public cultural services, and was closely related to the equalization of the basic public cultural services. The equalization of basic public cultural services referred to the most basic part of public cultural services, the part that had a close connection with cultural livelihood and was closely related to the public's immediate cultural interests, rather than the equalization of all public cultural services.

Equalization of Public Digital Cultural Services: Equalization of basic public digital cultural services was an extension of the equalization of basic public cultural services in urban and rural areas under the construction of Smart City, which meant that the main body of the supply of public digital cultural services provides public digital cultural services that satisfy the basic needs of all citizens under the environment of the digital network, to safeguard the basic cultural rights and interests of all citizens, and to make use of its own conditions and social resources, and within the scope of its ability, through the construction of digital cultural resources, the construction of digital network facilities and equipment, and the richness and diversity of the means of service, and so on.

The Relevance of Smart City and Public Cultural Services: Wu Baihua (2015) believed that in the construction of "smart Hangzhou" should had cultural value rational level of cultural vision, to consider the real-life level of cultural spirit shaping, and actively create a system and mechanism conducive to the development of cultural prosperity. Yu Dejiang (2014) took the development of smart cities as the starting point, introduces the construction of public cultural services into the construction of cities, and pays attention to the integration of the characteristics of city development such as novelty, intelligence and technology. He proposed the realistic way of building smart public cultural services in towns with interactive communication platform, resource sharing platform and real-time participation platform. Yang Xiaoli (2014) argues that grassroots public libraries in the smart construction of cities should focus on the transformation of traditional libraries with an eye on the overall trend of Smart City construction.

Research Methodology

Format of the Research: To explore the measurement of equalization of basic public cultural services in urban and rural areas from the perspective of smart city, and to propose policy ways. The theoretical scope of the study was based on two main aspects: the new public service theory and the equity and efficiency theory.

Population and Samples: The study comprises of two dimensions: supply of government resources and residents' perception of cultural accessibility. Among them, the indicators for the government resource supply dimension used the National Guidance Standards for Basic Public Cultural Services (2015-2020) as a foundation.

Samples: The supply of government resources: 2019-2021 data from Guangdong Province, Hubei Province, and Gansu Province were selected as

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samples. The residents' sense of cultural access: Interviews and questionnaires were conducted with residents of Guangdong Province.

Research Instruments: The primary research instrument used included literature review, mixed analyses, comparative research, interviews and questionnaires. The analysis examined the effect of government resource allocation and residents' perception of cultural accessibility on equalization.

Data Collection: 1) Data were collected on the supply of government resources came from official data such as government information disclosure websites, **China Culture and Tourism Statistical Yearbook**, and **China Statistical Yearbook**. 2) Data were collected on residents' sense of cultural access came from interview surveys of 30 people and questionnaire data from more than 500 people.

Data Analysis: 1) The data were analyzed of government resource provision used the "ratio method", which was based on the ratio of the level of basic public cultural services per capita in urban areas to the corresponding level of basic public cultural services per capita in rural areas, to reflect the multiplier relationship visually and graphically between basic public cultural services in urban areas and basic public cultural services in rural areas. 2) The data were analyzed of residents' sense of cultural access was analyzed by combining the interview survey and questionnaire data, using the rooting theory and Likert scale, respectively.

Results

Institutional Factors. 1) Lack of Performance Appraisal and Evaluation Mechanisms. The government had failed to strengthen supervision and assessment, and did not often take on-site supervision, follow-up supervision, random supervision and other ways to increase supervision of digital culture construction, thus lacked the awareness of regular notification of construction progress. Insufficient attention had been paid to the publicizing of service projects and financial disclosure. In addition, the Government failed to establish a sound system of supervision, inspection and accountability, and did not include the construction of digital culture in the government's annual target responsibility appraisal and public cultural service construction appraisal, so as to ensure that management responsibilities and details were in place. 2) Shortage of Cultural Services Personnel. In the process of building basic public cultural services, specialized public cultural service personnel were needed to formulate guidelines and policies, decide on the allocation and regulation of public cultural service resources, and took charge of the dissemination of relevant policies and

the provision of public cultural services. The lack of service talents would make the construction of public cultural services lack of motivation and vitality, and the service activities could not be carried out normally. Through the survey, it was found that there were still many problems in the construction of the current talent team. The smooth advancement of the construction of the public cultural service system depended on talents to develop culture, run culture, and manage culture. The introduction of high-quality, high-level talent was an effective way to optimize the structure of the public cultural service team, and efforts should also be made to build a professional cultural service team with a high level of political literacy and a strong level of professionalism by innovating the talent training mechanism. 3) Lack of Feedback Channels for the Expression of Needs. The government had failed to collect and analyze public feedback promptly and had not effectively improved the actual efficiency of the provision of public digital cultural services. The government had not taken rigorous and thoughtful measures to obtain the public's ideas and perspectives, such as on-site observations, individual interviews, and resident talks. It also failed to follow the public's insights and propose corresponding corrective programs to adjust the content and improve the mode of supply, and then improve the efficiency of supply. At the same time, the government had not responded promptly to the disposition and implementation of public opinions and had not informed the public of the corrective action plan and implementation initiatives within the optimal period, thus failed to improve the degree of service appropriateness and enhance the effectiveness of management.

Economic Factor: 1) The Small Proportion of Funding for Culture and Tourism in Public Finance Inputs. As mentioned earlier, factors such as financial inputs, human resources, and facilities were seriously affecting the level of equalization of basic public cultural services in China, and the relatively small total amount of financial inputs for culture was an important cause of these problems. In terms of trends, the proportion of national culture and tourism expenditures in public finance had been increasing year by year, but it was still small compared to other social programs. From the comparison of the national cultural expenses and other social expenses, the total fiscal expenditure in 2019 is 190,382 billion yuan, of which 349,13 billion yuan for education, accounting for a proportion of 18.34%; health and wellness expenditures were 16,797 billion yuan, accounting for a proportion of 8.82%; science and technology expenditures were 952.9 billion yuan, accounting for a proportion of 5.0%; and the cultural and tourism expenses total 106,5202 billion yuan, accounting for only 0.45% of total fiscal expenditure. 2) Differences in Different Groups' Economic Conditions. Access to public digital cultural services depended on network access and information facilities and equipment such as computers, cell phones, and televisions, and the ownership of networks and information

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facilities and equipment was closely related to the economic conditions of the groups themselves. Low-income and poor groups such as the urban unemployed, the rural poor, and the homeless were isolated from public digital cultural services because they cannot afford to buy electronic reading devices such as computers and smartphones, and they had difficulty paying the high network access fees, digital TV fees, and cell phone traffic fees. On the other hand, the economically privileged had an advantage in accessing public digital cultural services and could easily access the Internet and purchase electronic devices to learn information access skills. The economic gap between the rich and the poor had a direct impact on their access to public digital cultural services, thus created a digital cultural gap between the rich and the poor.

Resource Factors: 1) Infrastructure Development to be Improved. Public cultural service infrastructure mainly included museums, libraries, cultural centers, cultural stations, radio and television broadcasting projects, and the construction of a comprehensive public cultural service infrastructure was a powerful support for the reality of the equalization of basic public cultural services. However, the construction of public cultural service facilities in remote and backward areas was characterized by a single form, low efficiency, slow updating, and low compliance rate, and these grass-roots cultural facilities had been idle for a long time after their completion. The phenomenon of waste was prominent, and there was a lack of long-term supervision mechanisms. At the same time, there was a mismatch between the construction of basic public cultural service facilities and the needs of the public, most of them had only a vague understanding of the needs of the masses and the structure of the audience, and the cultural goods and exhibits provided often fail to truly meet the needs of the public. 2) Uneven Allocation of Digital Resources. At present, despite the creation of the National Digital Cultural Center website as a reference example, there were still relatively few existing projects to integrate and share local public cultural information resources. On the one hand, there was insufficient investment in construction, as the challenges it faces were quite big, involved longer time, more money, larger labor costs, and higher technical requirements, which leaded to insufficient willingness and motivation among cultural institutions to build the integration platform. On the other hand, there was a wrong positioning of the integration method, as it ignored the public's actual needs and real feelings during the process of exploring the mode of resource construction. 3) Poor Information Integration of Digital Cultural Resource Platforms. As a result of the inadequate resource integration system and the lack of a standardized framework, the public was unable to access information resources from different cultural institutions on the same digital platform, and efficient sharing of resources to meet the public's "one-stop" digital cultural needed cannot be achieved. Specifically, on the one hand, there

was a lack of diversified, customized, and personalized display modes such as intelligent navigation systems and virtual scene exhibitions. The public was unable to "one-stop" search for digital cultural resources from different cultural institutions and was also unable to carry out in-depth development and optimized allocation of digital cultural resources. On the other hand, there were many shortcomings in the information presentation forms of the projects that had been put into operation.

Public Awareness and Literacy Factors: 1) Different Levels of Public Literacy. The level of education of citizens had a direct impact on their cultural literacy, with higher levels of education leading to increased cultural awareness, literacy and demand for cultural activities. Differences in citizens' cultural literacy leaded to unequal opportunities for groups with different cultural literacy to enjoy cultural services. The equitable distribution of public digital cultural services depended on providing services that align with public demand. To achieve equitable access to public digital cultural services, it was crucial to match the supply of public digital cultural services with the demand expressed by citizens. Citizens' cultural literacy level influences how they expressed their cultural needs. Groups with low cultural literacy often lack awareness of safeguarding their cultural interests and rights. They might have difficulty understanding and expressing their cultural needs resulting in non-availability of services from service providers, which hinders the adjustment of their service delivery methods. 2) Low Level of Information Literacy. The distinctive features of public digital cultural services were the digitization of resources and the networking of communication, and access to them requires basic information literacy, including skills in the operation of information equipment and information retrieval skills. There were differences in the level of information literacy among citizens. In public digital cultural services, whether it was the staff or the public, low information literacy directly affects the effectiveness of the services. It was difficult to serve the public when the staff has insufficient awareness of digital services and was not highly educated and was not aware of how to use digital technology to improve the level of services. The public lacks understanding of the services and resources provided by e-reading rooms and cultural sharing projects and was even more lacking in basic digital cultural awareness.

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Discussions

Serious Problem of Non-Equalization of Basic Public Cultural Services between Urban and Rural Areas.

This paper measured and analyzed the equalization of basic public cultural services between urban and rural areas in China from the perspectives of government resource supply and residents' sense of cultural access. The study showed that in terms of both government resource supply and residents' sense of cultural access, the gap between urban and rural areas was very obvious. The investment in cultural capital, cultural team building, cultural facilities construction, and cultural product supply in rural areas were different from those in cities. There was a big gap between rural areas and cities in terms of cultural capital investment and cultural product supply. The level of public cultural service participation and satisfaction between rural and urban residents differs considerably, as did the level of public cultural service demand between urban and rural residents. Therefore, the State's policies for rural development should not only focus on the supply of resources but also cater to the cultural needs of rural populations. These policies should aim to increase participation and satisfaction with public cultural services and enhance cultural acquisition in rural areas.

The New Public Service Theory had Implications for Equalization.

The new public service theory has emphasized the role of public participation and considered citizens as indispensable participants in public affairs. This has implications for the equalization of fundamental public cultural services, which involves promoting equal access to cultural services via equitable service design, resource allocation, service content, and delivery methods by the government. To achieve this goal, it should encourage public participation and feedback, establish a mechanism for the public to express their needs, and expand the channels for the public to express their needs. The equalization system's design should be in line with the public interests of all citizens, so that the supply of basic public cultural services can be matched with the demand, and the evaluation and supervision of citizens can be brought into play, thus improving the effectiveness of basic public cultural services and promoting the realization of the goal of equalization. Additionally, the provision of fundamental public cultural services should not depend on the government solely, thus mechanisms to promote citizens, social organizations and businesses must be established. Cooperation between the government and society should enhance the content and mode of service provision, better serving the needs of the citizens.

Policy Ideas for Promoting the Equalization of Basic Public Cultural Services in Urban and Rural Areas.

The process of equalizing basic public cultural services between urban and rural areas in China was still in its infancy. Various management systems were still deficient while the financial resources of the government, particularly at the grass-roots level, were limited. The involvement of social forces was also insufficient. This was further compounded by issues such as the falling behind in constructing cultural teams and facilities at the grass-roots level, inadequate supply of cultural products, and a lack of awareness and participation among the population, particularly in rural areas. Consequently, the equalization of basic public cultural services in urban and rural areas received insufficient support, leading to a lack of robust guarantees for the management system, ineffective supply of products and resources, and an absence of active participation by residents of both urban and rural areas. These factors have resulted in the dilemma of inadequate external and internal motivation for equalization.

Guided by the connotations of the new public service theory, this study considered the roles, civil rights, and fairness and efficiency of government service providers, and improved the support system for the equalization of urban and rural basic public cultural services from the outer institutional space, the middle physical space, and the inner psychological space.
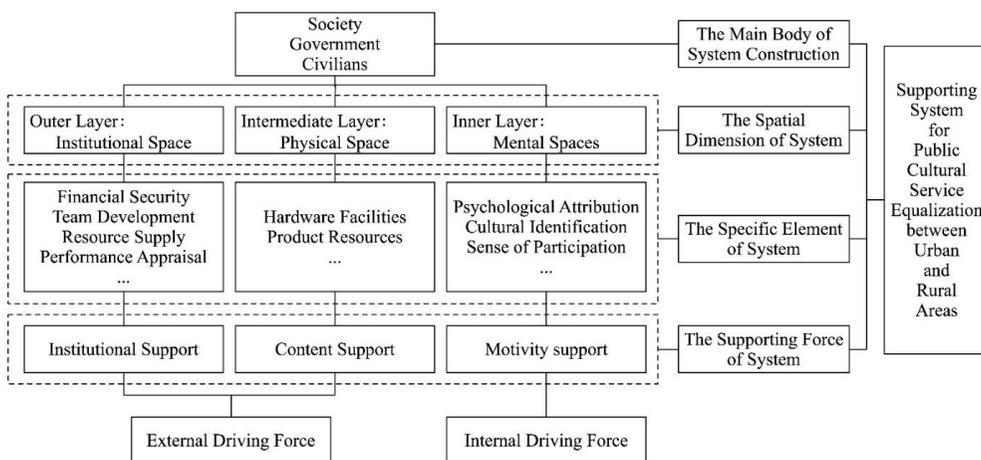

Figure 1: Structure of the Supporting System for the Equalization of Basic Public Cultural Services in Urban and Rural Areas.

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New Knowledges

1. Increase Funding for Grass-Roots Culture and Provide Financial Support for the Construction of Equalized Basic Public Cultural Services in Urban and Rural Areas.

2. Strengthening Grass-Roots Cultural Team Building and Providing Talent Support for the Construction of Equalized Basic Public Cultural Services in Urban and Rural Areas.

3. Establishment of a Sound and Virtuous Cycle Supply Mechanism of "Initial Supply of Resources - Participation of Residents - Evaluation of Residents' Satisfaction - Feedback on Demand - Resupply of Resources".

4. Establishment of an Assessment System for the Equalization of Basic Public Cultural Services, and Provision of Binding Support for the Construction of Equalization of Basic Public Cultural Services in Urban and Rural Areas.

Conclusions

The areas of cultural capital input and cultural product supply; China's mobile cultural facilities as a whole showed a serious lack of status of; there was a serious lack of digital resources in rural areas; and there was a high degree of equalization of mass cultural institutions.

The comprehensively analyze the imbalance between urban and rural basic public cultural services from the perspectives of government resource supply and residents' cultural access sense, and to provide a comprehensive understanding of the status and problems that rural and urban residents had a low level of equalized access to culture, caused by the dual factors of insufficient participation and insufficient satisfaction.

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