How can the construction of social credit system in the context of digitalization empower grassroots governance? A Case Study of "Moral Bank" in Yuyao City, Zhejiang Province

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How can the construction of social credit system in the context of digitalization empower grassroots governance? — A Case Study of "Moral Bank" in Yuyao City, Zhejiang Province

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ABSTRACT

As President of PRC Xi Jinping mentioned, "if the grassroots is strong, the country is strong, and if the grassroots is safe, the world is safe." Social credit system is an important part of socialist market economy system and social governance system, and it is also a basic project for modernization of national governance system and governance capacity. Both conceptually and institutionally, the social credit system is closely related to social governance. Digitalization has reshaped the development trend of economy and society, and also profoundly influenced the operation basis of social credit system. Promoting the transformation of social credit system in the context of digitalization will promote the integration and development of digital economy and social credit system construction, thus making social governance highlight higher value. Based on the systemic and dynamic characteristics of credit system construction for grassroots governance in the digital context, this paper focuses on the changes in the governance mechanism through which the credit system contributes to the modernization of grassroots governance under the digital transformation. Drawing on existing studies, we construct a whole process analysis framework of "structure-process-function" to explore the internal logic of Yuyao Moral Bank's digital credit system construction and grassroots governance through three dimensions: structural reorganization from loose and fragile to stable as a whole, process innovation from fragmentation to synergy, and functional improvement from rough imbalance to fine co-governance. Through the case analysis of Yuyao "moral bank", we have come up with three thoughts on the need to build the incentive mechanism of grassroots governance system, promote multi-dimensional cooperation and build the linkage mechanism between credit system and grassroots governance in the context of digitalization in the construction of digital credit system to empower grassroots governance.

Keywords: Credit system construction, Grassroots governance, Digitalization, Moral bank

Как построение системы социального кредита в контексте цифровизации может усилить низовой уровень управления? — Тематическое исследование «Морального банка» города Юяо в провинции Чжэцзян

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РЕФЕРАТ

Как отметил председатель КНР Си Цзиньпин, «если силен низовой уровень — сильно и государство, если низовой уровень в безопасности — мир в безопасности». Система социального кредита является важной частью системы социалистической рыночной экономики и системы социального управления, а также основным проектом модернизации национальной системы управления и управленческого потенциала.

Система социального кредита концептуально и институционально связана с социальным управлением. Цифровизация изменила вектор развития экономики и общества, оказала глубокое влияние на основы функционирования социального кредита. Трансформация системы социального кредита в процессе цифровизации способствует интеграции и развитию цифровой экономики и системы социального кредита, тем самым укрепляя социальное управление. Беря за основу системные и динамические характеристики построения системы кредита, авторы уделяют особое внимание изменениям в механизме управления, где система кредита вносит существенный вклад в модернизацию низового уровня управления в процессе цифровизации. Опираясь на существующие исследования, авторы моделируют целостную систему анализа процессов «структура — процесс — функция» для изучения внутренней логики построения цифровой системы кредита «Морального банка» города Юяо и низового уровня управления с трех точек зрения. С точки зрения структурной реорганизации — от слабой к стабильной, с точки зрения процессных инноваций — от фрагментации к синергии, и с точки зрения функционального улучшения — от сильного дисбаланса к гармоничному совместному управлению. Проанализировав кейс «Морального банка» города Юяо, авторы пришли к трем решениям для усиления низового уровня управления при построении цифровой системы кредита: создать механизм стимулирования системы низового уровня управления, поощрять многомерное сотрудничество и создать механизм взаимосвязи между системой кредита и низовым уровнем управления в контексте цифровизации.

Ключевые слова: построение системы социального кредита, низовой уровень управления, цифровизация, Моральный банк

1. Origin of the problem

The 20th Party Congress report proposed to improve the grid-based management, refinement of services, information technology to support the grassroots governance platform, and improve the urban and rural community governance system [1, p. 24]. Grass-roots social governance is the basis of the entire national governance system, which concerns the vital interests of millions of people. At present, the government concentrates funds and material resources on infrastructure construction, and while the hardware environment at the grassroots level is improving, the construction of soft power is seriously lagging behind, and residents' awareness of participation and public spirit are seriously lacking, so grassroots governance needs to be transformed.

The basic function of social credit system is to form incentives and constraints for various subjects with the help of credit evaluation mechanism, so as to realize effective social governance. The establishment of social credit system can not only create an environment to serve social governance, but also provide important support for the modernization of social governance system and national governance capacity. Thus, under the strategic choice of building a comprehensive social credit system, combining an effective social credit system with grassroots social governance is an inevitable choice for China's future development. Meanwhile, along with the accelerated development of digitization in China, the digitization of social credit system construction has become a powerful boost to promote credit governance. The digital transformation of social credit system can fully activate the path of credit information formation and collection in the traditional social credit system, optimize the operation mechanism and application scenario of credit evaluation mechanism, and thus maximize the functional utility of credit-enabled grassroots social governance.

Based on this, this paper attempts to take the many challenges faced by grassroots governance as a logical starting point, take the "moral bank" in Yuyao, Zhejiang Province as a case study, trace how the construction of social credit system empowers grassroots social governance in the context of digitalization, explore the operation mechanism and practical effects of it, and extract corresponding insights.

2. Literature Review and Analytical Framework

2.1. Literature Review

2.1.1. Grassroots Governance

The term "grassroots" is a word repeatedly used in China's daily political and social life, and a review of specific studies on "grassroots governance" reveals the following points: First, the change of the concept of grassroots governance. Combining the basic connotation and mechanism of holistic governance, the logic of grassroots governance in China can be summarized as follows: under the active role of "Party building and leading", the "polycentric" tendency of fragmented governance is broken by strengthening the top-down organic unity, and the "co-centered" tendency is built by coordinating In addition, the Party will build a governance pattern of "co-construction" and "co-management" by coordinating the relationship between the main parties, and promote the social sharing of governance results on the basis of adhering to the political position of "people-centered" [2, p. 37]. Second, the function of grassroots governance. Based on the investigation of grassroots governance in Longquanyi District, Chengdu, Ye Benqian et al. found that the grassroots Party organizations and the government have promoted the innovation of grassroots governance system, rationalized and standardized the grassroots governance system, improved the grassroots democracy mechanism, made democracy work, and enhanced the level of grassroots governance ability [3, p. 106]. Thirdly, the relationship between the subjects of grassroots governance and the optimization path. The government cultivates the cooperative habit of multiple subjects through rule adjustment and continuous participation incentive, thus forming a stable and sustainable cooperative governance norm and realizing the social governance community [4, p. 113].

2.1.2. Credit Building Digitalization and Grassroots Social Governance

The relationship between the construction and transformation of social credit system and social governance is a hot topic that has long been a concern of Chinese academia and practice. Reviewing the previous studies, we can find that Lin Junyue tries to explain the inheritance lineage and theoretical innovation of social credit system by explaining the process of social credit system structure and the structure theory in the design and operation of credit system [5, p. 10]. Regarding the significance of credit digital construction for social governance, Dai Hongrui believes that public credit construction is an innovation of government in market regulation and social governance in the context of economic and social digitalization, and shows the governance value of constructing institutional trust, improving law enforcement effectiveness, and promoting the forward movement of legal regulation model with the empowerment of digital technology [6, p. 90]. Regarding the development trend of social governance under the construction of social credit system, Zhou Yu emphasized that the new stage should coalesce the joint efforts to improve the credit law and regulation system, promote intelligent digital "credit+" products and services, and promote the new credit-based regulatory mechanism to promote the high-quality development of social governance under the construction of social credit [7, p. 8].

To summarize the relevant literature, although some scholars have elaborated the relationship between social credit system construction and grassroots governance, there

are few studies on social credit system construction from the perspective of grassroots governance, and no scholars have used the case study of "moral bank" in Yuyao City to analyze how credit system construction and grassroots governance are coupled in the strategic context of digital transformation. No scholar has used the case of Yuyao Moral Bank to analyze how credit system construction and grassroots governance are coupled in the strategic context of digital transformation. Therefore, the next part of this paper will discuss this issue.

2.2. AnalyticalFramework

Based on theoretical and practical requirements, we focus on the changes of governance mechanisms through which the credit system contributes to the modernization of grassroots governance under the digital transformation. Both the "structure-function" and "structure-process" frameworks are well established in existing academic research [8, p. 42]. The "structure-function" analytical framework, which is mainly derived from structural-functionalism, provides an exploratory framework for exploring social system processes and system changes that can explain the internal operating mechanisms. The "structure-process" analytical framework provides analytical tools for providing dynamic changes in the system, such as analyzing the role of structural and process arrangements in modernizing national governance in shaping the construction of national autonomy. Reviewing the existing academic research and practice, we find that the traditional structural function and transformation theories and related problem-solving strategies are not sufficient to explain and solve the difficulties facing the current practice of grassroots public governance in China. Therefore, some scholars have started to try to combine the two and establish a "structure-process-function" analytical framework, and use this framework to analyze issues such as the modernization of the state vertical governance system, the whole process of people's democracy, and the Chinese model of emergency management [9, p. 71].

Based on the existing research, this paper constructs a "structure-process-function" analytical framework for digital credit system construction that enables grassroots governance based on the inherent logic of credit digitalization and grassroots governance. "The structure-process-function analysis framework is in line with the research theme: the object and problem of this paper are mainly based on the in-depth observation of the current credit system construction and grassroots governance practices in China, and it focuses on the internal operation process of the governance system in the context of the credit system construction to enable grassroots governance in the data-based context. In this paper, we focus on the process of internal operation of the governance system, and observe the changes and impacts on the effectiveness of governance by the process of internal changes of the governance system.

In the "structure-process-function" analysis framework, structure exists as a vehicle for function and process, process exists as a link between structure and function, and function exists as a determination of structure and process [10, p. 67]. In this context, structure generally refers to the relatively stable relationship between organizational organization, repeated behaviors, or different roles created by certain participants in an organization. For the purpose of this study, it mainly refers to the relevant systems, structures, and power and responsibility relationships of grassroots governance. A process is a process or stage of something, in which transformation is a typical form of process. In the context of this study, the process describes the operational mechanism, basic management approach features, and transformation of the internal logic of grassroots governance before and after applying the credit system in the digital context. By function, we mean the effect or effect related to the purpose and process of the behavior of different actors. In the practice of grassroots governance empowered by the construction of digital credit system, it is reflected in

the functions and effects played by the digital construction of credit in grassroots governance.

3. "Structure-Process-Function": A Practical Exploration of Yuyao's "Moral Bank"

3.1. Case Overview

Yuyao is a county-level city under the jurisdiction of Zhejiang Province and is subordinate to Ningbo City, located in the Ning-Shao Plain in the eastern part of Zhejiang Province. According to the seventh census, Yuyao has a resident population of 1,254,032 as of November 1, 2020, and in 2022, Yuyao will have a gross regional product of 151.359 billion yuan. Since 2012, Yuyao has taken the lead in piloting the "Moral Bank" in China, using the "Moral Bank" as a platform and the moral green card as a carrier to promote the marriage of morality and credit, and linking it to benefits. Social care benefits, including medical and health benefits, transportation benefits, visit benefits, etc., to provide good people with real preferential services [11, p. 3].

After nearly 10 years, Yuyao City has continuously standardized the points assessment, quantified morality, formulated and issued "Yuyao City Moral Points Management Measures", refined 20 indicators in four aspects: social morality, professional morality, family virtue and personal morality, established a four-level evaluation network system of grid, village, town and city, relying on the city's 1,459 grids, set up 261 administrative villages and communities "Moral bank" branches 43, set up 21 township street "moral bank" branches, and set up the city "moral bank" head office, to ensure that the evaluation matters are clearly interconnected, and step by step, in accordance with The process of "individual self-evaluation — network mutual evaluation — village and community evaluation — big data wisdom evaluation" is used for daily moral evaluation.

Today, by linking to the provincial comprehensive resource system, the Yuyao Moral Bank has completed the construction of 18 data interfaces and built a digital cockpit based on them, constructing four scenarios including moral evaluation, moral portrait, moral credit and moral courtesy in the overall scope. By the end of 2022, the total number of citizens enrolled in the Yuyao Moral Bank will exceed 600,000.

3.2. Specific case studies in the "structure-process-function" framework

3.2.1. Restructuring of structure: from loose and fragile to integral and solid
The structural reorganization is mainly reflected in the functional adjustment of the grassroots organizational structure and the innovation of the local government administrative system.

After the reform and opening up, Yuyao, led by the central government's policy, has devoted itself to building a new self-governance system at the grassroots level. However, in actual operation, party organizations, economic organizations, and self-governance organizations are often confused and nested within the system, which in turn leads to the alienation of grassroots self-governance and the existence of pluralistic governance in name only. At the same time, there is a worrying information imbalance in the grassroots market, and the problems of moral hazard and adverse selection are prominent. The construction of a grassroots credit system is a common problem faced by government departments, regulatory units and financial institutions. In general, before the application of digital credit building system, the overall grassroots governance structure in Yuyao showed the administrative characteristics of many conflicts, serious system rigidity, and loose and fragile structure.

When Yuyao "MOral bank" was established in 2012, the main structure was a three-level service network of city, township and village, and the assessment and evaluation of points

were based on village level, and the three-level structure was subsequently evaluated and recorded; in 2020, the key was multi-cross-scene comprehensive analysis, relying on WeChat applets and blockchain technology to create "moral bank" 3.0 mobile service platform, on the basis of moral self-assessment, village evaluation, social security, industry and commerce, taxation, public security and other government affairs data transferred into the integration. After building the digital credit system, Yuyao City has changed its previous loose and fragile governance structure. The moral bank has effectively resolved the inherent tension between different levels of government, empowered local autonomy while strengthening effective supervision and control from above, and strongly promoted the deep structural reform of grassroots governance, ensuring the wholeness and solidity of governance.

3.2.2. Innovation of process: from fragmented and disordered to synergistic and linked

Process innovation is mainly reflected in the optimization of the interaction of the grassroots governance process and the change of administrative processes at all levels of the department.

Prior to the implementation of the moral bank program, with the rapid development of urbanization, Yuyao's grassroots "hollowing out" phenomenon was serious, and individuals in society became strangers and profit oriented. The integrity of Yuyao's economic market is seriously distorted, which makes enterprises cautious in their investments, people have difficulties in borrowing money from banks, and the daily economic operation of the society is hindered. In this context, grassroots organizations are not in close contact with the public, the supply of public goods at the grassroots level cannot meet the needs of people's livelihood, and there is insufficient coordination among various departments at the grassroots level, which makes grassroots governance an integrated state of disharmony, lack of trust and disorder.

Yuyao Moral Bank 3.0 version establishes optimized data model, relying on a large amount of access to credit data, generates scientific and accurate personal moral portrait and moral code [13, p. 65]. The main effectiveness is demonstrated in: users with green code above 80 points can enjoy credit preferences, and through the data model automatically generate credit lines and preferential interest rates, and can also enjoy moral rent, moral travel, moral medicine, etc.; through the data interface mode and Ningbo public Through the data interface mode and Ningbo public credit information platform to achieve interoperability and sharing, a total of more than 8 million pieces of data, providing credit information services for government departments, enterprises and the public; citizens can initiate moral evaluation and apply for moral loans at any time through the "Zheli Office", and the credit funds are "once approved, with the use of the loan, balance control, and The credit funds are "approved once, loaned at any time, balance control, and used in a turnaround". The credit system construction under the digital background directly and disruptively changes the disorder and fragmentation of grassroots governance under the traditional credit system, reshapes the social integrity atmosphere through data portrayal and economic incentives, simplifies the office process by relying on the data platform, realizes the interoperability and linkage of multiple governance subjects through credit point sharing, and meets the realistic needs of different subjects based on different governance scenarios.

3.2.3. Enhancement of functions: from rough and unbalanced to refined and co-governance

Function enhancement is mainly characterized by the functional positioning of grassroots social governance and its effectiveness enhancement.

In previous grassroots governance, overlapping and cross-cutting responsibilities between departments and mutual shirking of responsibilities have occurred, which can

result in the public not receiving services on specific matters or receiving services of established standards and having to go through complicated forms and cumbersome procedures to get something done, with rough grassroots public services. In addition, the bias of resources between different levels of government departments does not directly or completely translate into the effectiveness of government governance, but is reflected in the imbalance of public service delivery, which leads to a strong public dissatisfaction and crisis of trust in government.

The piloting of moral bank in Yuyao and the technological changes that accompany digital transformation have had a significant impact on the effectiveness of grassroots governance in the region. First, it directly enhances the convenience of financing services for citizens and reduces the default rate of credit loan products. Moral bank is pure credit loans without any collateral guarantee, and after the business process is transferred from offline to Zheli office, the financing time is significantly reduced to enhance the convenience of credit, and at the same time, the default rate of credit is greatly reduced because moral bank has strict management methods for credit modeling. Second, the formation of moral bank data closed-loop mechanism. Moral Bank applies credit data from provincial and municipal credit platforms and grassroots communities' evaluation information to credit portraits, generates individual credit evaluations and feeds them back to Ningbo's social credit work platform. The closed-loop mechanism of "collection-application-return" of credit information is successfully built to realize the cooperative governance of multiple departments. Third, to create a good atmosphere for the whole society to know and trustworthy and public participation. The moral bank determines the amount of credit loans according to the moral credit performance of citizens, so that people realize the importance of honesty and integrity, and the awareness of honesty and social participation is continuously enhanced. At the same time, the public enjoys multiple courtesies with moral green cards or with moral green codes, which inspires them to participate more actively in social activities and volunteer services, stimulates the sense of civic participation and dedication, and emerges many moral models. From the perspective of function enhancement, the combination of moral bank and digitalization has directly changed the previous rough and unbalanced grassroots governance situation in Yuyao City, achieving a great transformation of grassroots governance from rough and unbalanced to fine and common governance.

A specific case study in the "structure-process-function" framework is shown in Fig.

4. Inspiration

Digitization is not only a technological change, but also a social change, and this change is accompanied by the innovation of social management system and public services. The construction of social credit system with citizens' credit management as the core is becoming an important way to innovate grassroots social governance in the context of digitalization. This paper selects the "moral bank" in Yuyao City, Zhejiang Province as a case study. In the current real-life dilemma that grassroots governance is facing many challenges, we review previous studies and then combine academic views and practices to build a theoretical analysis using the "structure-process-function" framework. In this study, we explore the intrinsic logical connection between the construction of credit system and grassroots governance in the digital context of Yuyao "moral bank", how and why it can be empowered, and finally draw universal inspiration for the construction of digital credit system to empower grassroots governance based on the case study analysis.

First, the construction of credit system needs to build the incentive mechanism of grassroots governance system. First, the higher administrative departments must

Practical exploration of "moral bank" in Yuyao

Restructuring of structure

loose, fragile → integral, solid

confusing system ⇩ three-level structure

Innovation of process

fragmented, disordered → synergistic, linked

credit collapse ⇩ points sharing

Enhancement of functions

rough, unbalanced → refined, cogovernance

trust crisis ⇩ active contribution

Digitalization helps credit system construction, empowers the modernization of grassroots governance
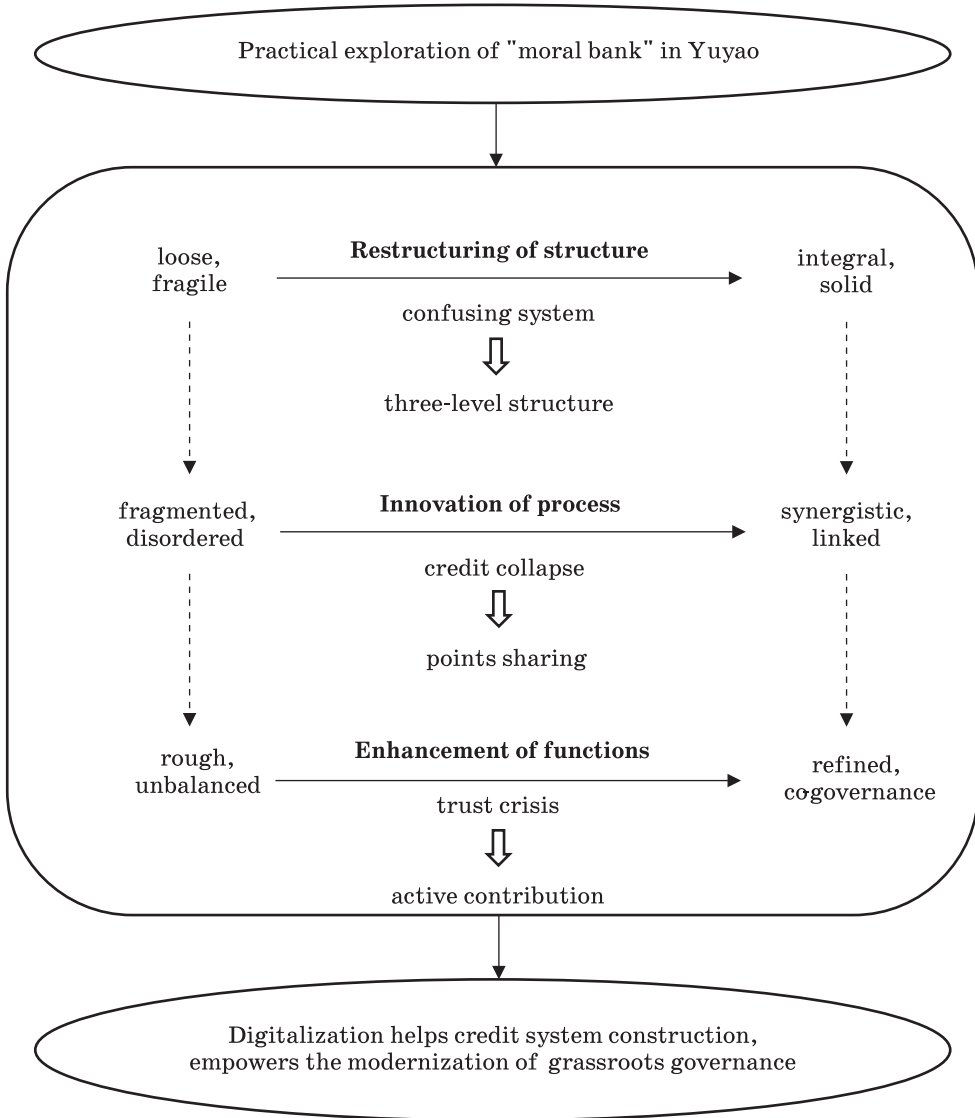
Fig. The "Structure-Process-Function" framework of Yuyao's "Moral Bank"

participate in the construction of the credit system, through the top-level design of the credit system construction into the work of the grassroots governance system and evaluation criteria to encourage grassroots organizations to participate, so as to achieve administrative gains. Secondly, improving grassroots governance should take into account the economic benefits pursued by the people, and the establishment of a credit system is to help grassroots obtain more sources of funding and various investments to accelerate economic growth and promote regional prosperity. Again, grassroots social governance should be conducive to grassroots organizations to achieve value feedbacks. Through the construction of credit system, grassroots organizations can gradually introduce formal institutional constraints into the grassroots

management system, improve government management, achieve good interaction between financial credit and social credit, and further improve the grassroots social governance system.

Second, continuously strengthening the in-depth cooperation among multiple departments such as government and banks, and continuously building a pluralistic shared interest community is an important way to realize digital credit system construction to empower grassroots governance. In this study, one of the important reasons for the success of Yuyao Moral Bank is that the government, industry and commerce, public security, banks and other multi-departments collaboratively participate in grassroots governance, forming a community of interests with "shared risks and shared benefits". The collaborative participation of multiple actors in social governance has formed a new model of interactive social governance, and the complementary embeddedness of administrative, market and community mechanisms is prominent, forming an effective complementary and synergistic model of shared governance.

Third, there is a need to build a linkage mechanism between credit system and grassroots governance in the context of data. Information technology construction has become an important part of grassroots governance, and digital management system may become a fundamental platform for future grassroots social and economic life. The concept of data management should be integrated into the whole chain of social credit system digitization, and the process of data-based digital transformation should coordinate the two parts of data transmission flow and data security, and optimize credit information by improving the level of public information openness, strengthening data security, and promoting information sharing reform. At the same time, there is a need to strengthen the construction of linked platforms for credit data monitoring, improve credit data classification and assessment standards, and promote and complete the innovation of both intelligent monitoring and credit supervision mechanisms are crucial. Use data for decision making, data for innovation, and data for management to make fundamental changes in the credit society.

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