

Research on the Synergistic Mechanism of the Innovation Ecosystem of Strategic Emerging Industries

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Abstract: The development of an innovation ecosystem is a key element of the current core innovation enterprise in competing with upstream suppliers, downstream suppliers, and peers. By constructing a good product service and using the interdependence under various related supporting subjects, a good cooperation relationship can be formed, which is the key element to achieve collaborative innovation in strategic emerging industries. In the analysis of this paper, the synergistic mechanism of the innovation ecosystem of strategic emerging industries is elaborated's Innovation Ecosystem.

Keywords: Ecosystem; Strategic Emerging Industries; Synergistic Mechanism

Introduction

Strategic emerging industry is an emerging industry that has a significant and long-term impact on the country and the region, and can promote the economic development of the country and the region. In the actual strategic development of enterprises, the innovation development in the field of emerging industries is not an independent innovation behavior, but needs to realize the innovation of the ecosystem in a certain scope, and strengthen the correlation between enterprises and other elements so that they can survive in the competition. The current market competition pressure is getting bigger and bigger, enterprises need to coordinate upstream and downstream within the industry in order to get good development, sustainable development and construction can be achieved.

1. The value of building innovation ecosystems in strategic emerging industries

The core of the innovation ecosystem is the synergistic development of products and services with upstream, downstream, and peer competitors, similar to the mutually beneficial symbiotic relationship between organisms and the environment. The core innovation of such an innovation ecosystem is the use of complementary technologies between the enterprise and other external enterprises to provide a more complete product and service in a common consumer-oriented way, so as to achieve a centralized solution to the problem. The lack of a complete complementary body, or the existence of a lack of technology, can lead to an innovation ecosystem that does not operate stably^[1].

Strategic emerging industries are the deep integration of emerging technologies and emerging industries. In strategic emerging industries, technology is usually stuck in the slow evolution stage. so the synergy of innovation in terms of product, process and market is a key element to drive the market development. In order to achieve such a synergistic innovation mechanism, enterprises should avoid the situation of being limited to a few technologies or fields, but need to analyze the future development from a macro perspective, thus allowing them to open up the upstream and downstream industrial chain.

2. Governance Causes of Innovation Ecosystems in Strategic Emerging Industries

2.1 Dependent asymmetry of innovation ecosystem

The innovation ecosystem proposed in the current development of strategic emerging industries is often a technological interaction between enterprises within the partnership, but is influenced by the scarcity of each other's technological resources, making there a more obvious problem of non-substitutability. In the process of cooperation, it is always necessary to safeguard the innovation ecosystem and actively use a strong interdependence in order to achieve technological complementarity and satisfaction. However, in the market some resources with strong technical and overall strength are very scarce, which can lead to a significant asymmetric relationship of dependence^[2].

2.2 Innovative ecosystem technology supporting specialization

In the current development of core innovation companies, for the design among open product platforms, certain product interfaces and knowledge have to be obtained in external supporting companies. First, this will lead to the development stage of the technology, there will be an asset aspect of the exclusive characteristics. Secondly, it is also correspondingly locked into the innovation ecology of the core enterprise, which in turn faces the future development and content of the core enterprise. The development of interface technology in peripheral enterprises requires the active acquisition of some special assets and equipment, and is influenced by the development of strategic emerging industries to ensure that the developed and produced equipment have strong special characteristics, which once formed will lead to the inability to use in a timely manner. The strong specialization of the technology of the innovative ecosystem will lead to low bargaining power in the actual negotiations of the core enterprises, which will lead to certain impact on the future work.

2.3 Prevent the cost loss caused by technology spillover

In the ecosystem of strategic emerging industries, the standard of technology sharing is reasonably determined. The intangibility of knowledge and the spillover problems make it impossible to control the core technologies that the participating staff can possess. However, the emergence of the innovation ecosystem of some staff makes the development of technology packages to be free of some technical knowledge content, so it will be easy to appear the mode of compliance to this situation, so that the use of technology patents between enterprises are unable to pay the cost of resources and resource costs.

3. Governance mechanism of the innovation ecosystem of strategic emerging industries

3.1 Consultation and negotiation mechanism

In the current process of building out an innovation ecosystem, there are often obvious conflicts in various aspects. Therefore, in order to ensure the stable development of the innovation ecosystem, it is necessary to ensure the coordination of the interests of all parties involved, so as to maintain a balanced development effect. In the current development of the enterprise, the coordination of interests is basically handled by means of administrative orders, and in the innovation ecosystem, the partners represent different interests, so it is necessary to pay attention to the resolution of problems in the coordination process^[3].

For example, the processing of intellectual property rights is an important basis for enterprises to enter into the innovation of strategic emerging industries, and the high degree of technology integration in strategic emerging industries requires that all intellectual property rights owned by a single enterprise may originate from a technology chain, so more enterprises should be involved to develop a perfect technology standard. The intellectual property rights of various enterprises need to maintain a close connection, and the way of deciding and knowing about intellectual property rights is to build a good bargaining power mainly in the development of strategic emerging industries.

Secondly, Strategic emerging industries need growth engines with distinctive features, complementary strengths and a reasonable structure, and a development model that is integrated, clustered and ecological. Enterprises should always maintain good economic characteristics in the Internet era, coupled with the choice of new materials, Internet of vehicles, electronic information, life and health, intelligent equipment and other emerging products, can well reach the prescribed user scale. Also in the use of products, for the emergence of convenient consumer can create value, we should carry out scientific and reasonable analysis and treatment. And to build the network processing link, further enhance the upstream and downstream ecological links, with the modernization of the industrial chain, leading to support the development of high quality, sustainable.

3.2 Reputation mechanism

Reputation is an important component of private information in the system of innovation ecosystems, and can reflect commitment to another partner about whom there is no private information. In the development of cooperation activities, commitment is valued, and a company with a high trust value can observe the reputation record in a timely manner, even if the two parties have not cooperated before, but the influence of such a reputation can directly understand the value of the company's reputation, as well as a clear picture of the potential benefits that can be obtained from future cooperation. In addition, if there is a breach of trust in the development of the innovation ecosystem, the reputation of the company will be significantly affected and therefore the cooperation will be negatively impacted. Therefore, the design of the reputation mechanism is a good constraint for the construction of the ecosystem of strategic emerging industries.

3.3 Trust mechanism

In the system, members interact with each other, there is always a motivation for companies to acquire the intellectual property rights of other companies, which cannot be known in time, so the formal contracting coordination role, under the trend of opportunistic behavior, faces limitations. In order to solve such problems, it is possible to reduce some opportunistic behaviors and operations under starvation in cooperation activities by self-implementation of the agreed FionnVision. A higher level of trust is what allows companies to be highly recognized by employees in the link of the innovation ecosystem, and at the same time the way companies are organized under the future development of the innovation ecosystem accordingly, and furthermore play a role of good supervision and management of partners. In the current development of strategic emerging industries, it is often necessary to comprehensively enhance the trust value in terms of enterprise organization, while also correspondingly guaranteeing the use of the actual judgment of the current market development, strengthening the fine adjustment of this trust mechanism, and maximizing the actual effect of the work carried out. On the other hand, it is also necessary to actively realize the comprehensive sharing in terms of technical knowledge and strengthen the consultation mechanism in all aspects of the innovation ecosystem, so as to meet people's working ability in terms of information batch and not to have some information processing problems.

Conclusion

In summary, in the ecosystem construction of strategic emerging industries, it is necessary to actively use various mechanisms, so as to promote the development of enterprises in the upstream and downstream, to form the effect of synergistic development, to avoid being affected by the risks of the external market and some operational problems, and at the same time to strengthen the association and help between different enterprises, so that achieves market-oriented and stable development.

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