

# Research on Effective Development and Management Strategy Innovation of Strategic Talent Resources in Technology Enterprises

**Zhou Hongjin**

Ningbo Fangtai Kitchenware Co., Ltd., Zhejiang, Ningbo, 315000, China  
zhou\_hongjin@foxmail.com

**Abstract:** With the rapid development of technology and the intensification of market competition, the development of technology enterprises increasingly relies on strategic talent resources. Therefore, this article studies the innovation of effective development and management strategies for strategic talent resources in technology enterprises. Firstly, it should elaborate on its connotation and characteristics, then, conduct a thorough analysis of the current situation and existing problems related to its development and management. Based on this analysis, innovative management strategies are proposed. These strategies aim to provide a theoretical foundation and practical reference for technology enterprises to effectively develop and manage their strategic talent resources in the fiercely competitive market, thereby enhancing their core competitiveness.

**Keywords:** Technology related enterprises; Strategic talents; Talent resources; Effective development; Management strategy

## 1. Introduction

In today's era of rapid technological development, technology enterprises play a crucial role in promoting economic growth and innovative development. Strategic talent resources are the core driving force for the development of technology enterprises. The strategic talent resources of technology enterprises have unique connotations and characteristics. They not only possess profound professional knowledge and skills, but also have various abilities such as innovative thinking and keen market insight. However, current technology companies face many challenges in the development and management of strategic talent resources [1]. For example, the increasingly fierce competition for talent has led to the problem of talent loss, and traditional management models are unable to meet the demand for new talents. Therefore, it is of great practical significance to conduct in-depth research on the effective development of strategic talent resources and innovative management strategies in technology enterprises.

## 2. The connotation and characteristics of strategic talent resources in technology enterprises

The strategic talent resources of technology enterprises are those who have a decisive impact on the long-term development and strategic goals of the enterprise, possess profound professional knowledge and skills, and are the core force in multiple key areas of the enterprise. Their decisions and actions directly affect the competitiveness and market position of the enterprise. These talents have high professionalism and can solve complex technical problems in specific fields to promote innovation; Strong innovation ability enables individuals to constantly propose new ideas and solutions for product and service improvement [2]. They possess strategic thinking, not only focusing on the present but also anticipating industry trends and formulating long-term development strategies. With leadership skills, they are able to lead teams efficiently in completing complex tasks and achieving corporate goals. High market sensitivity allows them to quickly identify market opportunities and threats, and develop appropriate response strategies. Additionally, they possess cross-cultural communication skills, enabling effective communication and collaboration in multicultural environments, thereby promoting the international development of enterprises in the context of globalization.

### **3. Analysis of the Current Situation and Problems in the Development and Management of Strategic Talent Resources in Technology Enterprises**

In today's rapidly changing technological era, as an important force driving social progress and economic development, the development and management of strategic talent resources in technology enterprises are particularly important and complex. Faced with rapidly changing market environments and increasingly fierce competition, technology companies must continuously optimize their talent strategies to ensure sustained innovation capabilities and competitive advantages. The following is an in-depth analysis of the current status and existing problems of strategic talent resource development and management in technology enterprises.

#### **3.1 Present situation**

At present, many technology companies have deeply recognized the crucial role of strategic talent resources in their development, and have therefore invested a large amount of resources in talent cultivation. These enterprises not only value the improvement of employees' professional skills, but also pay attention to the cultivation of their comprehensive qualities. By establishing internal training courses, regularly holding seminars and workshops, and encouraging employees to participate in external professional training, technology companies strive to build a comprehensive and multi-level learning system. Some large technology companies even establish cooperative relationships with well-known universities and research institutions at home and abroad to jointly carry out joint training programs, aiming to cultivate high-end talents with forward-looking vision and innovative ability.

In terms of talent management, technology companies have generally established relatively complete performance evaluation systems, aiming to measure employees' job performance through scientific and fair evaluation mechanisms. These systems typically include multiple dimensions such as regular performance evaluations, 360 degree feedback, and project outcome presentations to ensure the comprehensiveness and accuracy of evaluations. Based on the evaluation results [3], companies will provide corresponding rewards to outstanding employees, such as bonuses, promotion opportunities, equity incentives, etc., in order to motivate employees to continue contributing value. At the same time, technology companies also focus on creating a positive corporate culture, enhancing employees' sense of belonging and loyalty through team building activities, employee care programs, and other means, in order to attract and retain talent

#### **3.2 Problem analysis**

Although technology companies have made significant progress in strategic talent resource development and management, they still face a series of challenges and problems:

(1) Talent loss caused by intense competition for talent

With the booming development of the technology industry, the demand for strategic talents has shown explosive growth, which not only drives innovation and progress in the industry, but also makes the competition in the talent market exceptionally fierce and white hot. In this context, technology companies often face strong competitive pressure from peers and other diversified industries, which is not only reflected in products and services, but also in the competition for top talent [4].

Competitors may offer more competitive compensation and benefits, superior working environments, or more attractive career development paths and promotion opportunities in order to attract and retain strategic talents. These tempting conditions often become key factors leading to the loss of strategic talent in companies [5]. For example, some emerging technology startups, although not large in scale, can successfully attract many experienced technical talents to join with their flexible operating models, innovative corporate culture, and generous equity incentive mechanisms. These talents are often lost from existing large technology companies. For large technology companies, this not only means bearing the high cost of talent training that has already been invested, but also facing the risk of core technology and trade secrets being leaked, which poses a serious threat to the company's market competitiveness and the implementation of long-term development strategies.

(2) Traditional management models are unable to meet the demand for new talents

Strategic talents in technology companies usually have high autonomy, innovation, and a strong pursuit of new knowledge and technologies. However, many companies still use traditional management models that emphasize hierarchical and command based management, focusing on

controlling and supervising employees. This management model conflicts greatly with the characteristics and needs of strategic talents. Innovative talents prefer to work in a relaxed, free, and innovative environment, and they need more autonomy to unleash their creativity. The cumbersome processes and strict hierarchical system under traditional management models may limit their innovative thinking and work efficiency, thereby affecting their job satisfaction and loyalty.

### (3) Lack of effective talent identification and selection mechanism

Accurately identifying and selecting strategic talents is an important part of enterprise talent resource development and management. However, many technology companies currently have shortcomings in this area. On the one hand, some companies place too much emphasis on superficial factors such as education and work experience, while neglecting the actual abilities and potential of talents. For example, some companies set excessively high educational thresholds during recruitment, which may result in missing out on talented individuals who possess innovative abilities and potential despite having a lower level of education. On the other hand, enterprises lack a comprehensive and scientific talent evaluation system, making it difficult to accurately assess the overall quality of talents. This may result in the selected talents of the enterprise not achieving the expected performance level in actual work, wasting the enterprise's resources and affecting the development speed of the enterprise.

### (4) The talent cultivation system is not perfect

Although enterprises realize the importance of talent cultivation, in practical operation, there are often many problems in the talent cultivation system. Firstly, the training content may be disconnected from the actual needs of the enterprise. When formulating training plans, enterprises do not fully consider their strategic goals and business needs, resulting in talents who have improved in certain aspects but lack the ability to solve practical problems in the enterprise. Secondly, the cultivation method is single. Most enterprises mainly rely on internal training courses for talent development, lacking diversified training methods such as practical project exercises and mentor guidance. This single training method is difficult to meet the growth needs of different types of talents and limits their comprehensive development.

Although technology enterprises have made certain progress in the development and management of strategic talent resources, they still face many urgent problems that need to be solved. Enterprises need to constantly explore and innovate to adapt to the constantly changing market environment and talent demand.

## **4. Innovation in Strategic Talent Resource Management Strategies for Technology Enterprises**

### ***4.1 Building Competitive Talent Attraction Strategies***

In today's fiercely competitive technology market, building a competitive talent attraction strategy is crucial for the sustained development and innovation of enterprises. The following strategies aim to enhance the attractiveness of talent by clarifying and disseminating the core values and culture of the enterprise, as well as building a diversified compensation and benefits system.

#### (1) Clarify and disseminate the core values and culture of the enterprise

To develop competitive talent attraction strategies for technology companies, it is first necessary to clarify the company's core values. These values are the foundation of corporate culture and can reflect the company's pursuit of innovation, social responsibility, customer experience concerns, and more. For example, some companies may emphasize continuous innovation and strive to promote the development of cutting-edge technologies in the industry; Some companies may focus on social responsibility and strive to use technology to solve social problems; Some companies may emphasize customer experience and strive to provide the ultimate service and products.

Corporate culture is the concrete manifestation of values in operations and employee behavior, and it depicts the future blueprint of the enterprise. In order to attract and retain talent, companies need to actively promote their culture. This can be achieved through various channels, such as social media platforms, corporate websites, offline events, etc.

Social media platforms: Utilize social media platforms such as LinkedIn to post information on technological breakthroughs, innovation project progress, employee benefits, etc., showcasing the company's innovation capabilities and employee care.

Enterprise website: Carefully design the enterprise website, set up dedicated sections to clarify the company's values and vision, and present them in various forms such as images, videos, articles, etc.

Offline activities: Participate in industry exhibitions, technical seminars, university job fairs, and other offline events to showcase the company's innovative culture and talent concepts to the outside world through unique booth designs, expert speeches, and value introductions.

In addition to showcasing the company's values and vision, it is also important to focus on spreading employee stories and growth opportunities. This can be achieved by sharing successful cases, career development paths, training opportunities, and other information of employees, allowing them to feel the care and support of the company, while also attracting more ambitious individuals to join.

#### (2) Build a diversified salary and welfare system

Creating a diversified compensation and benefits system is crucial for attracting talent. Firstly, the basic salary should have market competitiveness. Enterprises need to conduct research on salaries in the same industry, region, and position. The basic salary for strategic talent positions should be at the mid to high end level, such as senior algorithm engineers in large technology companies in first tier cities earning a monthly salary of 30000 to 50000 yuan. Performance bonuses are linked to work results. Enterprises should establish a reasonable performance evaluation system and clarify KPIs. For example, KPIs for software development teams include project delivery, number of vulnerabilities, user satisfaction, etc. Outstanding performers can receive several months of salary bonuses to motivate employees and create a competitive atmosphere. Secondly, stock options are of great significance in attracting strategic talents, especially for technology startups and rapidly developing enterprises. Employees can purchase stocks at specific prices in the future, and the company can make substantial profits when it develops well, such as the listing of core technology talent options for startups worth millions of dollars. The design of an option plan should consider multiple factors, with the target audience being key talents. The number of options granted should be determined based on the importance of talents, enterprise valuation, and development expectations. For example, the chief scientist can receive more options, and the exercise conditions include service years and performance goals, in order to bind the long-term interests of employees and the enterprise.

In summary, by clarifying and disseminating the core values and culture of the enterprise, as well as building a diversified compensation and benefits system, technology companies can construct a competitive talent attraction strategy. This will help attract more outstanding talents to join the company, promoting its sustainable development and innovation.

#### ***4.2 Establish a new management model that adapts to strategic talents***

Reduce management hierarchy and empower strategic talents with more decision-making power and autonomy. For example, ByteDance adopts flat management, so that employees can make decisions and execute projects quickly, which greatly improves work efficiency and innovation ability. This management model allows strategic talents to unleash their creativity in a more relaxed and free environment.

Organize the team with the project as the core, allowing strategic talents to freely combine and flow according to project needs. For example, in some large-scale projects, Huawei draws strategic talents from different departments in areas such as technology, marketing, and management to form project teams. After the project is completed, team members return to their original departments or participate in new projects. This approach can break down departmental barriers and improve the comprehensive utilization efficiency of talents.

#### ***4.3 Improve the mechanism for talent identification and selection***

Improving the talent identification and selection mechanism is crucial for enterprises to acquire outstanding talents. Firstly, in identifying talents, multiple factors should be comprehensively considered. It cannot be limited to a single professional skill. For example, in the selection of technical talents, programming ability is only the foundation. Whether they have a strong passion for learning new technologies, whether they can use innovative thinking to solve complex problems, and whether they have good communication and collaboration skills in the team are all important measurement standards. Innovation ability helps promote technological breakthroughs in enterprises, team collaboration ability is crucial for the smooth implementation of projects, learning ability ensures the continuous progress of talents, and strategic vision can align talents with the long-term development of

enterprises. Secondly, the channels for selecting talents should be diversified. Traditional recruitment websites and campus recruitment are common channels, but they are far from enough. Participating in industry forums allows access to experienced and insightful talents within the industry; Technology competitions are high-quality platforms for discovering potential talents, such as Microsoft's exploration of strategic talents in global technology competitions; Talent recommendation can also obtain talents with a high degree of matching with the corporate culture and job requirements.

#### **4.4 Innovative talent cultivation system**

Develop personalized training plans based on the strategic goals of the enterprise and individual differences in talent. For example, for talents who have the potential to become technical backbone, they can be arranged to participate in advanced technology research and development projects within the enterprise, and equipped with dedicated mentors for guidance; For talents with management potential, management training courses and job rotation opportunities can be provided.

Carry out cooperative training projects with universities, research institutions, and other enterprises. For example, technology companies can collaborate with universities to establish laboratories, allowing strategic talents of the company to jointly conduct research projects with university teachers and students. This not only allows talents to access cutting-edge academic research results, but also brings new technologies and innovative ideas to the company.

#### **4.5 Strengthen talent incentive and retention mechanisms**

Such as employee stock ownership plans, long-term performance bonuses, etc., closely link the interests of talents with the long-term development of the enterprise. For example, Apple Inc. uses an employee stock ownership plan to make employees shareholders of the company, motivating them to work hard for the long-term prosperity of the enterprise.

Provide clear career promotion channels for strategic talents, including technical promotion channels and management promotion channels. At the same time, pay attention to the work life balance of employees, organize rich and colorful employee activities, and enhance employees' sense of belonging and loyalty. For example, Tencent provides employees with multiple promotion channels from junior engineers to chief scientists, from grassroots employees to senior managers, and often holds employee team building activities.

### **5. Conclusion**

In summary, the effective development and innovative management strategies of strategic talent resources in technology enterprises are key factors for their success in the knowledge economy era. By deeply understanding the connotation and characteristics of strategic talent resources, comprehensively analyzing the current situation and problems of development and management, innovative management strategies can be proposed in a targeted manner. These strategies help technology companies attract, cultivate, and retain strategic talents, fully tap into their potential, enhance their innovation capabilities and core competitiveness, occupy a place in the increasingly complex and competitive technology market, and achieve the long-term goal of sustainable development.

### **References**

- [1] Yang Q .*Human Resources Development and Management System Based on "Five New" Strategy* [J].*Lecture Notes on Data Engineering and Communications Technologies*, 2022.
- [2] Zhao Y , Hua Z , Liu Y ,et al.*Research and Practice on Strategic Planning and Resource Allocation Optimisation Model of Off-site Research Institute*[J].*Applied Mathematics and Nonlinear Sciences*, 2024, 9(1).
- [3] Waqas U , Umair S , Mrugalska B ,et al.*Mediating role of green talent management between green strategic orientation and sustainable supply chain performance among SMEs of Oman*[J].*Annals of Operations Research*, 2024, 340(2-3):1063-1089.
- [4] Mariusz Malinowski,Adam Kisiel,Jan Szmiedt,Krzysztof Pozniak,Grzegorz Kasprowicz, Zbigniew M.Wawrzyniak, Piotr Wisniewski.*QUANTUM TECHNOLOGIES—STRATEGIC DEVELOPMENT PRIORITY FOR THE WARSAW UNIVERSITY OF TECHNOLOGY*[J]. *Elektronika: Konstrukcje, technologie, zastosowania*,2023,64(8):2-4.

[5] *Vasiliadis, Giorgos, Panagiotakis, Costas, Stenaki, Iliana, Fanourgiakis, John. The impact of brain-drain in country ranking: the case of computer science [J]. Scientometrics: An International Journal for All Quantitative Aspects of the Science of Science Policy, 2023, 128(2): 1441-1450.*