Sustainable Social Development (2023) Volume 1 Issue 1
doi: 10.54517/ssd.v1i1.2227

ORIGINAL RESEARCH ARTICLE

Inclusive governance-driven upgrading path for old industrial parks

Senqiang Wang

Business School, Shandong University of Technology, Zibo 255000, China; wangsenqiang97@126.com

ABSTRACT

Industrial park is the important driving force of regional industrial transformation and economic development, but when developed to a certain social and economic level, most planning within the scope of industrial enterprises have been unable to meet the requirements of industrial iterative upgrade and space update reconstruction, and park construction "heavy quantity, light quality" characteristics, so in different levels of the resources will continue to promote strategic transformation and upgrading of old industrial park. Based on the theory of inclusive governance, this paper systematically analyzes the path of the upgrading and transformation of the old industrial park from multiple dimensions. The study found that, on the one hand, the upgrading of old industrial parks follows the path of "regional enterprises leading-public resources leading-local government leading", forming the old industrial park transformation mode of "enterprise leading the market operation and government services"; on the other hand, the goal orientation and practice activities follow different paths. Among them, the regional enterprise leading mainly focused on the park industry accurate positioning and linkage of the main body to carry out the pilot project, public resources leading by integrated space overall transformation, integration of social resources to build urban construction and public service sharing platform, local government is around the different stages of the process and various security policies and measures of system and mechanism innovation. On this basis, this paper constructs the upgrading path model of old industrial parks, which can not only strengthen the theoretical understanding of the upgrading of old industrial parks, but also provide scientific guidance for specific practical activities.

Keywords: old industrial park; upgrading path; inclusive governance theory

1. Introduction

Industrial parks in the traditional sense mainly form simple mixed processing industrial areas by giving large state-owned enterprises special industrial settings and operation systems, thus promoting a high concentration of various production factors and powerfully driving the coordinated development of the regional economy. Since the 21st century, there has been a boom in the establishment of industrial parks on a large scale and in large quantities in various regions of the country, showing a development trend that covers a wide range of economic and social fields, with different industrial types complementing each other. Although industrial parks are an important growth pole for economic construction and development. Under the new development mode of industrial modernization, many traditional industrial parks are unable to meet the new demands of regional economic development and continuous industrial innovation due to factors such as long development and construction time, relatively traditional industrial production processes and technology levels, saturated space utilization and low levels of support and protection of various facilities,

ARTICLE INFO
Received: 3 July 2023 | Accepted: 27 July 2023 | Available online: 9 August 2023

CITATION
Wang S. Inclusive governance-driven upgrading path for old industrial parks. *Sustainable Social Development* 2023; 1(1): 2227. doi: 10.54517/ssd.v1i1.2227

and the overall vacancy rate of industrial parks is as high as 43.2%. Based on the above-mentioned background, "exploring the upgrading and renovation activities of old parks, and rebuilding the advantages and vitality of industrial park development" is a key issue to be addressed at this stage.

The essence of upgrading old industrial parks is industrial upgrading, and its core lies in realizing the synergistic development of industrial parks in an integrated manner of efficiency and equity. Although policy documents have been implemented around the world to promote the construction of old industrial parks, no in-depth analysis has been made of the realistic development environment and industrial change trends in industrial parks, and the reliability and universality of their transformation paths are still questionable. Therefore, it is necessary to focus on typical reform cases from a theoretical perspective, in order to build a systematic theoretical analysis framework and thus inspire practice. In recent years, some scholars' relevant studies on old parks can be summarized into the following three aspects: first, analytical studies on the transformation and upgrading direction of old parks. For example, through exploring and comparing the development samples of park economies, Li and Zhao[1] point out that the main direction of upgrading and renovation of industrial parks in the future should focus on facilitating the integration of industries and cities, accelerating industrial upgrading and promoting regional synergistic development. The second is an analytical study on the dynamics of transformation and upgrading of old parks. For example, based on the evolution of the three types of industrial parks, Yan et al.[2] point out that the driving force for the transformation of parks comes from three elements: institutions, integration and soft environment. Third, it is an analytical study on the transformation and upgrading mode of old parks. For example, Fang and Cao[3] conclude that the transformation of old parks should be based on two basic models, namely "park + innovation" and "innovation + park", from the perspectives of traditional industrial innovation and spatial planning of old parks as a guide. On the whole, these studies are mostly focused on opinion statements and lack systematic research and comprehensive thinking on theory, which is not conducive to the construction of a management mechanism for upgrading and transforming old industrial parks and hinders the development of diversified practical activities.

Based on the above practical and theoretical research background, this paper will systematically analysis the basic path of upgrading and transforming old industrial parks based on inclusive governance theory. On this basis, this paper distils the key elements and activities in the upgrading and transformation process of old industrial parks, so as to fill the gaps in existing research and provide more operational insights for reform practice.

2. Theoretical foundations

2.1. Inclusive governance theory

Inclusive governance is a model of management based on open and innovative development. Through the participation of multiple actors in institutional development and administrative planning, all regions and citizens have equal access to social resources, breaking through the limitations of traditional public governance models and emphasizing the principle of "building, governing and sharing together". In addition, the theory advocates the formation of a balanced and coordinated pattern of multiple governance types, and is a public governance mechanism oriented towards the sharing of resources and the plurality of participation.

2.2. Contents of upgrading old industrial parks

The comparison reveals that the overall transformation strategies of the different policy documents tend to be the same. With the systematic sorting and promotion of relevant policy contents, relevant studies by

some scholars also present a consistent theoretical perspective. For example, Wang[4] summarised the renovation strategies of old industrial parks from three aspects: green and circular development, innovation drive and transformation of urban functions. Chen[5] focused on five key elements in the transformation process of old industrial parks: top-level design, infrastructure construction, industrial chain synergy, market-oriented mechanism reform and information management services. Tang[6], on the other hand, takes three areas of the relationship between government and enterprises, industrial land transfer and industrial transformation as guarantees for upgrading old parks under the new normal.

2.3. Ways to upgrade old industrial parks

Based on the influence of the current practice community, the theoretical community has interpreted the following four main approaches to upgrading and transforming old parks: first, accelerating industrial iteration and upgrading. In emphasizing the structural optimization of the park's traditional advantageous industries and urban renewal, the focus is on the organic integration of processing manufacturing and modern service industries, and the promotion of the agglomeration of new industries. For example, Chen and Wang[7] argue that old industrial parks should build an ecological industrial development system by incubating emerging technologies to drive the sustainable development of green manufacturing and core innovation chains in the context of high-quality development of an open economy. Second, focus on incremental rise and stock change. The spatial upgrade of the park should focus on elements such as spatial layout, spatial function and spatial operation, refine the functions of each area in the original spatial structure, and reconstruct the spatial planning system in a cutting-edge and systematic manner. For example, taking Suzhou Industrial Park as an example, Zhang et al.[8] provide an integrated strategy for achieving efficient use of spatial structure and full-cycle control from the dimensions of intensive land use and low ecological consumption, further realizing the efficient allocation of spatial layout and functions in industrial parks. Thirdly, it promotes the synergistic development of new towns. Under the concept of integrated development of industrial parks and cities, the functional services and operation modes of the parks are integrated into the construction of towns, thus innovating industrial development and land management modes. For example, Xu and Tan[9]suggest that promoting the transformation of old parks should deepen the comprehensive integration with urban and rural industries, build a service platform for urban and rural resources, continuously optimize and improve basic supporting services and facilities, and form a new development industry led by the rural revitalization strategy. Fourth, excavate and reshape historical and cultural resources. Through the use of diversified conservation means to maintain and update the cultural resources of the old park, the historical value and cultural connotation of the old city are enhanced, and the sustainable development of the cultural industry is boosted through heritage and innovation. For example, Liang[10] points out that the construction of cultural industry parks suffers from insufficient policy support and a single means of resource protection, and advocates leveraging market forces to drive the innovative development of parks and accelerate the in-depth excavation and industrial development of historical and cultural resources.

Based on the above views, although various scholars have explored the ways of upgrading old parks from different perspectives, no unified paradigm has been formed on how to carry out this activity of upgrading old parks at present. In addition, few scholars have discussed the internal logic between different governance paths, which does not constitute a systematic theoretical analysis framework and is not conducive to providing a more comprehensive inspiration for practical operations.

3. Study design

3.1. Method selection

This paper chooses to adopt a research method that combines rooted theory and case studies for the following reasons: ① Although there are currently more practical explorations and innovative attempts to upgrade and transform old industrial parks, there are fewer systematic theoretical studies, so it is appropriate to adopt a single case study method to build a theoretical analysis framework in this field. ② The case study is suitable for analyzing the question of "how to do it and how to do it". The aim of the study is to facilitate an in-depth understanding of the process tasks at each key point through a detailed analysis of a typical sample, combined with the characteristics of the specific practice changes at each stage. The upgrade path of the old industrial park, which is the subject of this paper, belongs to this category. ③ The rooted theory gradually rises to a theoretical level by refining and summarizing the acquired information and literature, further defining the essence and ideas of the phenomenon. This study extracts and summarizes the original information collected, and then builds a theoretical model adapted to the upgrading and transformation path of the old industrial park on this basis.

3.2. Data analysis

Based on the data collected from the cases, the following steps were followed to conduct the analysis: ① A three-tier coding analysis was conducted on the basis that the researchers possessed a high degree of cognitive consistency in the landmark events and basic paths in the upgrading and transformation process of the old industrial parks. ② To ensure the integrity of the data and the credibility of the coding, research, return visits and interviews were repeatedly taken to supplement and improve the data for issues that arose during the research process, thereby improving the quality of the data. ③ Around the dimension of inclusive governance theory, the constructs emerging from the case data were analyzed and open-ended coding, spindle coding and selective coding were conducted respectively, thereby constructing a robust chain of evidence of causality.

In addition, this paper draws on the rooting theory to firstly conduct open coding around the "upgrading and transformation path of old industrial parks". Through initial reading and analysis of the interviews, different concepts are summarized from the relevant words and phrases and "labelled" to extract 20 relatively independent initial concepts such as industrial transformation planning system, industrial sorting, design and customization. Through the "categoryization" process, seven sub-categories were formed, such as industry positioning, pilot first, and linkage development. Secondly, based on the initial categories formed by open coding, three main categories were extracted: regional industry-led, public resource-led and local government-led. Finally, the main categories formed in the main axis coding stage were further integrated, and the core category of "upgrading and transformation paths of old industrial parks" was identified through selective coding, further sorting out the logical relationships with other categories.

4. Case studies

This paper analyses the process in three stages: firstly, the active exploration led by enterprises; secondly, the new practice with market participation; and finally, the institutional guarantee with government services. In order to highlight the extent to which the concept of inclusive governance is realized in the upgrading and transformation process of old industrial parks as a whole, this paper refines the research questions into the following two major aspects for systematic analysis: firstly, it analyses how the basic path of upgrading and transformation of old industrial parks is practiced (t1-t2-t3); secondly, it elaborates how the

logic of inclusive governance acts on the upgrading and transformation activities of old industrial parks at different stages (y1-y2-y3), and finally to refine the theoretical model.

4.1. Active exploration led by business: Regional industry-led (t1)

The upgrading of old industrial parks is a complex and systematic project. Its core lies in combining the actual location and enterprise conditions, focusing on industrial tier upgrading as a breakthrough, and carrying out independent upgrading or continuous transformation of traditional advantageous industries that are in line with the development plan of the district or ecological and environmental protection guidelines. Specifically, in the phase of active exploration led by enterprises, the activities of the old park focusing on regional industry-led upgrading are mainly manifested at three levels: (1) industrial positioning; (2) piloting first; (3) linkage development. Among them, industrial positioning is driven by the innovative development of high-tech industries to enable enterprises in the park to maintain a competitive edge, while piloting and linkage development are the two aspects of the internal and external environment respectively, prompting regional industries to focus their transformation on the alternation of old and new industries and the rational use of resources.

4.1.1. Industrial positioning

Scientific planning of industrial positioning can significantly contribute to industrial upgrading and enhance the comprehensive economic, social and ecological benefits of the park. On this basis, the enterprises in the old park have started from a macro level, based on high-end equipment manufacturing, to further clarify the overall strategy of transformation in terms of "scale, phase and direction". In addition, in the practice of industrial transformation, the high-end manufacturing industries such as new energy, new materials, big data and information technology have been used to achieve the comprehensive and coordinated development of the urban economy, the township economy and the rural collective economy.

4.1.2. Pilot sites first

Actively promote the old park pilot and facilitate the smooth transformation and upgrading of the park. By joining forces with the main functional areas and thus introducing professional service organizations to participate in the work team with the help of an outsourcing platform, it is possible to effectively interface with relevant local chambers of commerce, industry associations and other civic organizations and professional investment forces to participate in the planning and operation of the park pilot together. In addition, the park's differentiated industrial layout and business model design will be promoted in a targeted manner, while a number of high-quality enterprises will be guided to settle in the industrial park.

4.1.3. Joint development

First, linkage with government departments for governance. By establishing efficient communication mechanisms with relevant business divisions such as the Science and Technology Bureau, the Industry and Information Bureau and the Resources Bureau, we have kept abreast of the latest work deployment requirements and developments. In addition, the whole area from municipal construction projects and industrial restructuring is supplemented with scientific and systematic and streamlined and efficient strategic planning. Secondly, linkage governance with business organizations. Through the extensive introduction of various industrial projects, the focus is on the development of high-end equipment manufacturing, marine new energy, automotive intelligent manufacturing and other industries. This not only promotes the organic integration of processing manufacturing and production-based services, but also expands the advantages of industrial clusters. Thirdly, linkage governance with university institutions. We are making every effort to deepen the collaborative development relationship with higher education institutions to form a manufacturing-led industrial cluster pattern and promote the construction of industrial informatization on this

basis. Fourth, linkage governance with research institutes. Relying on scientific development research institutes and technology research and development centers, we will promote industry to focus on scientific research and development and transformation, carry out key technological innovation and docking in continuous absorption and exchange, and continuously form an international high-tech industrial system.

4.2. Topping up practice with market participation: Public resource led (t2)

Achieving a balanced allocation of resources in old industrial parks is not only a key objective in the upgrading of old parks, but also an important guideline for the further implementation of the "Inclusive city" layout. Specifically, at the stage of market participation in the new practice, the public resource-led activities in the upgrading of old parks are mainly manifested at two levels: (1) the spatial equality model; (2) the social sharing model. The spatial equality model is reflected in the area of spatial transformation design, while the social sharing model is reflected in the area of public service effectiveness, with the two working together to enhance the efficiency of the urban function transformation of the park.

4.2.1. Spatial equality model

In the area of "spatial equality", the workflow is based on "market-oriented operation of spatial transformation programmers + strengthening support for various elements + focusing on the improvement of transport and sanitary conditions in the park + diversified investment in construction funds". By promoting the reform of "multi-planning" in conjunction with the integration and governance of the entire land area, the planning model of the entire old park is determined spatially, and the balanced allocation of infrastructure in the park is promoted.

Firstly, market-oriented spatial transformation plan. Through the systematic planning scheme of "plot development details + unit implementation plan + zoning transformation strategy", the idea of renewing the stock space of industrial parks, especially town and village industrial parks, is clarified to ensure the scientific and operability of spatial transformation planning. Second, strengthen the support of each element. According to the demand of investment, we will adopt the standard land construction and "3 + X" land use model, so as to further adjust the spatial hierarchy and gradually form a spatial function layout based on "production + living + ecology". Thirdly, we will focus on improving the traffic and sanitary conditions of the park. By improving the urban transport and road systems and the ecological environment, we will take into account the industrial land needs and infrastructure construction cycles of each park, and continue to improve the construction of intercity roads and barrier-free transport facilities. Fourth, diversify the investment in construction funds. On the basis of fully exploring the existing resources of the villages, the idle factory buildings are used to create the special B&B and central commercial street, and infrastructure such as cultural plazas, service stations and observation decks are constantly improved to realize the integrated development of agriculture and modern service industries.

4.2.2. Social sharing model

Firstly, by following the workflow of "optimizing public services + full participation in urban planning and construction" and emphasizing the inclusive development and public service needs of disadvantaged groups and mobile populations, we will realize the collaboration of multiple parties in urban planning and governance, and create a new public service model and a new pattern of people-centered public services and shared governance. Secondly, to co-ordinate and optimize public services. In the process of equalizing public services, the allocation of specific public service targets, supply efficiency and demand orientation will be optimized in a unified manner. Particularly for migrant working groups and the floating population, various livelihood facilities will be added and improved to gradually achieve full coverage of the public service system. Thirdly, the whole population is involved in urban planning and construction. In leading the process

of co-governance of urban construction, the park is unified in design and development, spatial planning and utilisation through the execution of land acquisition functions and planning and decision-making functions.

4.3. Institutional safeguards under government services: Local government leadership (t3)

On the basis of the upgrading of industrial hierarchy and balanced allocation of park functions, old industrial parks should further adhere to problem orientation and tighten the implementation of policies. A new path of park governance is explored by simplifying the government hierarchy and block structure, realizing the diversification of public governance subjects and the marketisation of governance methods. Specifically, in the stage of institutional guarantee under government services, the old parks focus on local government-led activities in upgrading and transformation mainly at two levels: (1) promotion mechanism; (2) policy guarantee.

4.3.1. Promotion mechanisms

The promotion mechanism emphasizes the establishment of a task force and a sound institutional mechanism. By setting up a special working group for the old industrial parks, the path of participation of multiple actors is further deepened through three stages: “preliminary preparation-pilot implementation-full transformation”. The specific performance is as follows.

First, the operational departments were divided. By drawing up rules of procedure and work programmers, the operational departments carry out research activities on old industrial parks and determine the upgrade path for the pilot old parks after gaining a comprehensive understanding of the current industrial status of the parks and the demands of citizens. Second, implement special plans. On the basis of in-depth research, form policies on financial and tax incentives, land and housing replacement policies for park enterprises, policies for park enterprises to participate in investment in the upgrading and transformation of parks, policies related to the implementation of transformation of own land by enterprise consortia, and policies for targeted investment attraction in parks, in order to fully mobilize park enterprises, social capital and citizens to participate in the transformation. Third, establish a coordination mechanism. Under the co-ordination of various authorities and the park management committee, the upgrading and transformation of old industrial parks will be comprehensively promoted. By establishing a fast track for the approval of upgrading and renovation of old industrial parks, we will ensure that the upgrading and renovation work of the parks will be carried out smoothly.

4.3.2. Policy assurance

The policy guarantees emphasize the introduction of complementary policies and the launch of comprehensive assessment work. In response to the work plans and common problems that arise in each transformation process, the old industrial parks have issued complementary policies and operational rules in accordance with the division of responsibilities, and built them into three major policy systems: “supervision and feedback, information interconnection and performance evaluation”.

Firstly, establishing a monitoring and feedback mechanism. Implement the implementation of the work on old industrial parks by establishing a monthly notification and quarterly supervisory work mechanism. Secondly, promote the interconnection of information and linked development in the sector. By implementing a linked development model, efficient docking and optimal allocation of resources such as industry, space, infrastructure and public services will be achieved. Third, performance evaluation and assessment system. A dynamic monitoring and assessment mechanism will be established according to the industrial development needs of each park, and a performance assessment mechanism oriented to innovation drive will be improved. In addition, by improving the comprehensive assessment and evaluation of the use of

cadres, the employment orientation will be strengthened in accordance with the responsibility list.

5. Conclusion

This paper uses the case study method to systematically analyze the path of upgrading and transforming old industrial parks from the perspective of inclusive governance, from which the main target orientations and specific practical activities are extracted, and a corresponding theoretical model is constructed in conjunction with the case study.

Firstly, the upgrading and transformation of old industrial parks follows the basic path of "led by regional enterprises-led by public resources-led by local policies". By leading with a goal-oriented approach and clarifying the specific practical activities of upgrading and transforming old industrial parks, a model of upgrading and transforming old industrial parks in the direction of "enterprise leadership + market participation + government services" has been formed. Specifically, on the one hand, regional enterprises take the lead in determining the overall layout of the park's industries and the interconnection of projects from a macro perspective by coordinating the various elements of the industrial park and its actual development. On the other hand, the public resource-led and local policy-led approach expands and extends the industrial development strategies identified in the park from different governance perspectives and practical activities, effectively promoting the high-quality upgrading and transformation of old industrial parks on a territory-wide basis.

Secondly, the upgrading and transformation of old industrial parks focuses on the goal of "optimizing industrial space and promoting construction in an integrated manner" to achieve the maximum effectiveness of upgrading and transformation activities. In terms of regional enterprise leadership, the core of the implementation is to clarify the positioning of regional industrial development and promote the construction of a multi-faceted synergy mechanism for the pilot project. In the area of public resource leadership, the focus is on the realization of spatial equality and the creation of a shared social model, with the integration and optimization of a range of resources such as public space and public services. In the area of local policy leadership, the main work is to promote the construction of mechanisms as the main point, and strengthen the efforts of policy protection and institutional innovation.

Thirdly, the upgrading and transformation activities of old industrial parks can be generally categorized into four major aspects: "conversion of old and new dynamic energy, development of new linkage mode, strengthening of platform empowerment and institutional mechanism innovation", and there are also differences in the practical activities corresponding to different paths and objectives. Regional enterprises take the transformation of old and new dynamism and the development of new linkage models as their internal engines, thus defining the overall development strategy of "inclusion of old and new industries". The public resource-led approach focuses on the three main areas of innovation and linkage, institutional innovation and platform empowerment, with a focus on the "functional inclusion of the city" as a whole. Local policy leadership aims to continuously improve the construction of an innovation system for "inclusive public governance" through the development of new linkage models and institutional innovation.

Conflict of interest

The author declares no conflict of interest.

References

1. Li L, Zhao F. International perception and new mission of China's park economy. *Reform* 2017; 7: 119–127.
2. Yan J, Ren H, Tang K. Sustainable development of industrial parks in China: History, form and logic. *Journal of*

Urban Planning 2022; 1: 66–73.
3. Fang J, Cao C. Exploring the transformation mode of traditional industrial park in the context of "innovative city". *Journal of Urban Planning* 2019; (S1): 47–56.
4. Wang Y. Research on the innovation and development of industrial park service system. *Learning and Exploration* 2016; 4: 97–100.
5. Chen X. Intelligent transformation and evaluation of industrial parks. *Science and Technology Progress and Countermeasures* 2015; 32(10): 114–118.
6. Tang Y. Research on the strategy of revitalizing old industrial land under the development orientation of "new normal" and "stock". *Economic System Reform* 2015; 4: 102–108.
7. Chen W, Wang J. Strategic thinking on the high-quality development of industrial parks. *Macroeconomic Management* 2021; 4: 55–62.
8. Zhang Z, Wang Y, Jiang Y, Zhuang T. Evaluation of high-quality utilization of industrial land stock and optimization strategies: The case of Suzhou Industrial Park. *Planner* 2021; 37(20): 13–21.
9. Xu L, Tan C. Research on the development of rural tourism industrial park in China under the background of urban-rural integration. *Agricultural Economy* 2021; 5: 43–45.
10. Liang X. Research on the influencing factors of interactive development of cultural industry park and urban construction in the perspective of city-industry integration. *China Soft Science* 2017; 1: 93–102.