

Research on Local Characteristic Industry Construction in Characteristic Towns under Public-Private Partnership Development Mode

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Abstract. In recent years, there's been a global trend of emphasizing the role of local characteristics in steering economic growth. To foster the advancement of local characteristic industries in characteristic towns, the public-private partnership (PPP) model is being adopted. This strategy leverages social resources and governmental incentives to drive both urban and rural progress, thus becoming a silver bullet to bolster the growth of characteristic towns. However, achieving "town-industry integration" and "sustainable development" necessitates shared consensus and understanding among all stakeholders. Given the intricate nature of the PPP mechanism, a comprehensive theoretical framework tailored to Chinese local characteristics is essential. This study scrutinizes the integration of the PPP model into characteristic industries within small Chinese towns. It follows a framework encompassing theoretical characteristics, feasibility analysis, existing problems, countermeasures, and recommendations, as well as future trends. The study employs both inductive reasoning and comparison. The research findings serve to establish a theoretical consensus for the PPP model's integration with characteristic industries in these towns, benefiting all involved parties.

1. Introduction

Governed by the state and facilitated by the business entities in the market, the construction of characteristic industries in characteristic towns under the public-private partnership (PPP) mode centres on characteristic industries and emerging industries. During practical implementation, it is imperative to underscore the pertinent theories applicable to these unique industries. Owing to the broad scope of PPP, this study aims to delve into the development of such industries within specific towns and the specific operation mechanism of PPP. It emphatically elaborates on the innovation of the new operation mode of PPP in China and probes into the strategic feasibility, application necessity, existing challenges and drawbacks that must be resolved in the accelerated construction of characteristic towns and villages.

Specifically, the paper follows the framework of theoretical characteristics, strategic feasibility analysis, application necessity, existing problems, countermeasures and suggestions, and future development trends, to investigate the introduction of PPP mode into the development of characteristic industries in small towns with Chinese characteristics.

2. Theoretical Characteristics of Introducing PPP Mode into Local Characteristic Industries

The development of characteristic towns can be sub-categorized into "industry-oriented," "community-oriented," and "tourism-oriented." Hence, we can summarize the theoretical framework of the application of the PPP mode in characteristic industry market promotion to outline the essential theoretical characteristics of introducing the PPP mode into characteristic industries of characteristic towns, thus explaining the key to the successful application of the mode.

Targeting the protruding problems in the development of characteristic industries in characteristic town projects, such as backward policies and regulations, inadequate talent provision, difficult approval of enterprise financing, constrained risk management ability, and poor later business performance, the promotion of PPP mode in the construction of characteristic industries in characteristic towns can fully mobilize the enthusiasm of social enterprises for investment and development, reduce local financial pressure, and improve operational efficiency.

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2.1. Theory and feasibility of introducing PPP mode into characteristic industries.

Constructing characteristic industries in characteristic towns under the PPP mode is a "partnership between government and social capital." It is a mutually beneficial cooperation mode authorized by construction projects and related services, in which the government and the public and private sectors provide various infrastructure, public utilities, natural resources and environmental benefits, etc., relying on the policy advantages provided by the government [12].

This operational mode of public project investment can adopt a variety of forms, including Build-Operate-Transfer (BOT), Build-Own-Operate-Transfer (BOOT), Transfer-Operate-Transfer (TOT) and other ways of combination. Among them, the public sector can help alleviate the social burden brought by public finances, complete project construction, and fulfil government services, while the private sector can share certain risks through financing and obtain a reasonable return [3].

2.2. Advantages of introducing PPP mode into characteristic industries

The introduction of PPP mode into characteristic industries can:

- (1) improve the business financial level of public organizations and staff in the general private sector.
- (2) reduce the economic and financial pressure imposed on governments at all levels.
- (3) encourage innovation and a more flexible way in certain aspects of risk management within the private sector than in the public sector.
- (4) contribute to the sharing of risks.
- (5) boost the overall reform of the socialist market system construction.
- (6) expand the investment field of social capital.

2.3. Application necessity of introducing PPP mode in characteristic industries

Presently, the PPP operation mode is progressively emerging as one of the top two choices for financial guarantees employed by local administrations to establish diverse characteristic towns. The advancement and creation of infrastructures within these towns have notably propelled the growth of the PPP operational model in China, which stimulates the internal vitality of investment in characteristic towns across the country.

- (1) The introduction of the PPP operation mode can further reduce the financial pressure faced by the grassroots government in investment. Since the early investment and construction management in the development of characteristic towns has a high barrier and the investment and construction turnover of capital often takes longer, the essential constraint for the planning and construction of characteristic towns lies in insufficient total financial funds.

- (2) In addition, it is helpful to further reduce the project capital risk brought by the small-scale, scattered construction of characteristic towns.

- (3) Moreover, it can effectively improve the overall construction service quality and efficiency, as well as the operational efficiency of small towns with Chinese characteristics. The market-oriented construction of characteristic town incubators and its close combination with industrial park PPP projects and other innovative modes will become an inevitable trend [11] [15].

2.4. Operation mode of PPP projects in characteristic industries

The selection of PPP operation mode is mainly determined by factors such as PPP project type, financing demand, reconstruction and expansion demand, charging and pricing mechanism, return of investment, the basic framework of risk allocation, and disposal upon expiration.

In China, the naming of operation mode is based on "the control state of ownership/ right to use of public assets." Another international parallel naming convention is based on "the functions transferred by the government to social capital [8]."

PPP concession generally refers to the financing, operation and management and other management work related to projects in small towns with Chinese characteristics under the PPP mode, including products with incidental attributes intrinsically linked to project construction. The relationship network of the concessionaire's development environment is as follows (Fig 1) [13] [14]:

3. Feasibility of PPP Projects in Characteristic Industries of Characteristic Towns

3.1. Obtaining policy support from the central and local governments.

The overall development ideology of characteristic towns should reflect the concepts of "innovation, openness, sharing, environmental protection, and ecological coordination." A platform for the tourism industry should integrate elements including local industries, tourism, cultural activities, and community function [2].

The central department shall offer financial support to various policies. Provincial and municipal governments in areas such as Zhejiang, Guangzhou, and Fujian can generally apply the PPP cooperation mode in a few pilot regions to develop and construct characteristic industries in characteristic towns, directing targeted policy support to the local area.

3.2 Meeting the capital needs of participants by attracting broader social capital.

Given the lack of local government financial support in the early development stage, the construction of

characteristic towns needs developers injecting a lot of idle funds. The financing operation mode of PPP projects, due to its stable economic return, can attract a broad range of social capital to intervene. It is impossible, however, to rely merely on government finance for the construction funds of characteristic towns; social forces in social

capital should be leveraged extensively. Improving the return on investment is key to attracting social capital. PPP operation financing mode is considered an effective solution to this problem [2].

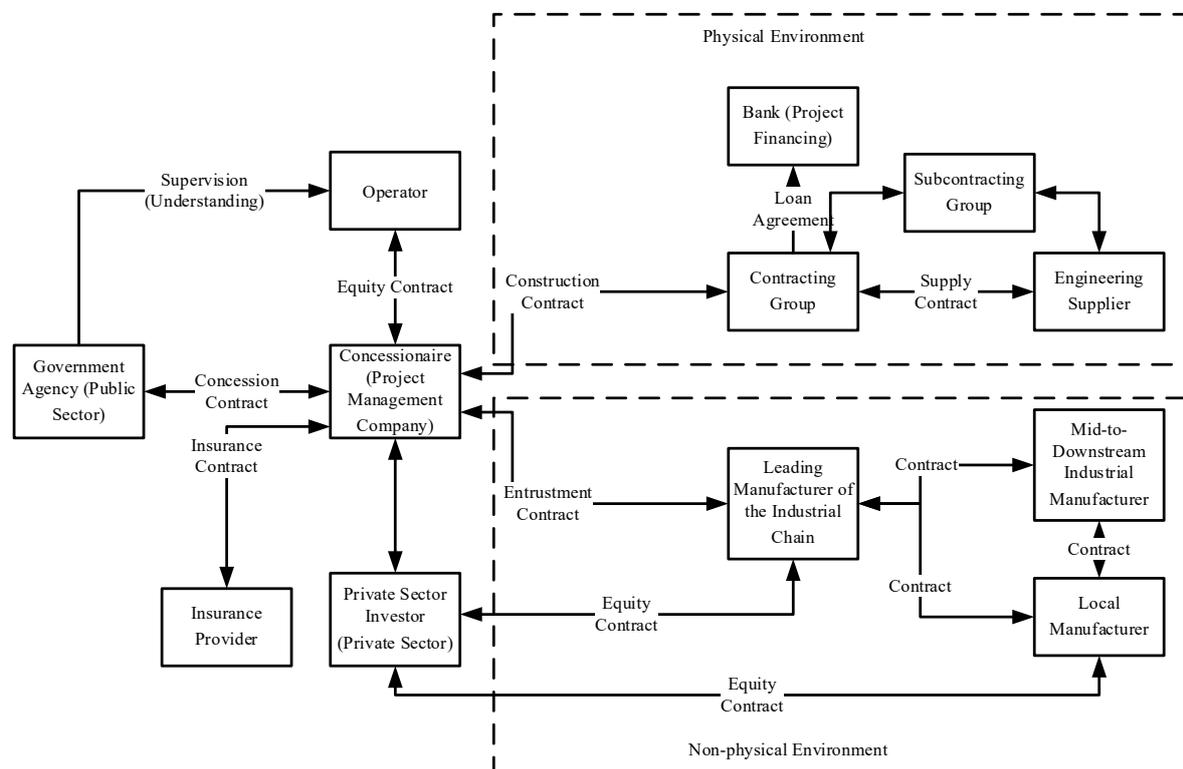


Fig 1: Network Relationship of Concessionaires' Development Environment for Characteristic Industry Growth under the PPP Mode

3.3 Introducing new profit model of PPP projects in local characteristic industries.

The specific profit model is the key to supporting the operation of PPP projects in characteristic industries. The classification of PPP projects based on the profit model of concessionaires is listed as follows (Table 1):

Table 1 Profit Model, Contents, and Facilities of PPP Projects in Local Characteristic Industries

Profit Model	Franchise Business Contents	Facilities
(1) User-pays mode	Usually adopted for infrastructure projects with high operability and high economic benefit and provide services directly to end users.	Municipal water supply, city pipeline gas, toll roads, etc.
(2) Government-pays mode	Usually adopted for terminal infrastructure projects that do not directly provide services to end users.	Municipal sewage treatment plants, waste incineration power plants, or non-profitable infrastructure projects such as municipal road construction and river regulation.
(3) VGF mode (Viability Gap Funding/Subsidy VGF)	Insufficient part of users' payments by social capital will be subsidized by the government with financial subsidies, equity investment, preferential loans, financing guarantees, and other preferential policies.	Hospitals, schools, cultural and sports venues, social security housing, network-based municipal public projects with reduced price policies or insufficient demand, toll roads with insufficient traffic flow, etc.

3.4 Favourable operating conditions and practical foundation

Although both the adoption of the PPP operation mode in some characteristic towns in China and the path toward

future industrialized development are still under exploration and research, we can sum up the experience of other public infrastructure projects and draw insights from the successful experience of foreign PPP projects and solve the application problems based the actual situation of specific domestic projects [2].

4. Problems Existing in PPP Projects of Characteristic Industries in Characteristic Towns

The application of the Chinese-style PPP operation mode is a Chinese-style investment and financing operation practice drawing lessons from the PPP mode within the comprehensive urban planning policy for Chinese characteristic towns. Nevertheless, PPP projects entail substantial investment, long-term concession contracts, and intricate technologies, potentially giving rise to numerous implementation risks that can lead to project setbacks [4].

Risks associated with characteristic industrial projects in the PPP mode encompass the following aspects: the first aspect involves inadequate policy and regulation development, along with imperfect systems. The second aspect encompasses a dearth of skilled personnel, insufficient project management, and limited financial resources. The third aspect entails inefficient bank loans and approvals, leading to uncertain risks. The fourth aspect is relevant to weak risk management capabilities, outdated methods, and one-sided thinking. Lastly, unsatisfactory long-term operational outcomes for characteristic towns also matter [7].

5. Countermeasures and Suggestions for Construction of Characteristic Towns and Characteristic Industries under the PPP Mode

5.1 Suggestions

We should optimize the approval process and regulate the implementation of policies; innovate financing modes to attract social capital to participate in PPP financing in characteristic towns; enhance core competitiveness to attract highly skilled personnel; and evaluate market demand based on local conditions [5].

5.2 Sustainable development countermeasures

The sustainable development countermeasures include the design and implementation of a PPP cooperation mode that can realize the stable development of the local economy, the rise of social living standards, and the improvement of the industrial development and investment environment. The government should provide guidance in the investment and operation of funding projects and the investment and financing cooperation in urban regional economic and social development.

The specific countermeasures include establishing an information disclosure platform, improving the system of laws and regulations, and supplementing the government's decision-making and supervision mechanism [5].

6. Development Trend of Construction of Characteristic Towns and Characteristic Industries under the PPP Mode

In a future society, characteristic towns will promote the reform and innovation of people's lifestyles; an enterprised, city-supported, and villager-involved innovative development style will be established. Advantageous private enterprises will be ushered to establish a green product circle that favours a healthy life. The development will be based on expanding investment methods. Hence, the PPP model will offer more cutting-edge technologies for characteristic town development, enhanced management practices, and decreased investment risks [10].

6.1 Propulsive effect of the PPP mode in the development of characteristic towns

-(1) As an important innovation in infrastructure construction and service provision, the PPP mode helps improve the infrastructure construction level and operation ability of characteristic towns.

-(2) PPP mode emphasizes market-oriented operation, which can absorb extensive social resources to invest in the construction of characteristic towns. Marketization is also a major direction for the government to promote the development of characteristic towns.

-(3) The PPP model can alleviate the fiscal expenditure burden. Although characteristic small towns can draw substantial investments, securing such investments is challenging. Moreover, the prolonged operation and maintenance require extensive financing. The PPP mode can pool a large amount of social capital and realize intellectual investment, providing a whole-life-cycle investment scheme design for PPP projects in small towns with Chinese characteristics.

-(4) The PPP mode can encourage intensive and large-scale supply of social funds through supply chain operations. The important feature of PPP projects in characteristic towns is that it contains many sub-projects with relatively complicated boundaries. Through the PPP mode, a large amount of social funds can be integrated into the early planning and construction of small towns, which can resolve the difficulties in the scattered design and operation of small towns with Chinese characteristics [9].

6.2 The direction and trend of characteristic towns under the PPP mode

The future direction and trend of characteristic towns under the PPP mode are:

-(1) clarify the development direction of characteristic industries [6];

-(2) broaden financing channels to meet capital needs;

-(3) realize the organic combination of project and industry.

-(4) create a new characteristic of integrating the PPP mode and intelligence for the construction of small towns with Chinese characteristics.

PPP + BIM intelligent technology can enhance the advancement of various intelligent technologies in project management. Anchored in the project's entire lifecycle, it yields digitized outcomes for decision-making and error avoidance. Furthermore, it carries the capability of reintegration to cater to diverse stakeholders, thereby enhancing the conventional approach and methodology of project management.

-(5) reasonably spread the risks of PPP projects in characteristic towns.

7. Conclusion

Currently, the PPP operational approach is essential for crafting distinctive Chinese towns. Examining its necessity and significance, adeptly employing the PPP model assists in easing financial pressures on local governments, mitigating capital risks tied to construction, and, to some extent, enhancing construction quality and efficiency [1].

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