International Business Research; Vol. 15, No. 7; 2022
ISSN 1913-9004 E-ISSN 1913-9012
Published by Canadian Center of Science and Education

A Review of the Impact of Network Embeddedness Selection on Firm Performance and Its Application

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Received: May 21, 2022 Accepted: June 21, 2022 Online Published: June 21, 2022

doi:10.5539/ibr.v15n7p79 URL: https://doi.org/10.5539/ibr.v15n7p79

Abstract

Enterprise network is a key element to the continuous growth of enterprises, and embeddedness is an important tool to study enterprise network. In the context of today's digital economy, the relevant theory that embeddedness affects enterprise performance is rapidly innovating and expanding. Moreover, its application involves the entire industrial network and enterprise network composed of government, industry and enterprises, which is widely used. At the same time, with the further maturity of internet technology and the further study of enterprise network theory, the research on embeddedness can provide theoretical basis and methodological guidance for decision-making on how to embed network to acquire core competitiveness.

Keywords: embedded selection, enterprise performance review, application

Embeddedness is an important tool to study enterprise network. The concept of "embeddedness" was first proposed by Polanyi (1944) in his book "The Great Transformation". At first he believed that the economy was an institutional process "embedded" in economic and non-economic systems, and the non-market economy was "embedded" in the In the social and cultural structure, the market economy is "disembeded" and only affected by price, but Polanyi later revised his conclusion, arguing that the market economy is the same as the non-market economy, both are embedded in the in social and cultural structures. By 1985, Granovetter (1985) redefined embeddedness and pushed embeddedness research to a new stage in his book Economic Action and Social Structure: The Problem of Embeddedness. Their behavior is constrained by social relations, and it is a serious misunderstanding to analyze them as independent individuals." He believes that economic activities are an interactive process within social networks, and sociological theories have "over-socialization" in analyzing economic behavior, while in new In classical economics, there is "insufficient socialization", and embeddedness theory makes sociology, economics and organization theory interpenetrate. The concept of "embeddedness" has attracted much attention from scholars, and more and more scholars have studied in network theory of alliances (Gulati, 1998), economic sociology (Lie, 1997), organization and strategy (Andrews & Konke, 1999), network and organizations (Nohria & Eccles, 1992), social capital (Sandefur & Lauxnann, 1998; Portes, 1998), market channels (Moorman, Deshpande & Zaltrman, 1992), organizational adaptation (Uzzi, 1996; Baum & Oliver, 1992), entrepreneurship (Jack & Anderson, 2002) and other fields have conducted theoretical and empirical research on embeddedness.Based on the research of Granovetter, Uzizi and others, many scholars have carried out theoretical and empirical research on embeddedness. Embeddedness is becoming one of the hot spots and difficulties in organizational research. The problem of organizational economic performance has always been the core and difficult point of economics and management research. What are the main factors and internal mechanisms that determine organizational economic performance? Different schools of economics and management have different understandings and viewpoints. From the perspective of economics, the classical economic sociology school (main representatives: Marx, Durkheim and Weber) established its own analytical framework system based on the interrelationship between economy and society; the modern economic sociology school (main representative: Parsons) and Smelser established their own analytical framework system based on the economic sociology of "function-structural"ism. In addition, based on the embeddedness of institutions, especially the embeddedness of the property rights system, the new institutional economics deeply analyzes their impact on the economic performance of organizations, and believes that the political form is also a factor that cannot be ignored that affects the property rights system and thus the performance of organizations. From the

perspective of management, embeddedness has a profound impact on research in the fields of organizational strategic management, organizational relationship management, and organizational structure design. For example, the conclusions of many strategic management-related literature studies show that organizational embeddedness can bring many heterogeneous resources to organizations. , and these heterogeneous resources will affect organizational economic performance and organizational core competitiveness. Both the organization's "internally owned resources and capabilities" and the organization's "embedded network resources and capabilities that are difficult to imitate by competitors" will both have an impact on the organization's competitive advantage and ultimately organizational performance, and so on. On the basis of the above research, with the further maturity of Internet technology and the further study of enterprise network theory, the research on embeddedness can provide theoretical basis and method guidance for enterprises how to embed network to obtain core competitiveness.

1. Research on the Impact of Relational Embedding on Firm Performance

In foreign countries, relationship embeddedness will affect corporate performance, and most scholars agree very much. For example, they believe that both weak ties and strong ties are conducive to improving corporate performance, but at the same time, it should be noted that the mechanisms of their roles are indeed different. The degree to which weak ties affect firm performance is closely related to the market conditions in which the firm is located. For example, a general competitive market is conducive to weak ties to improve firm performance, while in an uncertain market, there needs to be a higher level of relationship between the subjects of the ties. Collaboration and trust, otherwise it is difficult to improve corporate performance; strong relationships are conducive to improving corporate performance, but the degree of embedded relationships needs to be moderate, otherwise it will negatively affect corporate performance. The representative conclusion that relational embedding affects performance is proposed by Uzzi(1997) in his paper "Social structure and computation in interfirm net-work: The paradox of embeddedness" in 1997, Uzzi believed that this effect is both positive and negative effects. Larson et al. (1995) believe that the embedded relationship composed of joint problem-solving arrangements, meticulous information transfer, and trust has both positive and negative effects on firm performance, because on the one hand, embeddedness will create economic opportunities (such opportunities). Difficult to replicate via markets, contracts, etc.), but on the other hand it also has a negative effect on performance in terms of allocative efficiency. In China, Pan Wen'an (2021) studied the relationship between the "strength relationship" of supply chain enterprises, knowledge integration ability and knowledge transfer efficiency, and believed that the relationship strength of supply chain enterprises only had a positive impact on the external integration ability and collaborative knowledge transfer of the supply chain. , while there is no such effect on internal integration capability and innovative knowledge, and the direct effect of relationship strength on supply chain collaborative knowledge transfer is lower than its indirect effect. Therefore, strengthening the knowledge integration capacity building of supply chain enterprises is the core element for supply chain enterprises to use partnership to promote their own collaborative knowledge transfer efficiency. There are certain deviations in the view of means. Zhu Xiumei(2021) and others took 322 start-ups established within 42 months as the research object, and studied the relationship between relationship characteristics, resource acquisition and start-up performance. The results show that relationship strength and relationship trust are positively affecting operation. Resource acquisition and knowledge resources; network size positively affects knowledge resource acquisition, knowledge resource acquisition positively affects growth performance and new enterprise financial performance; knowledge resources positively affects operational resource acquisition and has a positive relationship between new enterprise performance and operational resource acquisition. positive regulation. However, network scale does not significantly affect the acquisition of operational resources, and operational resources do not significantly affect the growth performance of start-ups. Pan Songting (2011) constructed a conceptual model of the impact of network relationship strength on technological innovation using exploitative learning and exploratory learning as mediating variables. Empirical research shows that improving the strength of innovation network relationships is conducive to improving incremental innovation, but not conducive to breakthrough innovation. , where network relationship strength positively affects incremental innovation through exploitative learning, and negatively affects breakthrough innovation through exploratory learning. Yang Jun(2009). and others believe that although most researchers realize the conclusion that "the more good entrepreneurs are in using social network, the more likely they will have higher new enterprise performance gains", but they ignore the impact of relationship resources. In response to this problem, Yang Jun etal. used resource acquisition behavior as the mediating variable to study the relationship between entrepreneurial relationship strength, relationship resources and new enterprise performance. The more abundant entrepreneurial resources are integrated, the more conducive to the improvement of new enterprise performance. Xu Guannan(2021) and others conducted a research on the internal mechanism of relational embeddedness affecting

the exploratory learning of enterprises and their technological innovation performance through comparative analysis and internal analysis of five Chinese manufacturing enterprises, and found common solutions in the global manufacturing network. Problems, information sharing and inter-firm trust can improve the technological innovation performance of enterprises by promoting the utilization and acquisition of new knowledge. Yang Jun (2009) and other studies found that in the process of starting a business, the more the entrepreneur uses relationship resources, the more entrepreneurial resources are obtained, and the faster the performance of new enterprises is improved. Important variables for performance differences. Even if the entrepreneur is a user of high relationship strength, it is difficult to meet the resource demand in the early stage of the business. Xie Hongming(2022) and others studied the interaction mechanism of management innovation performance and network relationship embeddedness and the mediating role of knowledge inflow by taking private science and technology enterprises in the Pearl River Delta region of my country as samples. The results show that network relationship embedding significantly positively affects knowledge inflow and management innovation performance; knowledge inflow plays a complete mediating role between management innovation performance and network relationship embedding; it is also found that in smaller firms, network relationship embedding There is no promotion effect on knowledge inflow, and in larger enterprises, the increase of R&D investment ratio does not significantly improve the performance of management innovation. Hu Leilei (2012) studied the relationship between network relationship strength and cluster innovation efficiency, and believed that knowledge flow among enterprises in industrial clusters is an important force to promote cluster development and innovation, and found that different network relationship strengths have different ways to improve cluster innovation efficiency.

2. Research on the Impact of Structural Embeddedness on Firm Performance

In foreign countries, there are three representative theories to study enterprise performance from the perspective of structural embeddedness, namely network closure theory, structural hole theory and "inverted U-shaped model" theory. In 1988, Coleman(1988) put forward the network closure theory in his paper "Social Capital in the Creation of Human Capital", arguing that the tighter the degree of network connection, the better the cooperation and trust between partners; in 1992, Burt(1992).published his academic book “Structuralholes: The social structure of computation” in Harvard University Press. In this book, he proposed the structural hole theory, which considered that under the condition that the enterprise and the network are not closely related, it can be exploited. The way in which structural holes exchange non-redundant information brings intermediary advantages, thereby improving enterprise efficiency. In 1998, Burt supplemented his own theory of structural holes, arguing that network closure theory and structural holes are not in conflict, and structural hole theory does not deny the licensing and collective supervision functions produced by dense relationships, and the resulting cooperation and Trust, just underscores the waste of organizational resources that redundant information can lead to. In 1997, Uzzi(1997) published his paper “Social structure and Competition in Interfirm Network: The Paradox of Embeddedness” in the《Administrative Science Quarterly》 journal, in which he proposed his "inverted-U model" theory.the theory believes that excessive embeddedness will limit the decision-making ability and decision-making vision of actors in society and enterprises, and have a negative impact on organizational performance. Therefore, there is an optimal embeddedness level in the organizational embedded network, and its main influencing factors include reputation, integrity , the number of transactions between the two parties, and so on. In China, Dou Hongbin et al.(2022)used the enterprise network theory as the basis to conduct empirical research using regression model through the data obtained from the questionnaire survey of 113 enterprises in Xi'an optoelectronics industry cluster. The results show that enterprises should pay attention to the network structure, strengthen the acquisition of explicit knowledge resources and tacit knowledge resources, and make full use of the network, a platform rich in knowledge, technology and resources, to improve the growth performance of enterprises. Peng Jianping(2011) found that the social network location of employees has a significant impact on employee relationship performance; network structure characteristics have different effects on employee relationship performance in state-owned enterprises and foreign-funded enterprises; the overall structural characteristics of the social network of R&D employees in Chinese and foreign enterprises exist certain difference. This finding provides theoretical support for companies to improve employee relationship performance by optimizing social networks, and enriches the practice and application of embeddedness theory in Chinese companies. Zhu Yali (2020) and others took 199 enterprises in the domestic communication power industry as samples, and found that network density has a significant positive impact on the transfer willingness of enterprises on both sides of the transfer. There is a significant full mediation effect when transferring the effect. Wang Xianshu and Hu Lingli(2010) selected the environment, which is one of the most important contingency variables in strategic management, as the third variable in their research, and used the survey data from Chinese enterprises to verify the environment based on the method of multiple regression analysis. The moderating effect

of uncertainty on the relationship between an enterprise's external network and internationalization performance is expected to provide some inspiration for the formulation and implementation of China's internationalized enterprise network strategy. Fan Qunlin (2010)and others took the furniture manufacturing cluster of Xindu in Chengdu as an example, and studied the mechanism of the structural embeddedness of the innovation network of traditional industrial clusters affecting the innovation performance of cluster enterprises from the three dimensions of intermediary centrality, node degree and structural hole characteristics. They believe that the network between centrality and node degree of enterprises positively affect the innovation performance of enterprises, while the characteristics of structural holes positively affect the innovation performance of enterprises, which is not significant. Wang Yulu(2019) and others took 123 multinational companies' subsidiaries in China as samples and found that: (1) exploratory learning has a positive moderating effect on the relationship between online learning effect and network density; (2) exploratory learning has a positive effect on online learning The relationship between effect and relationship embedding strength has a negative moderating effect; (3) Utilizing learning has a positive moderating effect on the relationship between network learning effect and group centrality; (4) Utilizing learning has a positive moderating effect on the relationship between online learning effect and network density has a positive regulatory effect.

3. Research on the Impact of Relational and Structural Embeddedness on Firm Performance

With the deepening of embeddedness research, many researchers began to study embeddedness from the two-dimensional perspective of relational and structural embeddedness. These studies not only expanded the research horizon, but also verified the original research conclusions. Liao Liefa and Wang Kanliang (2009)studied the mechanism of embeddedness and interpersonal information symmetry affecting social network characteristics and organizational learning performance in the process of learning network formation, and found that when information is asymmetric, information asymmetry affects organizational learning performance. In addition, the high-embedded network has a path dependence problem, and the learning degree of inhibitory knowledge is higher than that of the low-embedded network, and the final result is that the low-embedded network has a higher learning performance than the high-embedded network. When the information is symmetric, high-embedded networks are beneficial to exploitative learning, and low-embedded networks are beneficial to exploratory learning. Liu Ruosi (2018)believes that the traditional view of resources attributes the difference in enterprise performance to the difference in resources possessed by the enterprise, which brings competitive advantages to the enterprise, but this analysis ignores the connection between the enterprise and other external entities. It can indeed make up for this analysis defect. He believes that the network can provide enterprises with various intangible and tangible resource benefits, and enterprise behaviors are embedded in the social network. Therefore, researchers can also explain the behavior and performance of enterprises by studying the network relationships embedded in the enterprises. At the same time, he believes that network embeddedness has five dimensions, and on this basis, he studies the impact of network embeddedness on business performance. Yang Jiaoping (2022) and others believe that the strong embeddedness within the cluster has the dual effect of hindering and promoting technological innovation, because on the one hand, the strong embeddedness within the cluster will reduce the breadth of knowledge and hinder technological innovation, and on the other hand, it will increase the depth of knowledge and promote technological innovation. Innovation. Ren Shenggang (2021) studied the mechanism of the impact of enterprise network embeddedness on enterprise innovation performance, and believed that enterprise network embeddedness can improve enterprise innovation performance; network capability has a positive adjustment on the relationship between network location, relationship quality, relationship strength and innovation performance in network embedding. However, it has no moderating effect on the relationship between network density, network size and innovation performance; network density has a negative moderating effect on the relationship between location centrality, relationship strength and innovation performance. Zhang Fanghua (2022) conducted an empirical study on 270 local enterprises in the Yangtze River Delta region of my country, and found that both structural and relational embedding of enterprises can effectively improve the acquisition effect of external knowledge, thereby significantly improving the innovation performance of enterprises. From the above analysis, it can be seen that both economics and management have used the embedded method to conduct fruitful research on the social economic system and its operation performance determination law, and in terms of its research trend, it is not only the market, price, supply and demand and individual profit. Factors such as rationality determine the characteristics of economic operation. With the rapid development of economy, society and science and technology, non-market factors such as kinship obligations, social obligations and institutional innovation embedded in market transaction activities have become more and more influential on organizational performance. Therefore, studying organizational performance from the perspective of the mutual embeddedness of economic system and social system, its research situation is closer to the reality of economic society, so it can better reveal the essential laws of

economic and social development and the solution mechanism of internal problems. Under the background of this large economic and social background and the rapid innovation and expansion of performance theory research, the research on organizational embedded performance theory is the hot and difficult point of current theoretical research and practical exploration.

4. The Application of Network Embedding Selection on Enterprise Performance in Strategic Management of Emerging Industries

The research on the impact of network embeddedness selection on enterprise performance has a very wide range of applications, involving the entire industrial network composed of government, industry, and enterprises. Next, we analyze the application of embeddedness impacting enterprise performance research in strategic management of emerging industries.The method used here is a macro-analysis method and deductive analysis method based on research, and the relevant conclusions are as follows:

4.1 Whether It Is a Government Department or an Emerging Industry Enterprise, It must Be Ideologically Aware of the Positive Effect of Network Embeddedness on Promoting the Development of Emerging Industries, Correct Role Positioning, and Correctly Handle the Relevant Relationship after Embedding.

Since embeddedness has a positive impact on industrial development, both government departments and emerging industry enterprises must be ideologically aware of the positive effect embeddedness has on promoting the development of emerging industries. Enterprises realize complementary resources and capabilities, resulting in network synergy; it is conducive to the strengthening and expansion of mutual relations, reducing transaction costs of enterprises; it is conducive to the dissemination and diffusion of knowledge and technology among enterprises, and promoting enterprise innovation, etc. At the same time, when enterprises in emerging industries deal with the government, they must make it clear that the government is only the provider of public or semi-public goods in the development of emerging industries, not the leader of development. As a government department, on the one hand, we must clearly recognize that emerging industries are, after all, new enterprises. Most of them are weak enterprises at the beginning of their development, and have no competitive advantage. Support and cultivation are important conditions for their rapid development. But at the same time, it must be recognized that although embeddedness has a positive impact on the development of emerging industries, there are differences in the mechanisms by which embeddedness affects the development of emerging industries. Therefore, under the social and economic background where the global competition is intensifying and the trend of enterprise networking is becoming more and more obvious, enterprises must correctly choose the embedding method suitable for their own development mode according to their own objective situation in the enterprise network.

4.2 We Must Pay Attention to the Regional Enterprise Network Characteristics and Industrial Characteristics as the Enterprise Network Embedding Port, Take the Road of Emerging Industries with Regional Characteristics, and Avoid Three Misunderstandings.

4.2.1 It Is Believed that the Development of Emerging Industries Requires the Complete Abandonment of Traditional Industries, "Re-Drumming" and "Reopening", Resulting in Mistakes in Strategic Positioning, which Affects the Promotion Effect of Network Embeddedness on the Development of Emerging Industries

The development of any emerging industry is based on the technological innovation or cyclical fission of traditional industries, and the two are not contradictory. Therefore, enterprises must correct their strategic positioning, enhance the promotion effect of network embeddedness on the development of emerging industries, ensure that the core role of high-tech in the upgrading of traditional industries is fully utilized, and comprehensively promote the coordinated development of the two.

4.2.2 Local Governments and Enterprises Ignore the Regional Economic Characteristics and Industrial Characteristics, which Result in Strategic Positioning Errors, Excessive Duplication of Construction of a Few Projects, and Vicious Competition within the Entire Emerging Industry Network Enterprises

The research conclusions have confirmed that the strategic positioning and performance of network enterprises are deeply affected by the characteristics of the enterprise network. Therefore, when local governments and enterprises choose the development direction of emerging industries, they must combine the characteristics of local industrial networks and regional resource endowments to highlight key points. Distinctive characteristics, do not blindly duplicate development, resulting in excessive competition, must face up to the regional economic characteristics and industrial characteristics, scientific positioning, and take the road of characteristic industry development.

4.2.3 Use the Idea of Developing Traditional Industries to Develop Emerging Industries, Ignoring the New

Characteristics and New Situations of Emerging Industries.

The barriers to early embedding of emerging industries are different from those after industrial development, such as: (1) the market cycle of proprietary technologies is short; (2) the industrial chain is incomplete, and there are no ready-made distribution channels and raw material suppliers; (3) The experience curve is not obvious, and there is a lack of product and technical standards; (4) Risks increase the opportunity cost of enterprises to invest funds. Therefore, the development of emerging industries requires enterprises to transform from past technology imitation innovation to current independent innovation, and strive to form their own core technologies and lead their own target markets. Emerging enterprises must abandon the traditional low-cost industrial strategic positioning and transform to the innovative industrial strategic positioning, and constantly improve the competitiveness of emerging enterprises.

At the same time, the establishment and development of new ventures requires a lot of resource investment in the early stage, and the Internet can provide them with a good resource acquisition channel, including the key resources required by the enterprise. In addition, new ventures have few resources, and their organizational forms, strategic decision-making capabilities, operating models, and business relationships with the outside world have not been effectively formed. Most of the entrepreneurial relationship networks of enterprises are not strictly screened. Wait. Therefore, since many new start-ups have not yet experienced the test of the market, coupled with the non-rigidity of their internal decision-making, they must place the development of their external relations at an important strategic level and constantly embed themselves in the external social network system.

4.3 When Embedding Enterprise Networks, It Is Necessary to Clarify the Uncertainty of the Development of Emerging Industries, Dynamically Adjust Strategic Positioning, and Ensure the Healthy Development of Emerging Industries

The development of emerging industries has obvious uncertainties, and its development process contains certain industrial risks. These uncertainties and industrial risks are manifested in three aspects: (1) Uncertainty of the technological development route. Because the emerging industry is in its infancy, there is a shortage of relevant professionals, the company's production technology is immature, and there is no successful experience in product structure and operation methods to learn from. The organizational structure and development strategy also need to be further optimized and improved. (2) Uncertainty of future market demand. For the products or services provided by emerging industries, the buyers are basically first-time buyers, coupled with the short product cycle, many customers wait and see, thus increasing the market risk of enterprises. At the same time, enterprises in emerging industries do not have a ready-made business model, and there is uncertainty about what business model to adopt in the future. (3) Uncertainty of enterprise development strategy. Because in emerging industries, the status of industry competitors, supply networks, potential entrants and sales networks have not been formed, it is difficult for enterprises to understand the current competitors, and it is difficult to predict customer consumption preferences, industry sales share and target market distribution, etc. Therefore, the company's product market strategy, cost strategy and service strategy are uncertain.

5. Conclusion

The research on the impact of embeddedness on enterprise performance is very rich in content. The above is only a review of the research conclusions of some literatures. These literatures can not only provide reference for theoretical research, but also provide methodological guidance for enterprise practice. In terms of applications in emerging industries, embeddedness has a positive impact on the development of emerging industries. Therefore, whether enterprises are embedded based on network structure or relationship embeddedness, they have obvious performance growth effects on the development of emerging industries. But at the same time, the mechanism of network embeddedness affecting the development of emerging industries is different. The embeddedness of the network structure will have both direct and indirect effects on the development of emerging industries. This indirect effect is regulated by strategic positioning. Correspondingly, the embeddedness of network relationship only has a direct impact on the development of emerging industries, and there is no indirect impact on the development of emerging industries through the adjustment of corporate strategic positioning. Network embeddedness affects the development of emerging industries by adjusting the relationship between industrial strategic positioning and the development of emerging industries. It reflects the current strategic uncertainty, technological uncertainty and uncertainty of the structural changes of the industry itself in my country's emerging industries. The strategic positioning of emerging industry development plays an intermediary role in the relationship between network embeddedness and industrial development. Regardless of technology embeddedness or relationship embeddedness, different strategic positioning will affect the path of emerging

enterprises to obtain heterogeneous useful resources, thereby directly affecting the development of emerging industries. grow healthy. At the same time, innovation strategy has a mediating effect on the relationship between enterprise network embeddedness (including technology embeddedness and relationship embeddedness) and industrial development, but market differentiation strategy only has a mediating effect on relationship embeddedness and industry development.

To sum up, based on the specific historical background of the strategic transformation of Chinese enterprises, this paper reveals the internal mechanism of the development of emerging industries to a certain extent from the perspective of network embeddedness and industrial strategic positioning. Its research can not only promote strategic management theory And the development of enterprise network embedded theory, but also can provide feasible countermeasures and suggestions for the development of emerging industries.

6. Acknowledgements

This article is supported by the Natural Science Foundation of Hunan Province Project “Hengyang High-tech Value Network Blockchain Embedding, Collaborative Innovation Model and Collaborative Innovation Performance Research - Taking the New Generation of Information Technology Enterprises as an Example” (2021JJ50072), the Scientific Research Key of Hunan Provincial Department of Education Project “Dual circulation model, value network embedding and high-quality development research —Taking Hunan advanced manufacturing enterprises as an example”(21A0428), Hunan innovative province construction project “A research on audience needs, innovation paths and coping strategies of science popularization bases in the era of smart media —Taking 91 popular science bases in Hunan Province as an example” (2021ZK4229) ,2022 Guangxi University Young and Middle-aged Project “High-quality Research on Guangxi Port Intelligent Logistics under the Background of “Dual Circulation” - Based on the Perspective of Network Embeddedness and Strategic Positioning” (2022KY0971)and Hengyang Science and Technology Plan Fund Project “Research on High-Quality Development of Nonferrous Metals and New Alloy Industry Chains in Hengyang City under the Background of Digital Economy —Based on the Perspective of Network Embeddedness and Strategic Positioning” (Heng Ke Zi [2021] No. 21) and Hengyang Science and Technology Planning Fund Project “Research on the Strategic Layout of Hengyang City’s 14th Five-Year Plan for Science and Technology Development and Its Implementation Countermeasures” (Heng Ke Zi [2020] No.20).

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