


# STUDY ON THE PATH OF BUILDING AN INNOVATIVE AND ENTREPRENEURIAL ENVIRONMENT IN XINXIANG NATIONAL INNOVATION DEMONSTRATION ZONE

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## ABSTRACT

This paper takes the construction of innovation and entrepreneurship environment as the research perspective, analyzes in depth the theoretical framework of innovation and entrepreneurship environment, and proposes the specific path of constructing the innovation and entrepreneurship environment in Xinxiang National Independent Innovation Demonstration Zone from eight dimensions, including innovation and entrepreneurship policy environment, industrial environment, talent environment, R&D environment, financial environment, intermediary service environment, market and rule of law environment, and cultural environment, in order to accelerate the construction of Xinxiang National The aim is to accelerate the construction of Xinxiang National Innovation Demonstration Zone and promote the local social and economic development, as well as to set a good example for the development of other high-tech zones.

**Keywords:** National Independent, Innovation Demonstration Zone, Xinxiang City, Innovation and Entrepreneurship Environment

## 1. INTRODUCTION

China's Ministry of Science and Technology has pointed out that the construction of national autonomous innovation demonstration zones will play an important leading, radiating and driving role in further improving the institutional mechanism of science and technology innovation, accelerating the development of strategic emerging industries, promoting innovation-driven development and speeding up the transformation of the economic development mode. In recent years, some scholars have studied the construction of national innovation demonstration

zones in terms of science and technology innovation policy, innovation capacity evaluation, talent policy, economic transformation and optimal allocation of science and technology resources, etc. On March 30, 2016, Chinese Premier Li Keqiang presided over an executive meeting of the State Council and requested that national innovation demonstration zones should focus on building an optimal environment for innovation and entrepreneurship, drive entrepreneurship with innovation, and build a "dual-innovation" business environment. Employment, build "dual innovation" platforms, improve innovation services, and promote the speedy transformation of innovation achievements into real productivity. However, the construction of the innovation and entrepreneurship environment, which is an important way to build a national innovation demonstration zone, has not received the attention it deserves. Therefore, this paper takes the construction of innovation and entrepreneurship environment as a research perspective, constructs the innovation and entrepreneurship environment in Xinxiang National Innovation Demonstration Zone and establishes a performance evaluation mechanism, with a view to speeding up the construction of Xinxiang National Innovation Demonstration Zone and making it a world-class high-tech park, leading and demonstrating to other high-tech zones and regional economic and social development. [Bei and Guowei \(2019\)](#)

## **2. ITHEORETICAL FRAMEWORK FOR THE CONSTRUCTION OF AN INNOVATIVE ENTREPRENEURIAL ENVIRONMENT**

### **2.1. THE CONCEPT AND CHARACTERISTICS OF AN INNOVATIVE ENTREPRENEURIAL ENVIRONMENT**

An innovative and entrepreneurial environment is a potential cultural form that combines formal and informal institutions in a given region as companies or individuals (teams) use innovative elements, develop innovative products, transform their development models and realize their own values. It is only by following the rules that we can achieve twice the result with half the effort. In order to create a regional innovation and entrepreneurship environment, governments should first understand its characteristics: practice has shown that innovation and entrepreneurship environments have three main characteristics: strong cultural roots, social participation and regional plasticity. [Chunsheng \(2015\)](#)

### **2.2. EIGHT KEY ELEMENTS OF INNOVATION AND ENTREPRENEURSHIP**

The eight elements of the innovation and entrepreneurship environment can be summarized as government, industry, universities, research institutions, finance, intermediaries, markets and trade, and media, etc. Through complementarity and interaction, these eight elements achieve mutual benefits and win-win results, and form an innovation and entrepreneurship network, which together constitute the regional innovation and entrepreneurship environment system. The construction of a dual-innovation environment is a complex system involving multiple elements, which can be considered from an ecological perspective. By sorting out the important characteristics of the elements of innovation and entrepreneurship, the dynamics and openness of the interaction between the elements and the environment, the positive mechanism of innovation and entrepreneurship can be explored to achieve the systemic goal of sustainable and high-quality development. The ecological environment of innovation and entrepreneurship can be divided into four aspects: producers, consumers, decomposers, and catalysts. Producers include

universities, research institutions and science and technology innovation enterprises, which are the basic layer of the innovation and entrepreneurship environment. Enterprises are the consumers of the innovation and entrepreneurship environment. The government is the decomposer of the innovation and entrepreneurship environment. Innovation and entrepreneurship competition is the catalyst of the innovation and entrepreneurship environment. Finance, intermediary services, markets, and media are the bridges and links between producers, consumers, decomposers, and catalysts. The government is the main promoter of the innovation and entrepreneurship environment, industry is the direct participant of the innovation and entrepreneurship environment, universities are the main disseminator of innovation knowledge, research institutions are the important practitioners of innovation and entrepreneurship, finance is the important support of innovation and entrepreneurship, intermediaries are the bridge of innovation and entrepreneurship, the trade environment is the lubricant of innovation and entrepreneurship, and the media is the disseminator of innovation and entrepreneurship. The innovation and entrepreneurship ecosystem is not static and isolated, but an open, circular and dynamic system. To create a local innovation environment, we need to incorporate eight major resource elements, including government, industry, academia, research, finance, intermediary, trade, and media, into the local innovation and entrepreneurship service system, and effectively integrate them to support and serve the innovation development and growth of local enterprises. [Han \(2010\)](#)

### **3. ANALYSIS OF COUNTERMEASURES FOR BUILDING THE INNOVATION AND ENTREPRENEURSHIP ENVIRONMENT IN THE NATIONAL INDEPENDENT INNOVATION DEMONSTRATION ZONE IN XINXIANG CITY**

#### **1) Strengthening the policy environment for innovation and entrepreneurship**

The construction of the innovation and entrepreneurship environment involves many parties, especially in the support services and policy implementation of the construction of the innovation and entrepreneurship environment requires the joint participation of multiple departments to implement. At present, Xinxiang City has introduced some policies and measures to support the construction of the National Independent Innovation Demonstration Zone, but many policies cannot be implemented because there are too many departments involved, and the cooperation between multiple departments is not high and they are shirking responsibilities. This is because it is suggested that the implementation opinions on accelerating the construction of the innovation and entrepreneurship environment in the National Independent Innovation Demonstration Zone in Xinxiang City be issued in the name of the municipal government as soon as possible, to determine the overall objectives, tasks and initiatives for the construction of the innovation and entrepreneurship environment, to clarify the responsibilities of all parties, to form a working mechanism for multi-departmental coordination to promote the construction of the innovation and entrepreneurship environment, to establish a scientific and reasonable assessment and evaluation mechanism for the construction of the innovation and entrepreneurship environment, and to enhance the government's precise service capability. [Hongyu \(2017\)](#)

## **2) Strengthening the industrial environment for innovation and entrepreneurship**

- Layout and construction of characteristic towns, forming "one town with one characteristic". The foundation of innovation and entrepreneurship lies in innovation, and the construction of a national innovation demonstration zone requires the introduction and cultivation of a number of excellent and promising innovation projects. The construction of the national innovation demonstration zone requires the introduction and cultivation of a number of excellent and promising innovation projects. Therefore, the independent innovation demonstration zone should actively develop characteristic industries and build characteristic towns, which are beneficial to the construction of an industrial environment for innovation and entrepreneurship. Firstly, we should build "industrial towns" and form "one town with one special industry". The first is to build "industrial towns" and form "one town with one characteristic industry". By taking advantage of the "long board" of industries in the district and town, we can build crowdsourcing spaces, incubators, accelerators, and industrial parks in accordance with the industrial chain, forming a chain of innovation and entrepreneurship incubation for characteristic industries that combines points, lines, and surfaces, and forming a new pattern of industrial economy with "one town with one characteristic industry". Then, we support the projects of special industries to participate in innovation and entrepreneurship competitions, and through the platform of the competitions, we can expand the influence of our projects and obtain investment, so that we can better develop our projects and form a virtuous cycle. Secondly, we will build a "double-innovation town", forming "one town with one double-innovation element". With the main objective of cultivating and strengthening innovation and entrepreneurship investment factors and channels, we plan and build a number of "dual-innovation towns" with high intellectual density, high industrial added value and high innovation and entrepreneurial vitality, relying on the foundation of innovation and entrepreneurship development in some towns and streets in the region. Through the integration of innovative resources such as talents, finance and information, professional clusters of double-innovation input factors can be formed. For example, Internet towns, fund towns, creative towns, financial innovation towns, cultural towns, etc. can be built. The project will then be supported to participate in innovation and entrepreneurship competitions, which will enhance the competitiveness of the project. The third is to build a flexible institutional mechanism. The town will be included in the local reform experimental zone, and various reform initiatives at the district level will be piloted in the town.
- Accelerate the construction of the Crowd Creation Cluster and create "one strategic industry in one area". Firstly, the planning and layout of the crowdsource creation cluster. Focusing on the leading strategic industries in Xinxiang City, relying on industrial space carriers, accelerate the integration and concentration of industrial resources and crowdsourcing resources, focus on the transfer and transformation of scientific and technological achievements in strategic industries, expand the source supply of "double-creation", and make it an important carrier for innovation and entrepreneurial activities in leading strategic industries.

The second is to enhance the function of boosting industrial upgrading. Attract state-owned and private capital and leading enterprises to build professional incubators with strong professionalism and high industrial concentration, accelerate the gathering of R&D and design, business flow, testing and inspection, financing, and guarantee institutions, attract and build industrial technology innovation headquarters, professional testing and inspection centres, etc., to help industries climb up the value chain. Third, enhance the function of industrial entrepreneurial services. Accelerate the construction of high-quality, multi-functional entrepreneurial service institutions. Encourage leading backbone enterprises to set up professional entrepreneurship and innovation incubation service platforms and internal creator spaces, promote reform and innovation in R&D, production, marketing, service, and management, and create branded crowdsourcing spaces with strong radiation capacity.

### **3) Strengthening the environment for innovative and entrepreneurial talents**

Only high-level talents can promote the development of local innovation and entrepreneurship. The first is to innovate the management mechanism and improve the enthusiasm of talents for innovation and entrepreneurship. We will create a demonstration zone for talent reform and take advantage of the national-level Zheng Luo Xin Independent Innovation Demonstration Zone to promote early and pilot implementation of talent policies and provide replicable and replicable experience for innovation and breakthroughs in the institutional mechanism for talent work. Establish a policy of innovation and entrepreneurship for overseas talents, and create a good environment for overseas talents to innovate and start their business. The second is to innovate the talent service model. We will launch the "Internet + Double-creative talents" service model, establish a talent information network service platform that integrates the functions of talent demand customization and policy release, and realize the "online processing" service for the life and work of double-creative talents, and vigorously carry out entrepreneurial service activities, entrepreneurial training, and exchange activities, to build a vibrant innovation and entrepreneurship ecosystem.

### **4) Strengthening the R&D environment for innovation and entrepreneurship**

Research and development capabilities are vital to the development of innovative enterprises. At present, the cooperation between Xinxiang enterprises and universities and research institutes is not close, and although a large number of research platforms have been built in recent years, many cardinal problems remain unsolved, so continue to change the research and development environment.

- **Building a technology innovation centre**

Over the past 20 years, Xinxiang has established hundreds of engineering technology research centres, engineering research centres, enterprise technology centres and many other R&D platforms of technological innovation, which have played a role in promoting the development of innovation and entrepreneurship in Xinxiang. However, there are still few original research and technological achievements in many key areas. At the Science and Technology Conference in 2017, General Secretary Xi Jinping pointed out the need to build technology innovation centres, which are to be guided by the needs of industrial development and to

establish an integrated R&D complex of enterprises, universities, and research institutes to solve major technical problems in the development of enterprises and promote the development of the industry. Xinxiang should focus on building a number of distinctive technological innovation centres for key industries according to the characteristics of industrial organisations and industrial layouts, to enhance the R&D capabilities of enterprises and research institutes of universities.

- **Creating an integrated industrial chain**

It is necessary to actively create a national innovation demonstration zone for science and technology industry. The science and technology industry park can bring related enterprises together to create an integrated industrial chain, connecting the various links in the industrial chain, integrating resources and optimising resource allocation. In this industrial chain, enterprises need to use their own strengths to divide and collaborate, and innovative enterprises act as the glue of the industrial chain, bringing together technology-based SMEs. Through the establishment of an industrial support system and a complete innovation network system, the scientific and technological innovation achievements of the upstream industry can be transferred to the downstream industry in time to continue processing and innovation, thus increasing the transformation rate of scientific and technological achievements. The integration of the industrial chain improves operational efficiency and realises economies of scale.

- **Promote resource sharing**

Individual technology-based SMEs often have very limited innovation resources, which greatly hampers technology innovation activities. Innovative enterprises, on the other hand, have a wide range of innovative resources and can rent out their unused technical equipment or laboratories to SMEs in the park at preferential rates, thus achieving a win-win situation for all. The high concentration of technology and innovation enterprises in the park makes it easier to transfer information between enterprises and facilitate business cooperation and cluster innovation, sharing information, talents, equipment and knowledge and skills, increasing the mobility of resources, and complementing each other's strengths.

- **Building an innovation and entrepreneurship base**

The Xinxiang Municipal Government can establish innovation and entrepreneurship bases in universities, research institutes or areas where science and technology-based SMEs gather to realise the functions of scientific research, education, and production, etc. The bases can be divided into several parts such as scientific research areas, production areas, exhibition areas and comprehensive areas to perform scientific research functions, incubation functions and education and training functions, etc. The innovation and entrepreneurship base focuses on education, project-driven, research experiments, career planning and other activities to cultivate scientific and technological talents who are interested in innovation and entrepreneurship, stimulate research energy, link study, research, and entrepreneurship, and make full use of the resources provided by the base to find ways to apply current research results. At the same time, the innovation and entrepreneurship base can also build a bridge of cooperation between the university and enterprises, break through the traditional single education model, enhance the practicality, more cultivate students' innovation and entrepreneurial awareness and hands-on practical ability, use the advantages of science and technology expertise, play the role of the university talent pool, to provide excellent human resources for science and technology-based small and medium-sized enterprises. It is of great significance to promote the transformation of the regional economy and the restructuring of the economy by establishing an industry-oriented innovation



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and entrepreneurship base based on emerging industries such as computer networks, communications, and electronics, and by training professional talents.

- **Enterprise-led industry-academia-research combination**

The main task of technology-based SMEs is to apply cutting-edge scientific and technological knowledge to technological innovation, while universities and research institutes are mainly responsible for scientific research, dissemination of knowledge and training of scientific and technological talent. The combination of industry, academia and research enables better use of the market mechanism and promotes the integration of science and technology with the economy. The combination of enterprises with universities and research institutes can link the direction of scientific research with the market demand and the direction of productivity development, thus avoiding the disconnection between the scientific research contents of Koran universities and research institutes and the market, which can become "empty pavilions". Thus, the combination of industry-university-research led by enterprises is in line with the market economy and is

Those that are in line with the future direction of development and can drive the process of technological innovation in technology-based SMEs.

In the model of enterprise led industry-university-research combination, enterprises occupy a leading position, and they should give full play to their main role. Compared with large enterprises, it is very difficult for technology-based SMEs to achieve significant innovation on their own, so using the scientific research power of universities and research institutes is an inevitable choice to quickly strengthen their strength. After understanding the market demand, technology-based SMEs should clarify their own development strategies and research and innovation directions, and promptly reflect them to the universities and research institutes with which they have entered into cooperative relationships, seeking technical advice, talent services and R&D support. Universities and research institutes pool their scientific research resources to conduct research projects in the direction of the enterprises' scientific research themes, and cooperate with technology-based SMEs in scientific research, transforming the research results into the enterprises' productivity. [Jian \(2020\)](#)

The cutting-edge academic knowledge and scientific and technological innovation capabilities of universities and research institutes in their specialised fields can be regarded as advantageous resources, and they also have the function of disseminating knowledge and training a large number of scientific and technological talents with scientific research capabilities. For universities and research institutes, technology-based SMEs provide research teams with research projects that are closely integrated with the market, providing researchers with new research directions and ideas, and expanding research resources. For science and technology-based SMEs, enterprises can make use of the strong scientific research resources and excellent scientific talents provided by universities and research institutes to solve the problems in scientific innovation projects, or directly use the research results provided by their researchers and turn them into productivity, develop new product markets, upgrade product structures, and maximise enterprise value. The way in which universities and research institutes provide resources can be flexible and varied, either by importing science and technology to enterprises through projects, or by co-operating with enterprises to set up R&D institutions for mutual benefit, or by enterprises outsourcing services and entrusting universities and research institutes to develop innovative technologies, thus forming a diversified cooperation and deepening the cooperation mode of combining industry, university and research. [Jingjing et al. \(2017\)](#)

## **5) Strengthening the financial environment for innovation and entrepreneurship**

### **1) Accelerate the improvement of the credit guarantee system for technology-based SMEs**

- **Play the role of the government in the credit guarantee system**

Technology-based SMEs are characterised by high investment and high risk. They need to invest large amounts of capital to research advanced science and technology, and when research projects fail, the risk of debt repayment is extremely high. In order to ensure the safety of their own assets, guarantee institutions are usually reluctant to provide credit guarantees for technology-based SMEs. At present, China's credit guarantees for SMEs are policy-based. Strong government support is essential to improve the guarantee system for technology-based SMEs.

On the face of it, the government has added a large sum of money to the budget for the establishment of a guarantee system for technology-based SMEs, but there is no substitute for the role it plays. However, the government is not a "reserve treasury" for guarantee institutions, and financial resources should only play a guiding and incentive role in the credit guarantee system, not a dominant factor, and excessive administrative intervention should be prevented as far as possible. The credit guarantee system for technology-based SMEs should be constantly improved in a market-oriented environment, respecting the laws of the market, and maintaining market order.

- **Establishment of a risk prevention mechanism for guarantee institutions**

A series of measures need to be taken and a sound risk prevention mechanism needs to be put in place to ensure that the guarantee agency can function properly. The main measures include setting up a risk prevention and control department, establishing a risk reserve system and improving the counter-guarantee and re-guarantee mechanisms of the guarantee institutions.

- **Establishing a credit rating system for technology-based SMEs**

Credit rating is an important basis for guarantee institutions to provide guarantees to technology-based SMEs. As technology-based SMEs are characterised by high technological R&D and innovation capabilities and relatively high business risks, it is not possible to accurately assess their creditworthiness if the same credit rating system is used as for traditional SMEs. Therefore, there is a need to establish a credit rating system specifically for technology-based SMEs, through which guarantee institutions, governments and banks can understand the debt servicing status of technology-based SMEs, choose appropriate investment options, and reduce their own investment risks.

- **Improve internal management of guarantee institutions**

With the high risks and fierce competition faced by the guarantee industry, it is inevitable that there will be a mix of fish and fish. Some guarantee agencies neglect their own management, have loopholes in their financial systems, have irregular business processes and are too arbitrary in their approvals, and when their clients need them to repay them, they can only react passively, to the detriment of their clients and banks. The guarantee agencies provide guarantees for government-supported industrial projects and should have stricter requirements for their own business capabilities and management levels. 1. improve internal management



processes; 2. strictly control the approval system; 3. strengthen internal supervision and verification.

- **Establishment of a multi-level guarantee system**

The establishment of a multi-level credit guarantee system for science and technology-based SMEs can be considered as a mutual guarantee agency, taking into account both commercial and policy-based guarantees. A technology-based SME mutual guarantee agency is a voluntary, mutually beneficial, equal, and non-profit-making alliance of technology-based SMEs with strong economic strength, good credit standing, related industries and similar geographic areas, which can provide guarantees to lending enterprises by jointly funding and establishing mutual guarantee agencies. Mutual guarantee institutions enable the risk of guarantee to be transferred and distributed among enterprises. Compared to other enterprises, technology-based SMEs are involved in innovative technologies and research projects. [Zhongwei et al. \(2015\)](#)

Under the mutual guarantee model, both the guarantor and the applicant are technology-based SMEs, so they know each other better and can reduce the cost of information asymmetry. The model is also conducive to strengthening the linkages between technology-based SMEs, as the members of the consortium can monitor each other more effectively than external supervision. The model of a mutual guarantee agency, supplemented by commercial and policy guarantees, can combine the advantages of all three at the same time, reducing the financial burden, the cost of financing for technology-based SMEs and the risk of guarantees. The credit guarantee system has a clear hierarchy, linking government, enterprises, and financial institutions to form a more complete system. [Wei \(2016\)](#)

- **Establishment of financial institutions dedicated to financing technology-based SMEs**

The first is the establishment of science and technology financial institutions: vigorously developing science and technology banks and encouraging the establishment of private science and technology financial institutions. The second is to explore the creation of technology-based SME network financial institutions, which are intended to provide the following financial services for technology-based SMEs, including but not limited to: B2B online lending services and credit guarantee services.

- **Actively raising funds by listing technology-based SMEs**

The first is to give full play to the Main Board, the SME Board, and the Growth Enterprise Market; the second is to improve the bond market; and the third is to improve the ability of enterprises to raise capital by going public: constantly improving their innovation capacity, standardising their internal management systems, and improving their profitability. [Shaojuan and Yuechen \(2020\)](#)

## **6) Strengthening the environment for intermediary services for innovation and entrepreneurship**

The innovation and entrepreneurship intermediary service environment is a bridge and link to several other sub-environments in the innovation and entrepreneurship environment. The improvement of the intermediary service environment is conducive to the interoperability and complementarity of the various elements of the innovation and entrepreneurship environment, and enhances the efficiency of the construction of the innovation and entrepreneurship environment. Firstly, professional service agencies such as technology transfer services, management consulting services, intellectual property agency services,

asset appraisal services, science and technology credit guarantee services, results promotion services, and innovation and entrepreneurship carrier services should be established and improved to enhance the capacity and level of innovation and entrepreneurship services. Secondly, the Xinxiang Municipal Government should lower the threshold for high-level technical talents to set up intermediary service enterprises, support and encourage high-level technical talents to engage in intermediary service industry and enhance the level of intermediary services. Third, the training of various types of intermediary service talents should be increased to enhance their professionalism. Fourth, focus on the role of various innovation and entrepreneurship carriers to enhance the business level of the carriers' management and practitioners, so as to improve the level of service to the enterprises in incubation and better promote their development. Fifth, we should support the formation of local associations for the establishment of intermediary service industries to strengthen the internal management and discipline of the industry and optimise the internal environment. [Lening and Luoxin \(2019\)](#)

## **7) Strengthening the market and rule of law environment for innovation and entrepreneurship**

### **1) Transformation of government economic management functions**

With the rapid development of the economy, industrial upgrading, economic restructuring, and technological innovation are the current direction and trend of economic development. The Xinxiang Municipal Government should simplify and decentralise its economic construction, play a regulatory role in the operation of the market, improve the market regulatory system, and maintain market order and a good market environment. The government should give full play to its economic management functions, eliminate local protectionism, and create a vibrant market economy environment.

### **2) Lower market entry barriers**

In order to prohibit monopoly rent-seeking, firstly, the government should step up its efforts to combat corruption and not accept the transfer of undue benefits from enterprises to it. Secondly, the government and law enforcement agencies must prohibit technology-based SMEs from entering into agreements with monopoly clauses in their economic activities, as stipulated in the Anti-Monopoly Law. By prohibiting monopolistic rent-seeking practices, the government can lower the threshold for technology-based SMEs to enter the market, stimulate innovation and entrepreneurship, and promote the prosperous development of more technology-based SMEs. The government should create a "green channel" for technology-based SMEs and relax access policies to increase the incentive for entrepreneurs.

### **3) Improve relevant legislation**

Although some laws and regulations have been enacted, they are very simple and do not have a definitive and operational character, making it difficult for law enforcement agencies to identify and punish acts that harm entrepreneurs. In addition to this, another major reason why existing laws are difficult to enforce is that local governments and local law enforcement agencies cannot remain outside of local interests, making it difficult to ensure their objectivity.

The Xinxiang government can try to formulate special laws and regulations to promote the construction of an innovative and entrepreneurial environment in the National Innovation Demonstration Zone, improve the legal provisions related to it and increase the penalties. At the same time, training for entrepreneurs on legal

awareness should be increased to enhance their awareness of their rights and how to defend their rights when their interests are damaged. In addition, we should promote the formation of a good social atmosphere to protect the legitimate rights and interests of entrepreneurs in accordance with the law.

### **8) Strengthening the cultural environment for innovation and entrepreneurship**

- 1)** The government should actively foster the spirit of entrepreneurship and a culture of creators. Actively promote the courage to challenge and tolerate. The media should strengthen the publicity and guidance of public opinion on innovation and entrepreneurship, select advanced models of innovation and entrepreneurship, and report on advanced stories of innovation and entrepreneurship. The media should strengthen the propaganda and guidance of public opinion on innovation and entrepreneurship, select advanced models of innovation and entrepreneurship, and report on advanced deeds of innovation and entrepreneurship, so that mass entrepreneurship and innovation will take root in the hearts of the people.
- 2)** Establish a sound "fault-tolerance mechanism". To create an atmosphere of tolerance for failure, guide the public to respect entrepreneurs and correctly understand failure in entrepreneurship, and create an atmosphere of entrepreneurship and innovation that allows failure and encourages "rising again". Establish a failure-tolerant mechanism, improve the social insurance system, establish a business failure compensation fund and a pool of risk funds for venture capital, strengthen support for failed entrepreneurs, and attract more foreign entrepreneurs to develop in the Xinxiang National Innovation Demonstration Zone.
- 3)** Establish a local evaluation index for dual innovation. Using the Global Innovation Index, the China Innovation Index, the Zhongguancun Index, the Zhangjiang Index, and the Qingdao Lanbei Index as references, we will build a comprehensive index evaluation system for innovation and entrepreneurship that is adapted to local characteristics, and regularly publish a local dual-innovation index. By studying the changes in the index, it is possible to grasp the input and output situation of local dual-innovation work, observe the flow of dual-innovation factors, analyse the factors influencing the changes in dual-innovation output, and provide a basis for government decision-making.
- 4)** Create a dual-innovation brand. Integrate the resources for dual-innovation in the autonomous innovation demonstration zone, increase publicity efforts, and launch dual-innovation activities under a unified name such as innovation and entrepreneurship competition, investment roadshow, entrepreneurship salon, entrepreneurship lecture hall, entrepreneurship training camp, etc. to attract outstanding projects to land in the Xinxiang National Independent Innovation Demonstration Zone. The role of traditional media such as radio, television, newspapers and magazines and new media such as websites, forums, WeChat, and microblogs is brought into play to increase news publicity and guide public opinion on the Xinxiang National Innovation Demonstration Zone in multiple forms and

channels, so as to establish a multi-dimensional and comprehensive brand of dual innovation with the characteristics of the Xinxiang National Innovation Demonstration Zone.

#### **4. CONCLUDING REMARKS**

The new innovation and entrepreneurship environment of Xinxiang National Innovation Demonstration Zone is built from eight dimensions, including policy environment, industrial environment, talent environment, R&D environment, financial environment, intermediary service environment, market and rule of law environment, and cultural environment, which is conducive to accelerating the construction of Xinxiang National Innovation Demonstration Zone, promoting local social and economic development, and serving as a good example for other high-tech zones. At the same time, it is conducive to building a national regional innovation highland, not only to have a "name" and become a national regional science and technology innovation centre, but also to have a "reality" and enter the ranks of national strategic science and technology forces. Innovation system, through the government, industry, academia, research, and use, around the service of high-quality development of Xinxiang City, focusing on the transformation and upgrading of traditional industries, the cultivation and growth of emerging industries, the future industry layout of the key technology issues, to create the industrialization of scientific research results, engineering innovation chain.

#### **CONFLICT OF INTERESTS**

None.

#### **ACKNOWLEDGMENTS**

None.

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