

Research Article

Creative Destruction Path Selection for Industrial Park Transformation and Upgrading under the Concept of Character Town in the Era of Big Data

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With the reshuffle of the global industrial structure, some industrial parks in China are facing problems such as unclear industrial positioning, unclear agglomeration effect, and lack of impetus for independent innovation. It is urgent to seek a way of transformation and upgrading. The arrival of the era of big data also provides new opportunities for the transformation of China's industrial parks. In this context, the model of "character towns" proposed by Zhejiang Province provides a new concept for breaking the bottleneck of industrial park transformation and also provides a platform and space for the application of data technology and digital governance in the era of big data. Based on the theory of creative destruction and self-organization, this paper holds that the essence of industrial park transformation under the concept of character towns is the self-organization process of creative destruction and high-quality reconstruction. After sorting out the development process of parks in China, this paper divides industrial parks into production-oriented parks, consumption-oriented parks, and trade-oriented parks according to the economic activities classified by classical economics. By constructing a six-stage creative destruction model, this paper analyzes the path selection of transformation and upgrading of three types of parks under the concept of character towns and proposes that industrial structure replacement for the production-oriented parks, upgrading the consumption structure for the consumption-oriented parks, and change of trade control points for the trade-oriented parks are the possible transformation paths for the three types of parks.

1. Introduction

In recent years, China's economy has faced problems such as slow growth in demand and severe overcapacity in some industries, and the competitiveness of traditional industries has weakened. It has become the consensus of the entire society to accelerate industrial transformation and upgrading [1]. In China's economic development over the past three decades, industrial parks have flourished, effectively gathering economic development factors, creating huge economic and social benefits, and promoting the rapid development of China's industrialization and urbanization [2]. However, with the reshuffling of global industries, the price of labor, land, and other factors has risen worldwide, the cost of traditional industries has increased, and the

unsustainability in the development of industrial parks has come out. The problems of single industrial structure, lack of characteristics, lack of clustering, and insufficient capacity for independent innovation make industrial parks enter a bottleneck period of development. They need to seek a path of transformation and upgrading urgently [3]. In 2014, the concept of "character towns" proposed by Zhejiang Province was a spatial development platform located within 3.5 square kilometers, relatively independent of urban areas, with clear industrial positioning, cultural connotation, tourism, and certain community functions [4].

Character town gives a new direction to industrial upgrading and park transformation. Schumpeter's innovation theory has been put forward for a century, and there are many pieces of literature discussing this theory. This paper

intends to further explore this theory from the perspective of character towns and traditional parks. Along with the benefits of the big data era, Zhejiang Province supports all regions to promote industrial transformation and upgrading with the concept of character towns; the current development of artificial intelligence and the application of big data provide the possibility for this study. The research results of this paper provide new ideas for enriching urban governance in the era of big data. The character towns can solve the problems of economic innovation and lead to the upgrading of traditional industrial parks [5].

This paper will start from the theory of creative destruction and self-organization and classify parks according to the division of economic activities in classical economics. By analyzing the functional characteristics and existing problems of the three types of parks, a six-stage creative destruction model is constructed to analyze the creative destruction path of each type of industrial park by character towns in the era of big data and provide ideas for the transformation and upgrading of industrial parks with the concept of character towns.

2. Analysis of the Pressure of Industrial Park Transformation and Upgrading

According to the documents issued by the Ministry of Commerce, Ministry of Science and Technology, Ministry of Economics and Information, General Administration of Customs, and other ministries and commissions, the industrial parks approved by the state mainly include economic and technological development zones, high-tech industrial development zones, free trade zones, special customs supervision zones, and cross-border economic cooperation areas, tourist resorts, national independent innovation demonstration areas, and future technology cities.

2.1. The Evolution of China's Industrial Parks. Since the establishment of the Shenzhen Shekou Industrial Zone in 1979, the industrial park has undergone four steps of change [6]. The period from the beginning of reform and opening to the end of the 1980s was the start of industrial park entrepreneurship. The number of industrial parks approved by the state increased year by year, but at this time, the layout of the park mainly considered that the location and transportation conditions, the technology, and capital foundation were weak. It is dominated by labor-intensive industries, with various types of enterprises and unclear industrial position. The park can only provide physical space, and the urban function has not yet been formed in the park. From the 1980s to the end of the 1990s, China approved 32 economic and technological development zones and 53 high-tech industrial development zones. The park entered a rapid development era of capital-intensive and investment-driven, with increased production efficiency, enhanced industrial concentration, and property levels enhancement, but industrial supporting services are still in their infancy.

In the twenty-first century, the park has entered a technology-intensive era. Economic and technological development zones and high-tech development zones have gradually developed and stabilized, the industrial division of labor has been more refined, the industrial chain has begun to extend, and the park's living and commercial facilities have gradually improved. In the second decade of the twenty-first century, innovation has become an important production factor. The park has changed from technology-intensive to innovation-driven. The previous 40 years of development have exposed the problems of industrial-urban separation and single management model [7]. In the new international competitive situation, higher requirements have been put forward for the improvement of the industrial ecological chain, supporting services, and management level. In 2014, Zhejiang Province first proposed the concept of "character town." As an interior part of the park, the character town is an industrial space organization that helps parks to build a good industrial niche. Innovation is its core element [8], and its top-level design concept will satisfy the requirements of industrial-urban integration and management mode innovation through the process of park transformation [9]. In the era of big data, character towns can become the command center of regional governance using big data. Represented by Yunqi Character Town in Xihu District of Hangzhou, the establishment of "Urban Brain" in Yunqi Town provides a digital governance mode for Zhuantang Science Park and the whole city of Hangzhou. Promoting industrial transformation and upgrading through the construction of character towns is a new direction for the development of industrial parks in the new era [10].

2.2. Classification of Industrial Park Types. Marshall's book "Principles of Economics" first mentioned the concept of industrial parks. Industrial park is a concentrated platform of specialized industries in specific places [11]. The current research classifies industrial parks from different angles. According to the proportion of investment in science and technology, it is divided into industrial parks, characteristic industrial parks, comprehensive science and technology parks, and high-tech parks [12]. According to the origin of development and the status in the urban system, it can be summarized as a comprehensive park that starts with attracting foreign investment and contains various investment models. Agricultural industrialization, which developed on original towns, formed by the cluster of agricultural products, gradually matured through the aggregation of similar enterprises and in a subordinate position of the urban system [13]. No matter from which angle the park is classified, the fundamental purpose of the park is to engage in economic activities. The concentration and development of the industry are always the essence of the park. The development style and transformation methods of the parks are different as long as the major industries of the parks are different. The core of the park's transformation and upgrading is industrial transformation and upgrading. Therefore, according to the research paradigm of classical economics and neoclassical economics,

this paper divides economic activities into three categories: production activities, consumption activities, and trading activities. Accordingly, the parks are divided into product-oriented parks, consumer-oriented parks, and trade-oriented parks. Among them, product-oriented parks are divided into production parks for tangible products and production parks for intangible products based on different product types. High-tech parks, economic and technological development zones, and other parks that produce physical products are tangible product-oriented parks. Cultural and creative industrial parks, financial industrial parks, Internet information economy industrial parks, and other parks that produce ideas are intangible product-oriented parks. Consumer-oriented parks mainly refer to parks that provide consumers with goods and experience scenes, including tourism and leisure scenic spots, health and wellness areas, and urban agricultural parks. Trade-oriented park refers to a pivotal zone that provides modern logistics facilities, trade, and exhibition places benefit from transportation advantages. The major industries are bonded warehousing, logistics and distribution, and trade and exhibition, including airport economic demonstration zone, bonded port area, and logistics park.

As shown in Figure 1, the main functions of product-oriented parks are to provide physical products and virtual products, gather various resources, incubate scientific and technological achievements, transform ideas and R&D achievements, and provide high-value-added knowledge and information to society [14, 15]. The main functions of the consumer-oriented park are providing experience-based services to the customer and satisfy China's current transition demand from a production-oriented society to a consumer-oriented society [16]. The main functions of the trade-oriented park are to integrate regional logistics resources, realize the effective flow of raw material intermediate processes, final products, and related information, realize the informatization of the logistics market carrier, and optimize the regional material network [17].

2.3. Different Types of Industrial Parks Face Transformation and Upgrading Pressures and Dilemmas. At present, most production parks are in the middle and later stages of growth, with low levels of industrial development and irrational industrial structure. The park's function positioning and industry selection are facing strategic adjustments, and its driving effect on urban development is also very limited [18]. Problems such as unclear function positioning, obvious industrial homogeneity, incomplete service platform, lack of high-end talents, and incomplete industrial chain have made many industrial enterprises in the development zones with poor benefits, poor economic conditions, and unsatisfactory land use [19–23].

The main problems faced by consumer-oriented parks are unclear business models, high prices, inconvenient transportation, insufficient public facilities, and low service quality of the staff [24]. The lack of cultural connotation leads to poor local rooting; the low degree of scale effect leads to weak regional driving force; the lack of innovation leads to poor heterogeneity and complementarity of leisure products, and the value chain is difficult to extend effectively [25].

Trade-oriented parks mainly suffer from inadequate third-party logistics supply, high vacancy rates in the park, lack of overall planning, excessive government intervention, and low efficiency of land resource utilization [26]. It is urgent to transform into an efficient operating platform.

The three types of parks face different problems in their development. But the homogeneity of products, incomplete industrial chain, lack of innovation, and high-end elements are common problems faced by all types of parks. The emergence of character towns provides three creative destruction paths for the transformation and upgrading of three types of parks.

3. The Theoretical Basis for the Character Towns to Promote the Transformation and Upgrading of the Park: From Creative Destruction to Self-Organization

3.1. Creative Destruction Theory. Evolutionary thoughts began with Thorstein B Veblen. Taking Darwin's theory of evolution and Lamarck's theory of genetics as the ideological basis and taking the evolutionary laws of nature as a reference formed a core category of "genetic mechanism-variation and innovation mechanism-selection mechanism" [27]. Evolutionary economics simulates the dynamic evolution of human economics. In the modern development of evolutionary economics, Schumpeter's economic theory has become its important thought branch. In <Theory of Economic Development>, Schumpeter found the forces that led to an economic change from the internal of the economic system, namely, innovation, summarized as the "new combination" of supply implemented by entrepreneurs. Schumpeter regarded innovation as the essence of the process of economic development, emphasized the important role of nonequilibrium and qualitative change in the economic system, and proposed the concept of "creative destruction;" innovation constantly destroys the internal old economic structure and creates a new economic structure [28, 29]. "Creative destruction" is the fundamental driving force of economic growth. Entrepreneurs and technological innovation play a central role in the process of "creative destruction." On the basis of Schumpeter's theory, Nelson and Winter [30] linked innovation and organization theory to form an evolutionary growth theory in which technology, institutions, and industrial structures coexist. It is believed that the diffusion of innovation requires the cooperation of social institutions and political factors. The creative destruction will inevitably be accompanied by changes in organizational systems.

The connotation of innovation has been continuously expanded on the basis of Schumpeter's ideas, and it has been used to express many creative behaviors: technological innovation, institutional innovation, industrial innovation, cultural innovation, management innovation, and so on [31]. Character towns are embedded in the park, introducing high-end elements to creatively destroy the park industry and introducing a new institution of "government guidance, market leadership, and enterprise entities" to creatively

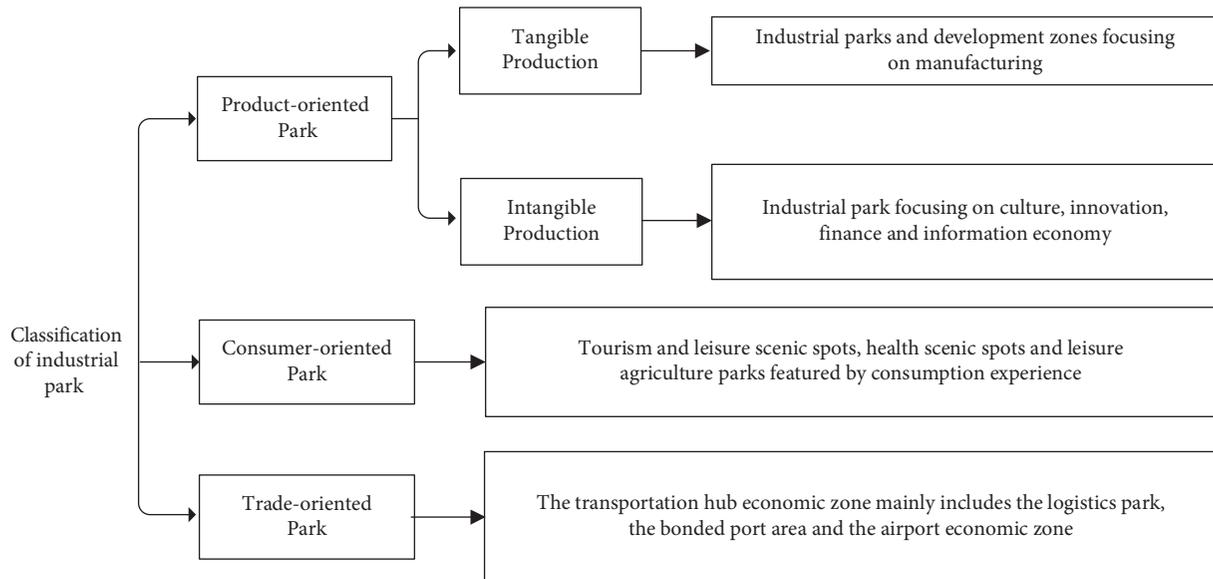


FIGURE 1: Classification of industrial park.

destroy the traditional institutional mechanisms of the park. Combining industrial innovation and institutional innovation, the character towns are positioned as a “nontown and nonzone” area. With the “3.5 square kilometers” of spatial innovation and a “scenic mode” space innovation, character towns creatively destroy the park from different aspects. Taking advantage of the character towns, the parks developed from extensive growth to refinement growth, from industrial decentralization to industrial agglomeration, and from industry-city separation to industry-city integration.

3.2. Self-Organization Theory. With Jacob and Monod revealing the order of self-organization of genetic arrangement in the gene bank, taking dissipative structure theory as a guide, self-organization theory has provided power for evolutionary economics. Self-organization theory is represented by synergetics, catastrophe theory, chaos, and fractal theory. The theory of self-organization believes that the fundamental power of the evolution of the social economic system lies in the material, energy, and information exchange between self-organization power within the system and the outside power, which is far away from the stable state. The exchange created a new structure [32]. Self-organization refers to the evolution process of a system, which is produced by the interaction of various elements in subsystems rather than external effects [33]. The fundamental power of the evolution of the social economic system lies in the self-organizing power within the system [30, 34]. Once a self-organizing system or subsystem emerges, natural selection will distinguish the adaptability of different organizations [35]. Self-replication is a form of self-organization. It produces offspring with the same structure of subsystem in the overall system so that the overall system gradually forms an orderly state and is maintained. In the initial stage of innovation diffusion, old

thinking and habits may stifle innovation in the cradle, but if the system is open and away from equilibrium, innovation will be amplified by self-replication and exceed an unstable threshold to enter a new organizational structure. After the formation of the new structure, the self-reinforcing mechanism will allow new ideas and new methods to enter the stage of rapid diffusion and finally evolve into a popular state of society, completing the routine process of evolutionary economics [36, 37].

The industrial park is a whole system, and the character town is the subsystem of the park. After the industry-city integration, smart growth, and high-quality development, character towns have become a subsystem with a self-blood production function. Its industrial model, governance model, and spatial form will continue to exchange material and energy from the outside world (park) through self-replication and eventually spread to the entire park. Through the combined action of creative destruction and self-organization, the overall system (park) transformation and upgrading will be realized. In the process of transformation and upgrading, since the self-organizing system has the ability of supercircular evolution, it will evolve to a more complicated level. Therefore, the interaction of character towns and parks will drive the industry to develop in a more sophisticated direction, form an industrial culture, and realize character towns and parks coexisting in symbiosis, as shown in Figure 2.

4. The Creative Destruction Path Design of Different Parks under the Concept of Character Towns

4.1. Creative Destruction Path of Product-Oriented Park. The main function of creating character towns in the product-oriented park is to help the park gather high-end production factors [38, 39]. The process of industrial development with

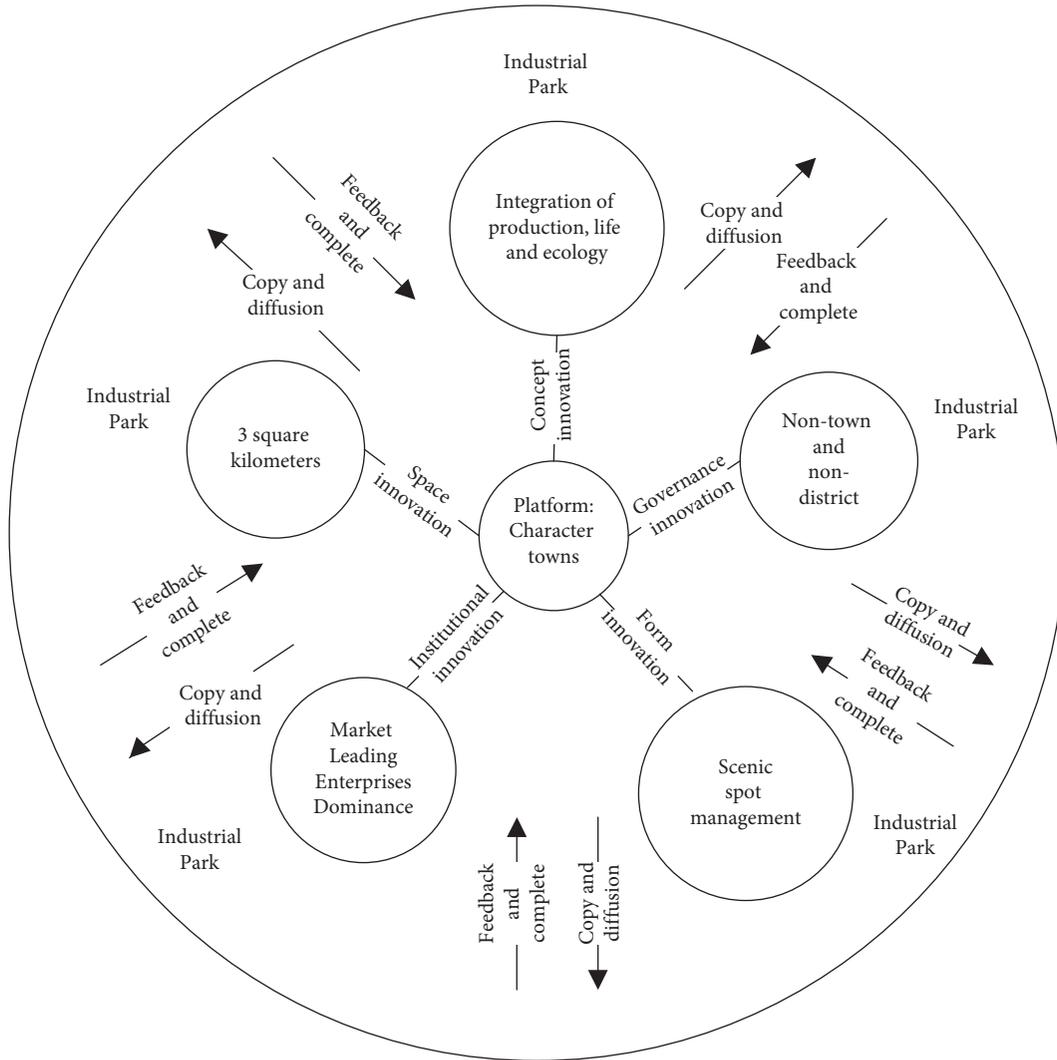


FIGURE 2: The creative destruction mechanism and self-organization evolution process of the character towns to the traditional industry park.

character towns can be divided into six stages. In the pre-aggregation stage, the character towns in the parks entered the provincial establishment list, and the first batch of R&D enterprises was attracted to settle in through preferential policies. The deepening of preferential policies has increased the number of high-end enterprises, professional enterprises have gathered in character towns, and the industrial space has begun to develop and entered the stage of primary agglomeration [40]. The spatial agglomeration of enterprises produces knowledge spillovers [41], the innovative activities brought by industrial agglomeration, knowledge spillovers, and collective actions promote collaborative development among enterprises, production efficiency improved, the value chains formed [42], and the parks entered the advanced agglomeration stage. Trade and cooperation with comparative advantages have been formed between enterprises, and industrial specialization has gradually formed, and the character town formed a clear industrial positioning, breaking through the original lack of organic correlation between enterprises within the park and the unformed industry chain. The old

industrial structure gradually disintegrated, and a new industrial structure was formed inside the character town, entering the stage of primary destruction. At this time, the destruction only happened to the interior of the town. The agglomeration of enterprises has reduced transaction costs. With the strengthening of vertical industrial linkages, horizontal industrial linkages have also gradually expanded. Enterprise service supporting departments such as financial institutions, accounting institutions, and legal institutions have also been attracted to character towns. High-end talents brought by high-end industries have put forward new requirements for the construction of township living facilities. Township infrastructure is gradually improved. On the basis of industrial specialization, a town brand of “one town, one product” is formed [43]. The completeness of the industrial chain has formed an industrial spillover effect, accelerating the connection between the character town and the external overall park, the internal and external networking and innovation of the town has formed, and the town model began to spread into the park and entered the stage of advanced

destruction. As the character town interacts with the park where it is located, the town model is constantly being copied, and the entire park eventually achieves a “dragon-for-bird” exchange. Traditional manufacturing enterprises with high pollution, high energy consumption, and low output are gradually replaced by high-end enterprises with R&D, innovation, and high added value [44, 45]. A complete industrial chain and value chain from R&D to consumer experience are formed in the park. So far, the park has changed from a traditional industrial park with low added value to a new industrial park with high added value, and a character town has become an important tool for the establishment and expansion of the new pattern of the park [40].

The upgrading process of product-oriented parks and the growth process of character towns are mutually reinforcing. The overall improvement of the park as a result of the construction of character towns will deepen the brand effect of them. When agglomeration develops to a certain extent, the business invitation will become an important form. Relaxation or cancellation of preferential policies will still attract enterprises to enter the town. The rooting and expansion of the park have promoted the interaction between the character town and the area, the transaction cost has been further reduced, and the collaborative innovation capability has been further improved. The division of labor in the town is more detailed, internal R&D is deeper, and new industries may be born. The transformation and upgrading of the park in turn also promote the growth of character towns. The upgrading process of product-oriented parks is illustrated in Figure 3.

For example, in this kind of park, the character towns with the health industry as the leading industry are a kind of product-oriented town, which are divided into characteristic towns providing medical health services and nonmedical health services. Among them, most of the characteristic towns providing medical health services build smart hospitals and apply unmanned treatment technology to provide remote diagnosis services for patients. Through big data technology, it can save time and money of communication between doctors and patients. At the same time, it can protect the privacy of patients as far as possible and can also put forward a new method to solve the contradiction between doctors and patients. In addition, many Chinese and foreign joint medical research teams and pharmaceutical manufacturing enterprises have been introduced into these character towns, carry out research on local cases and strengthen R&D capacity, try hard to achieve transformation of R&D in the biomedical field, and promote the transformation and upgrading of the local health industry.

4.2. The Creative Destruction Path of Consumer Parks. Consumer-oriented parks are represented by tourist attractions. The six-stage creative destruction model was first proposed by Mitchell based on the development of the Canadian heritage community St. Jacobs. Mitchell used St. Jacobs to explain the commercialization of historical villages and the evolution of tourism development [46, 47].

Character towns use the concept of global tourism and create an innovative integration model of “industry + tourism” to enhance traditional professional towns and traditional scenic spots [48]. At the birth of character towns, consumer-oriented parks were still dominated by agriculture or industrial production, the consumption structure was relatively simple, commercial investment was not initiated, and the landscape still retained the naturalness of the production-oriented rural landscape and was in the preintegration stage. With the creation of character towns, consumer parks have made full use of the preferential policies such as tax rebates and rent exemptions provided by local governments to attract businesses that focus on consumer experience, such as recreation, tourism, and leisure. Entrepreneurial investment in rural character commodities has gradually begun to destroy the original rural living conditions and stimulate tourism demand. Venture investment, consumption, and commoditized heritage interacted and entered the stage of primary industry integration. Commercial investment continues to increase, local heritage seekers and the real experienter of local heritage increase, and scenic spots are initially formed. The government is the leading developer at this stage. At this time, the similarity of local resources is still large. The support of local residents in the park has further attracted external tourists, private commercial investment has become more active, forming a “sightseeing + commercial shopping” model, and consumer products have gradually diversified. The public development policy continued and entered the advanced commercialization stage of commercial equilibrium [49]. At this stage, the natural landscape was deeply restored, and the post-production heritage landscape was formed. Local residents gradually realized the negative impact of commercialization on the original lifestyle. As the character towns’ landscape functions and consumer products diversified, investment companies began to replace government departments to play a leading role in the town. The stage of primary destruction begins with the retreat of the original residents in the park, and the town is shifted from government-led to enterprise-led. According to the demand for product quality and the space environment by the newly entered high-end consumer groups, the original scenic spot is driven by the market to form innovation and space innovation. Character towns have begun to change the consumption atmosphere of traditional parks, formed a stable tourism atmosphere through governance innovation, and entered the stage of advanced destruction. Subsequently, the policy changes, special development policies, and actions of consumer-oriented parks replaced public development policies and actions and started a new round of consumer product innovation. The entire park tourism industry structure was upgraded, and single consumption replaced experience consumption. The consumption structure was upgraded and entered the advanced destruction stage. The park has been completed, transformed, and upgraded [50, 51].

The character towns with the health industry as a major industry also contain the towns with nonmedical health services mainly focusing on healthcare. It is a kind of consumer-oriented town in parks. Most of them are located

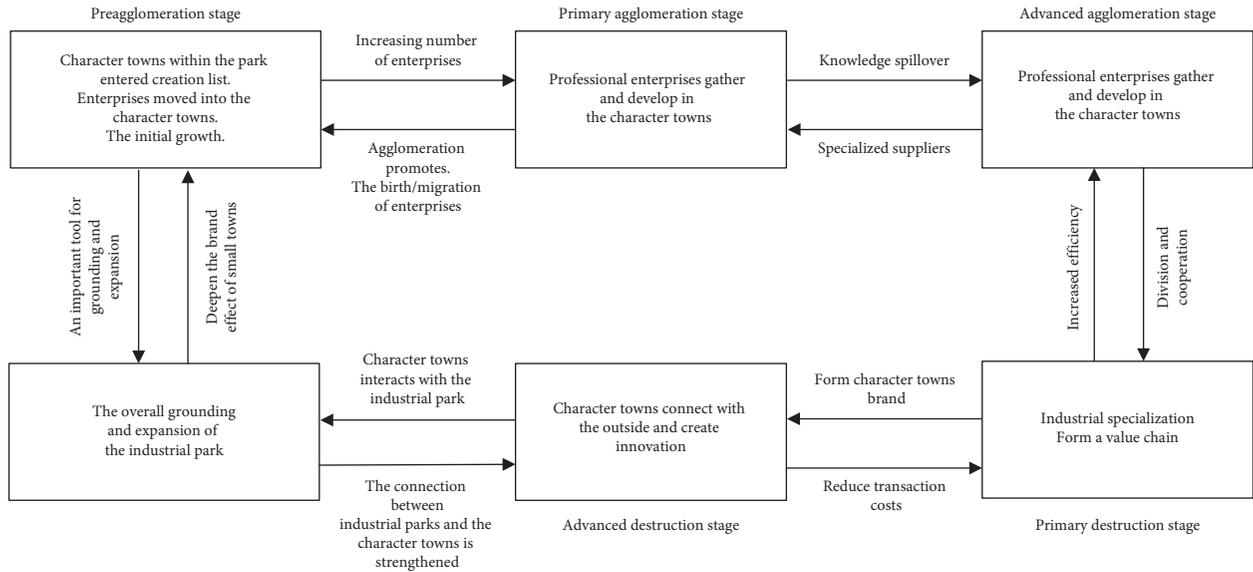


FIGURE 3: The creative destruction path of product-oriented park under the concept of character towns.

in places with beautiful environment and clean air. Health and leisure places such as nursing homes and health parks are built in these character towns. These character towns often hold sports events such as aviation and running, relying on the advantages of local mountains and water resources. For citizens living in cities, who are crouching in a tiny cubicle in office all day, these character towns provide a new type of consumption for health, a new place for family holiday leisure time, a new place for physical exercise, and a place for civilian populations. The creative destruction process of consumer-oriented parks is illustrated in Figure 4.

4.3. The Creative Destruction Path of Trade-Oriented Parks.

In the traditional trade stage, the market scope is limited. According to Adam Smith’s theory of labor division, the division of labor is restricted by the scope of the market. Where consumption power is insufficient, the degree of industrial specialization is inadequate, and the product supply is insufficient, which restricts the division of labor and reduces the exchange capacity. At this time, the economic, transportation, and technological levels of the park are insufficient. The hinterland of the logistics node is limited to the surrounding area. The density of the logistics network is low, and the spatial structure is simple. The emergence of the Internet has broken through the old market. The reconstruction of character towns based on the Internet has diversified customer needs. The emergence of the sharing economy has accelerated the change of consumer behavior, forming a model of common use and common payment by consumers. The transition of the market foundation has shifted from the buyer’s personal confrontation with the seller’s group to the confrontation between the buyer’s group and the seller’s group. The relative positions of the supply and demand sides have changed. The transition of the market foundation has promoted the transformation of traditional postal transportation methods

to new logistics methods, the existing logistics nodes expanded [52], and the formation of local logistics centers entered the initial stage of open Internet. As a new form of trade, cross-border e-commerce has transformed the industry of trade-oriented parks from manufacturing demand-oriented to service demand-oriented. With the emergence of new trading channels such as O2O, both supply and demand parties can interact without physical channels. Traditional distribution channels are gradually withdrawn. The innovative combination of products and services in the town has crossed the bottom of the “smile curve” to form “hardware + software + services” mode. The Internet uses big data to mine consumers’ derivative needs in the process of using products, and the industrial foundation realizes the transition of intelligence and digitalization. The character towns have built a comprehensive logistics center and adopted an integrated supply chain management model [53, 54]. As an industrial policy, the preferential policies of character towns will further expand the industrial base. The hinterland of the logistics node broke through the local area and expanded to the outside area. The logistics node has developed from a single, time-based service to a diversified and full-range service and entered the “Internet +” advanced opening stage [55]. “Internet+” combines offline physical trade and online virtual trade to understand customers’ needs and emotions in specific situations through virtual scenes [56]. Online virtual scenes and offline physical products collaborate with each other, breaking the traditional distribution model and product presentation model. The Internet scene is materialized in life so that customers have psychological belonging needs for products and form a stable customer group. Market segmentation is based on a stable customer base, shaping the fixed relationship between products and customers. A comprehensive model of “scene + product” where manufacturers and consumers create value together is formed [57]. The logistics nodes of the old model are gradually shrinking and are being replaced by new

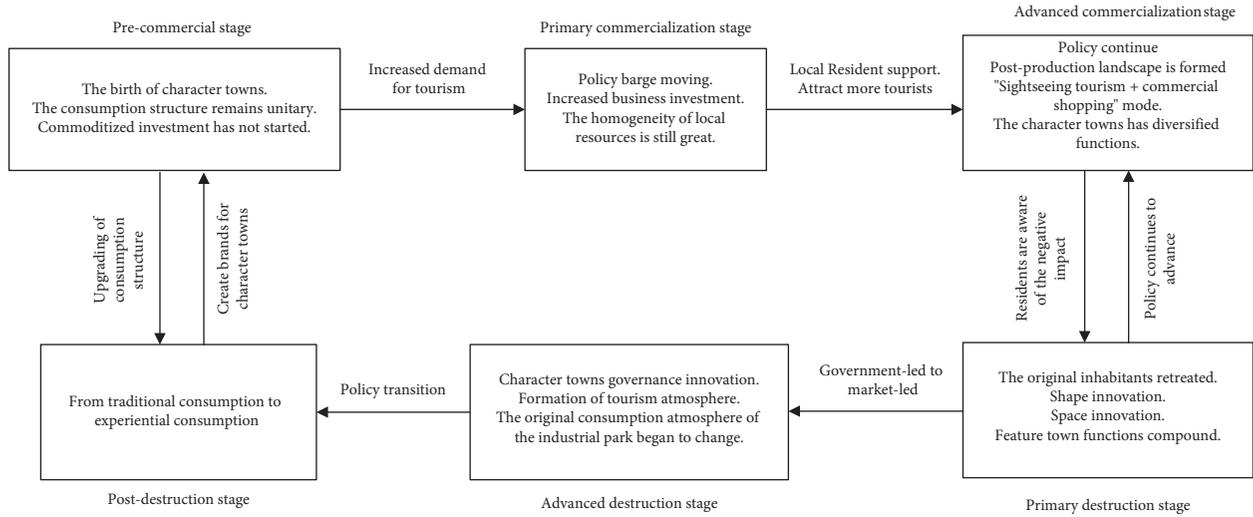


FIGURE 4: The creative destruction process of consumer-oriented park under the concept of character towns.

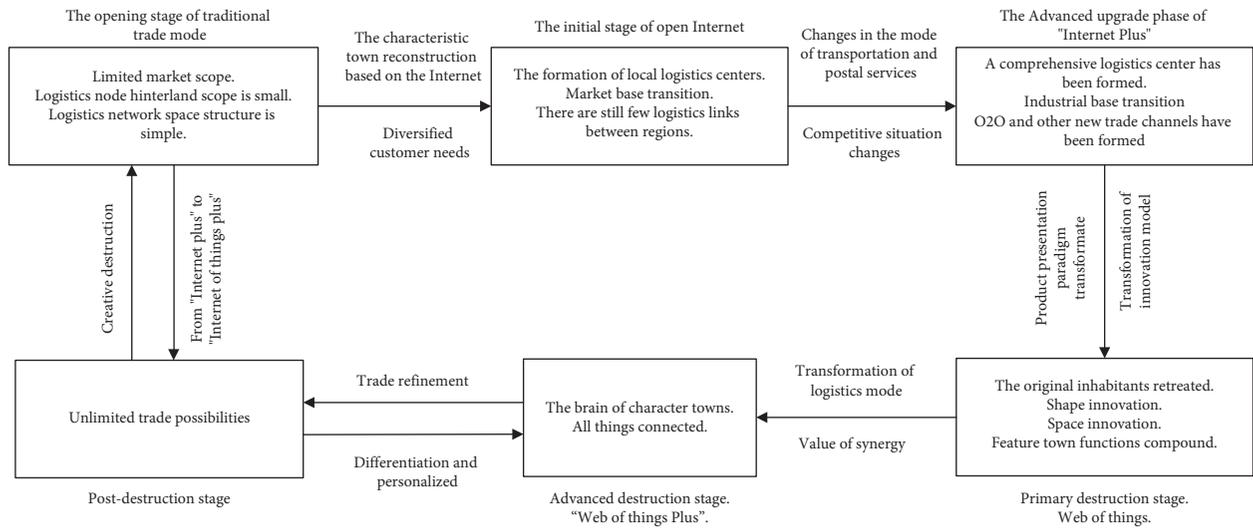


FIGURE 5: The creative destruction process of trade-oriented park under the concept of character towns.

TABLE 1: Summary of creative destruction path of the industrial park under the concept of character towns.

Type of industrial park	Transformation and upgrading path	Critical node of the path	Primary destruction stage	Advanced destruction stage	Self-organizing evolution/replication stage
Product-oriented park	Replacement of industrial structure	Formation of industrial specialization	The division of labor and cooperation among enterprises	Connect to the outside of the character towns	Form a new industry industrial specialization
Consumer-oriented park	Upgrading of consumption structure	Upgrade of commercial model	Spatial form innovation	Change in consumption patterns	Experiential consumption park
Trade-oriented park	Trade control points changed	Replacement of logistics mode	Product plus scene	The brain of character towns	Unlimited trade possibilities

logistics nodes. “Internet +” has realized the decentralization of industrial institutions and digitalization of enterprises, which has spawned the Internet of Things in social life, strengthened the connection between the industrial chain,

and promoted the transformation of warehousing, logistics, and other industries. At this time, the character towns became the control point of the Internet of Things in the trade park and entered the stage of primary destruction to the

park. With the transformation of the logistics model, character towns have become the “town brain” of the trade-oriented park. With the “Internet of Things +,” the “town brain” can connect people, finances, machines, and things in the park at any time and any place. In the park, all kinds of materials and information are connected to each other through the character towns and enter the advanced destruction stage. The differentiated and personalized service enters the postdestruction stage, which makes unlimited trade possible, and the trade-oriented park realizes transformation and upgrading.

The success of the transformation and upgrading of the trade-oriented parks will expand the originally limited market range. With the refined development of trade, it will further activate the “town brain” and enable the refined development of the Internet of Things dominated by it. Use the “town brain” to control living facilities, embed life and ecological elements in the trade-oriented park, and change the trade mode and the lifestyle of it. The creative destruction process of trade-oriented parks is illustrated in Figure 5.

Table 1 summarizes the creative destruction path of different industrial parks under the concept of character towns, and it shows the critical path node of different parks and three steps of destruction stages for each kind of park.

5. Discussion

According to the findings of this paper, different types of parks have different industrial transformation processes. The main path of production parks is industrial structure replacement, and the key node lies in the formation of industrial specialization. The main path of the transformation of consumer parks is the upgrading of consumption structure, and the key node is the upgrading of commercial mode. The key to the transformation of trade parks lies in the change of trade control points and the replacement of logistics mode. Different types of economic activities have different innovation ways, and the transmission path of these innovation ways, namely, the path of creative destruction, is also different, requiring different costs and the support of big data technology and methods.

6. Conclusion

Characteristic towns provide new possibilities for solving the bottlenecks in the transformation and upgrading of traditional industrial parks with the concepts of morphological innovation, spatial innovation, institutional innovation, and governance innovation. The transformation of the park promoted in the platform of a character town is essentially a process of industrial creative destruction and spatial self-organization under the guidance of regional policies. The transformation and upgrading of different types of traditional parks are inseparable from the replacement of the dominant industrial structure and the change of the form and function. However, due to the complexity of the industrial cluster evolution process, the transformation and

upgrade paths and key nodes of different industrial types of parks are different. The parks face different major contradictions and require a different solution. Based on the classification of industrial parks, under the guidance of creative destruction and self-organization theory, this paper has initially formed a theoretical framework for the transformation and upgrading of traditional parks and discussed the transformation path design of product-oriented parks, consumer-oriented parks, and trade-oriented parks with character towns. This paper only discusses the possible path of transformation and upgrading of the park under the concept of character towns from a theoretical level.

The outcomes of this paper provide a theoretical framework for the study of industrial transformation and upgrading of development zones from the new perspective of character towns and provide a new perspective for the study of urban citizens’ health platform. It is also the practice for Schumpeter’s “creative destruction” theory from China. It is worth further studying the following topics: how about the spillover effect of the character towns in the park, whether it has followed the laws of theory in practice, what innovative measures did the successful character towns have at each stage of the park transformation, what creative practices can be copied and promoted, and what is the problem of the failed character towns. In the next step of our work, the story of this paper can be verified by the actual cases of characteristic towns. In the future, the actual data can also be used to verify the occurrence process of creative destruction in each type of park by using the dimensionality reduction techniques of big data to obtain the data principal component supporting the further research.

Data Availability

The data used to support the findings of this study are from the official website of the Ministry of Commerce, PRC, <http://www.mofcom.gov.cn/xglj/kaifaqu.shtml>, the official website of the Ministry of Science and Technology, PRC, <http://www.most.gov.cn/>, the General Administration of Customs of the People’s Republic of China’s official website, <http://www.customs.gov.cn/>, the official website of Ministry of Culture and Tourism, PRC, <https://www.mct.gov.cn/>, and the official website of the Ministry of Industry and Information Technology, PRC, <http://www.miit.gov.cn/>.

Conflicts of Interest

The authors declare that there are no conflicts of interest with respect to the research, authorship, and/or publication of this paper.

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