

Research on Strategic Decision Making of Science and Technology Talents Based on Influence, Effectiveness and Efficiency

— A Theoretical Analysis Framework

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ABSTRACT

The support of science and technology talents strategy is the key factors which decide whether a national and regional development strategy can be realized smoothly. This paper adopts literature research and case analysis method to construct the theoretical analysis framework that the support of science and technology talents strategy with the example of Hubei Province scientific and technological personnel support strategic decision, starting from the impact, effectiveness and efficiency of three positioning points, rethinking from top to bottom and examine technical personnel support strategic decision effectiveness and implementation.

Keywords: *Science and Technology Talent, Talent Support System, Strategic Decision.*

1. INTRODUCTION

With the development of economic globalization, scientific and technological progress will play an increasingly important role for the future world, national and regional economic development. Scientific and technological progress will lead the future of the world and economy, and all of this cannot be separated from the contribution of scientific and technological personnel^[1]. The research on talent support embodies a systematic idea. Scholars have defined the talent support system. As a social system, it has diversity, hierarchy, dynamics and integrity.

(1) Research on the structure of talent support system. Fang Jianzhong and Zhou Jianbo (2006) proposed to build a support system for innovative talents in Jiangsu Province from the aspects of talent introduction, talent training, talent incentives, and talent collaborative innovation systems^[2]. Wang tongxun and Li weiping (2012) discussed theoretically that the talent strategy system includes the complex of talent structure system, talent quantity system, talent quality

system, talent management system and talent management mechanism system^[3].

(2) Research on the support mechanism of scientific and technological talents. In the survey of high-level scientific and technological talents in private enterprises in Zhejiang province, Sun wei (2013) proposed to strengthen the concept support, education support, incentive mechanism construction, industry-university-research integration support mechanism construction, science and technology finance and intellectual property system support, etc.^[4]. Li hua and Wang wenkui (2008), taking major projects in Shanxi province as the research object, proposed that talent support should focus on the construction of five systems including talent introduction, training, use, retention and talent reserve^[5].

In a word, at present, the research on the strategy of supporting scientific and technological talents mostly stays on the structure of the system. As for how to make strategic decisions and give play to the supporting role of scientific and technological talents, it needs to be further explored by the academic circle. In this way, this paper attempts to

construct the theoretical framework of the strategic decision of supporting scientific and technological talents, and analyzes the realization of the strategy of supporting scientific and technological talents.

2. THE METHODS OF SCIENTIFIC AND TECHNOLOGICAL TALENTS SUPPORTING STRATEGIC DECISION

As well as known, organizations have been making decisions about talents, and this decision is often driven by one of four methods. These methods are also applicable to the decision of science and technology talent support strategies. The first is compliance, which prescribes the rules, regulations or standards that must be fit. This approach is powerful because it is often directly linked to reducing the risk of penalties, fines or litigation. The second method is style and fashion. Some evidence suggests that the models followed by human resource management innovation are closer to fashion than rational strategic logic. For example, because of the popular Jack Welch autobiography in 2001, many organizations used the performance assessment tool of the mandatory distribution method at the same time. In fact, many companies adopted this assessment method, but their performance decreased or even went bankrupt.

The third method is equality. Many organizations think that all scientific and technological talents are important, and it is unfair to treat them differently. Therefore, the management measures adopted by the organization must be fair and can be applied equally to everyone. However, a large number of facts have proven that providing information with a logical basis for differentiated pricing can increase awareness of fairness. Fairness and equality are not the same, but the key to achieving these two goals at the same time is a logical basis for the differentiation of effective communication.

The last method is strategic logic, which is the decision framework that this article will advocate and explain. Scientific and technological talent resources include not only the talents known or owned by the organization, but also all potential and valuable scientific and technological talents. Including not only the ability of scientific and technological

talents, but also the motivation and opportunities of scientific and technological talents, how to use the decision-making framework to enhance the contribution of scientific and technological talents, and how to promote the interaction of scientific and technological talents in formal and informal organizational design and structure approach, and then focus on improving the strategic decision-making process regarding talents in science and technology and how they are organized and interacted.

3. THEORETICAL ANALYSIS FRAMEWORK OF STRATEGIC DECISION SUPPORTED BY SCIENTIFIC AND TECHNOLOGICAL TALENTS

The decision framework for the support strategy of science and technology talents not only clarifies the logical connection between the decision of science and technology talents and the success of the support strategy, but also organizes them so that they can be consistently applied to all strategies and business operations. Taking Hubei Province in China as an example, how to realize the strategic decision of scientific and technological talents support, to introduce this theoretical framework of strategic decision-making for talents support. There are three positioning points: impact, effectiveness, and efficiency. As shown in Figure 1: A strategic decision support framework for scientific and technological talents.

3.1 Impact Pivot: Where Science and Technology Talents and Organizations Have the Most Impact on Sustainable Strategic Success

The impact is determined by the relationship between the organization and the improvement of scientific and technological talent performance and the sustainable strategy. The fulcrum is where differences in performance most affect success. You need to dig deep into the organization's level strategy to get to the nuts and bolts of where and how the organization plans to compete, as well as the "supporting elements" that will be critical to achieving a competitive position. These insights identify the areas of organizational

and scientific talent that will have the greatest impact on the success of the strategy.

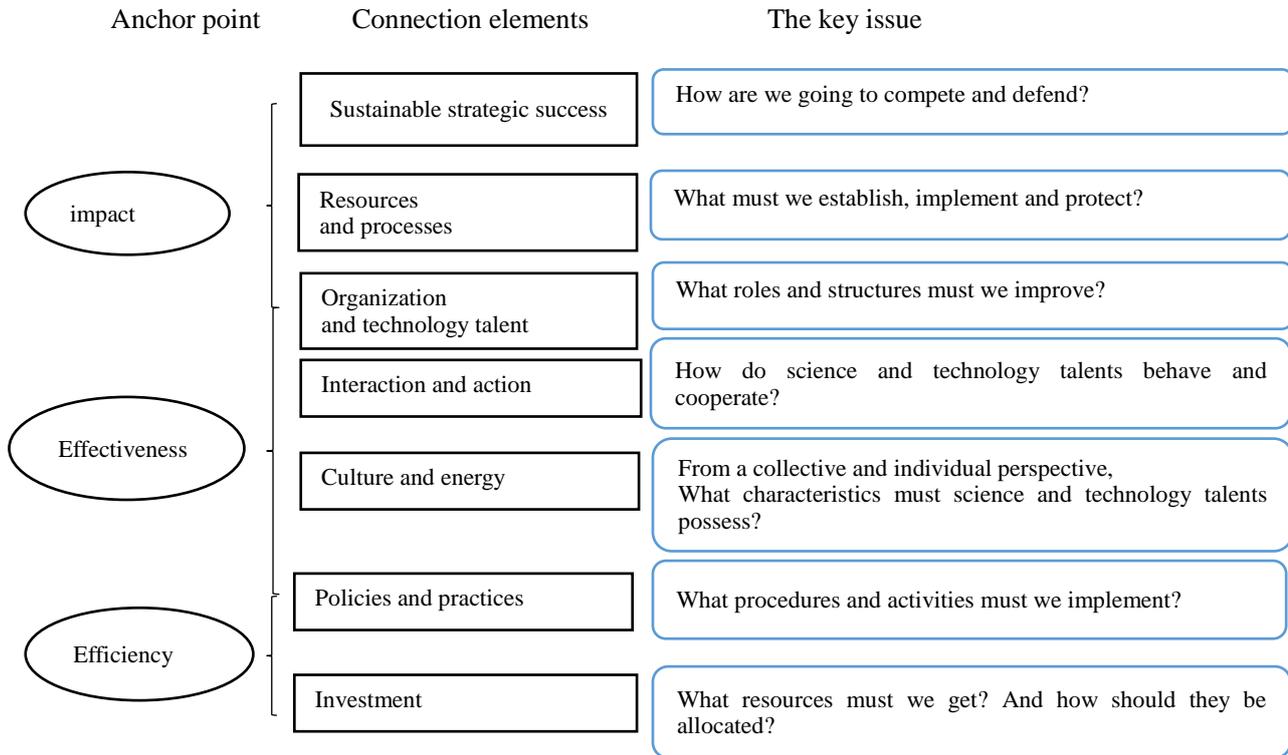


Figure 1: A Strategic Decision Support Framework for Technological Talents: Seven Key Issues

3.1.1 Sustainable strategic success

Sustainable strategic success is the first connecting element, focusing on how the organization plans to compete and defend its position. Through the connection elements, to delve into organizational strategy, to define specific competition or strategic background, organization under the background of a plan to get the status, the main competitive differentiation factor as well as where the organization will be located in. How will the organization grow, how he will have enough uniqueness and defensive in order to maintain a position?

3.1.2 Resources and processes

Resources and processes describe achieving and defending strategic positions or missions, An organization must succeed in something. One is "resources" that must be

acquired, deployed, utilized, and protected. The second is process, the transformation that the organization must make to create its unique value. The next challenge for impact analysis is to find the fulcrum in the process – and where improvements will have the greatest impact on the strategic goals of Hubei's leapfrog development. Found in the process of protection is a method of constraint factors, in Hubei province for example, there are many factors to limit its strategic objectives, bear the brunt of the restricting factors are all levels of government administration and economic function reform lags behind, the government's economic behavior restricts the behavior of the market economy, bloated, bloated, management is out of control, economic power and influence decision-making errors become the main obstacle of the development of market economy construction in Hubei, so, in Hubei province for storm, cure simplify the administrative examination and approval procedure, sets up the service concept, standardize the government behavior, especially in the government

management of high-tech industries, It is the first task to measure the efficiency of the government to serve the high-tech industry efficiently and quickly.

3.1.3 Organization and technology talents

The organizational and technical talent connection element focuses on what work must be done and how it should be organized. For Hubei province scientific and technological personnel are divided into different categories, a leading science and technology talent, the key scientific and technological personnel and the general scientific and technological personnel, there is no doubt that the leading scientific and technological personnel as industry leaders, has always been the goal of competing for, in order to introduce the leading scientific and technological personnel, Hubei province also have issued the talent policy, give a one-time talent award 1 million, also has set up a research platform for the talents for the superior director. What we are looking for here are talent and organizational areas where alignment and performance improvement will have a significant impact on the strategic fulcrum of processes and resources, and identifying key resources and processes allows us to now see the talent issue more clearly.

3.2 Pivot of Effectiveness: Where policies and practices most affect the performance of organizations and technology talents

Effectiveness defines the relationship between the performance of scientific and technological talent and the organization and the combination of policies and practices. Human resources procedures and processes affect the energy and actions of individuals and groups, and effectiveness is independent of impact.

Effectiveness is important, and organizations that ignore impact in favor of effectiveness tend to introduce well-intentioned human resource processes that have a significant impact on the pool of low-impact science and technology talent, But judging how processes (such as staffing, training, and rewards) really affect the business or competitive position of actions and interactions (such as

performance ratings, competencies, teamwork, and employee retention) is often challenging. For Hubei province, how to build a space and platform suitable for scientific and technological talents, and formulate corresponding management system and policies for scientific and technological talents are worthy of in-depth consideration.

At present, in the use of scientific and technological talents, Hubei Province adopts a combination of project introduction and job introduction, and provides policies to support it in the management positions above the middle level of the unit. In terms of treatment, it not only implements economic treatment but also effectively guarantees living treatment, and resolves household registration and spouses. Work and children's enrollment to school, etc., one-stop service, priority in the application of awards and awards, and provide tracking service mechanism, dedicated person responsible for daily contact and service methods, and fully solve the worries of science and technology talents, so that they can work without care.

3.2.1 Interaction and action

Interaction and action describe how the behavior and cooperation of scientific and technological talents have an impact on key roles: science and technology talents team composition and structure, the challenge for the scientific and technological personnel and how to ensure the whole team showed a coordinated response to distinguish between the effectiveness of the scientific and technological personnel behavior and inefficiencies, all help us to distinguish the role of science and technology talents facing challenges and reveals the key actions and interactions in the Nick of time.

Scientific and technological talents in Hubei Province generally carry out scientific and technological research and innovation research in the form of project teams. Even if one million bonuses are awarded to leading scientific and technological individuals at one time, it will not erase the outstanding achievements of scientific and technological talents, which cannot be separated from the team and the support of the project, with common goals and dreams,

continuous enthusiasm and interest, diligently strive for cooperation and finally achieve scientific and technological breakthroughs and reach innovative research.

3.2.2 Culture and energy

Culture and energy describe the collective and personal characteristics that science and technology talents must possess to perform key actions and interactions. This element translates actions and interactions into elements like skills, knowledge, and attitudes (how science and technology talents give them). As far as Hubei Province is concerned, publicity and consensus on culture and energy exist in what kind of shared values, beliefs and norms are promoted in Hubei Province. Wuhan refined the Wuhan spirit in 2011: dare to be the first and pursue excellence, then the "Hubei spirit" should include the following: pragmatic, truth-seeking, trustworthy, open and tolerant, and dare to be the first. There is no doubt that culture is directly related to the most critical actions and interactions. At the critical moment when the judgment of scientific and technological talents will have a greater impact, it is difficult for a first-level organization to directly intervene in supervision or guidance, but the culture deeply recognized by scientific and technological talents will help them make good choices. Hubei Province should design a good process and operation mode, and in the spirit and culture of Hubei, it should balance the capabilities, opportunities and motivations of scientific and technological talents ^[6].

3.2.3 Policies and practices

Policies and practices describe procedures and activities that will bring critical energy and culture. Generally speaking, such practices need to operate independently, but they are more important to operate as a combination. This issue can be reached through the following considerations: In the technology talent market, how will our approach distinguish us from our competitors? How will our approach work together? What are the conditions for success?

For Hubei Province, the policies and treatment of introducing scientific and technological talents are similar to

those of other provinces and cities, whether it is the "Hundred Talents Plan", "Chimes Award", "Urban Partner" or "Yellow Crane Talent Plan" of Hubei Province. It starts with the introduction, use, encouragement and cultivation of talents. The specific policies are not very different. However, the speed and quality of service and management can highlight the spirit of Hubei. For example, Hubei Province is well demonstrated in the measures for exit and entry. The sincerity and service concept of introducing scientific and technological talents: localize the high-level talent recognition standards and expand the policy coverage; shorten the time limit for foreign high-level talents to apply for residence certificates, from 15 working days to 7 working days, etc. ^[7].

3.3 Efficiency Pivot: Where Investment Will Most Impact Policy and Practice Combinations

Efficiency defines the relationship between the combination of policies and practices and the level of investment, and determines where specific resource investments can best strengthen this combination. For Hubei Province, what unique resources can be provided by the strategic positioning of "building a fulcrum and walking in the forefront" that can be used by scientific and technological talent management, and thinking about which part of the scientific and technological talent management practice portfolio is invested more than required by industry regulations and more resources can generate unique value.

Although Hubei Province, as a first-level government organization, must set a budget for its scientific and technological talent practices, efficiency in talent science focuses on a wider range of resources and optimization of investment based on fulcrum. Although efficiency focuses on the relationship between investment policies and practices, there are still some specific questions about the investment itself, including: what resources are available in Hubei Province (funds, policies, public opinion, platforms, ideas, participants' time, Public concern)? How to choose between these resources? How much to invest and where? Only by in-depth and continuous reflection on the above issues, can we ensure that Hubei Province can give full play

to the role of scientific and technological personnel and improve the effectiveness and profitability of investment in scientific and technological personnel.

4. CONCLUSION

The strategic decision of Hubei Province's science and technology talent support shows that investing in science and technology talents and organizations that affect a series of fulcrum points is the key to obtaining the greatest overall impact. As a basic concept of talent science, it is focused on the talent and organizational decisions that can most influence sustainable strategic success. At any stage of the sequence, if there is a non-critical connection, the impact of the investment will tend to zero. The principle of connected fulfillment points to the importance of looking beyond specific procedures or processes, and beyond investing to see if it works. To achieve the strategic support role of scientific and technological talents in Hubei Province, it should be committed to making a good impact (such as innovation, learning, motivation, loyalty and professionalism) among one or more scientific and technological talent groups. Through a series of fulcrum functions, the top-down rethinking and review of the effectiveness and implementation of strategic decision-making in Hubei's scientific and technological talents.

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