

Practice of Progressive Training System for Innovative Talents in Research Units

Deyao Zheng, Biao Zhang*, Yumin Kou

Cavite State University, Indang 4112, Philippines

* Corresponding author: Biao Zhang

Abstract: Young employees, as the reserve force of an enterprise, are crucial for its future and have always been valued and cared for by senior management. Talent cultivation follows the process of "establishing standards-building application systems-formulating plans-implementing training," and through digitalization, scientific evaluation, and visualization, it comprehensively connects the talent chain of "selection, cultivation, utilization, and management." This transforms past innovative talents from "I have to learn" to "I want to learn," effectively enhancing employees' work enthusiasm and management efficiency.

Keywords: Training System, State-Owned Enterprise, Research Unit.

1. Introduction

In the current market competition, management, talent, and technology are important factors for measuring the comprehensive strength of an enterprise. In the development of state-owned enterprises, the management of young innovative talents undoubtedly integrates the two important factors of enterprise management and talent. The cultivation and management of young innovative talents will determine the comprehensive level of development of power enterprises in the future. Faced with new situations and fields, compound talents are the foundation for the long-term development of enterprises, and innovative talents are the focus of cultivation. Enterprises need talents who can consider the level of enterprise development and job status for innovation in their work, and talents who can make important contributions to the overall innovation and development of the enterprise. When cultivating talents, enterprises should not only pay attention to the close combination of theoretical knowledge and practical skills but also focus on cultivating talents' innovative abilities. The research object of this study is the research unit of a power enterprise, where employees mostly have master's degrees or above. There are two postdoctoral researchers, and 25% of employees hold doctoral degrees, while 60% hold master's degrees. They have obvious theoretical advantages, outstanding innovative abilities, strong willingness to grow, and high expectations for their own career development. It is urgent to provide them with more platforms to demonstrate their talents, broaden their growth channels, match training resources, and help them quickly become innovative, leading, and compound talents. To consolidate the position of the "innovation highland" and "talent center," the project is guided by intelligent selection and empowerment of decisions, and through the implementation steps of establishing standards, building application systems, formulating plans, and implementing training, a progressive training system for innovative talents is constructed.

2. Research Background

2.1. Large Talent Gap and Incomplete Training System

Currently, enterprises primarily focus on cutting-edge areas in the power sector, but there are few successful cases to reference in practical business operations. Moreover, there is a lack of professionally trained personnel, and the talent training system is flawed. Although there is some degree of emphasis on cultivating innovative talents within enterprises, this attention is superficial. It is often believed that continuous self-learning during work is a key way to improve skills, thus neglecting the establishment of a systematic and comprehensive training system.

2.2. Complex Business Operations and Monolithic Training Models

Currently, the training of relevant personnel within the unit is relatively simplistic. Typically, it involves online or offline training organized uniformly by the company. The training methods are fixed, and the content is straightforward, making it challenging to tailor the training to the specific circumstances of the enterprise and the diverse needs of the employees.

2.3. Insufficient Multidimensional Capabilities and Poor Innovation Ability

There is a lack of emphasis on fostering innovative capabilities in talent training. The professional focus within enterprises is strong, but practical business operations require not only specialized knowledge and skills but also a comprehensive understanding of multiple disciplines. However, current training programs often only cover professional knowledge and skills related to the business, with significant deficiencies in areas such as computing, finance, and communication skills. The training plans for innovative talents focus more on professional capabilities, neglecting the development of employees' innovative awareness and abilities. Since there are no clear plans and measures for cultivating innovative talent, it is difficult to develop and enhance employees' innovation capabilities.

3. Key Practices

3.1. Establishing Evaluation Criteria

3.1.1. Defining Innovative Talents

Based on the new development concept, energy development trends, production and operation models, core job characteristics, and characteristics of innovative talents, innovative talents are divided into three stages: "Young Innovators" are young innovative talents who have emerged in their own fields, "Outstanding Innovators" are high-level young technical backbones with outstanding innovative ability and development potential, and "Leading Innovators" are authoritative experts and leaders who have made significant achievements in cutting-edge research.

3.1.2. Building a Quantitative Scoring Model

Constructing a three-dimensional model of "Quality + Ability + Performance," focusing on the basic qualities and future potential of employees in the "Quality" dimension, the basic, core, and developmental abilities in the "Ability" dimension, and systematically considering employees' contribution performance and innovation results in the "Performance" dimension. Guided by the training objectives, specific indicators are refined to ensure that each major dimension's specific scoring indicators are sufficient to measure the dimension where the score is located, ensuring scientifically correct guidance for talent development.

3.1.3. Formulating Scoring Rules

Considering the standards of important indicators and the distribution of scoring weights, emphasizing the current status, past contributions, and future development of scores, and realizing scientific and hierarchical measurement of scores. By distributing different weight coefficients for comprehensive indicators, important indicators, and difficult indicators, the guiding role of talent selection and employment with a clear emphasis on "emphasis on innovation, practicality, and performance" is highlighted, and the current stage talent evaluation of the company is highlighted.

3.2. Building Application Systems

3.2.1. Establishing a Selection Application System

Visualizing ranking comparisons. Collecting employees' quantitative scoring data, forming a data pool, deleting erroneous data, and performing calculations and analyses to form individual employee portraits. Through data analysis of employees' scores in multiple dimensions such as the company, department, individual, training period, job level, department attributes, and job nature, employees and departments can identify their positioning, benchmark excellence, clarify the direction of improvement in the next stage, and assist decision-makers in quickly and accurately identifying outstanding talents and potential talents. Implementing intelligent selection decisions. By selecting typical management scenarios in talent selection and training, categorizing and summarizing, collecting and analyzing important management actions in selected scenarios, and further decomposing the data requirements for talent label data, different talent scenario talent pool labels are formed, which are matched with specific job scenario talent pool labels to obtain job portraits. Talent selection screening conditions are created according to the labels, and corresponding rules are triggered through the digital system to determine whether the employee's personal portrait

matches the job portrait, so that the employee's data content matches the selection or training conditions of the "Young Innovators," "Outstanding Innovators," and "Leading Innovators" talent teams, reducing subjective judgment errors in company talent selection work, and ultimately realizing the basic data labeling, application scenario visualization, and comprehensive career path of talent management.

3.2.2. Establishing Cultivation Application Systems

Based on digital decision-making and quantitative scoring systems, develop highly targeted and accurate growth strategies. Customize training programs. Focus on different talent groups of "Young Innovators," "Outstanding Innovators," and "Leading Innovators," discover common disadvantages in each group's portraits, integrate and design targeted training content and methods that better meet the training needs of different types of talents, improve learning enthusiasm and initiative. At the same time, precise personalized training effectively avoids waste of training resources and improves training effectiveness. Match growth paths. Based on the talent pool labels of "Young Innovators," "Outstanding Innovators," and "Leading Innovators," implant typical growth paths, and intelligently match and analyze the growth data of various young employees, automatically provide career development suggestions, and allow young employees to choose the most suitable route for personal growth.

3.3. Formulating Talent Plans

Based on the theory of the full life cycle of talent growth, and following the principles of innovative talent definition and label characteristics, formulate talent cultivation plans to provide clear guidance.

3.3.1. Formulating Training Plans

Through targeted talent-oriented training, establish a talent reserve pool, and select outstanding innovative talents from the corresponding reserve talent pool at a rate of 10%. Based on the above goals and the law of talent growth, a five-year talent cultivation plan for innovative talents is formulated: Newly recruited employees have high theoretical levels and little practical experience, so the focus is on enhancing frontline practical experience and expanding horizontal knowledge to achieve the goal of entering the "Young Innovators" talent pool; After about 5 years of employment, young employees have some work experience and need further improvement. They should take on preliminary key tasks and achieve the goal of entering the "Outstanding Innovators" talent pool; After about 10 years of employment, employees are positioned as backbone personnel, so they need to undertake key research projects, solve difficult problems, and help build expert brands. The goal is to enter the "Leading Innovators" talent pool. Newly recruited employees become Young Innovators after one year of training, Young Innovators become Outstanding Innovators after one year of training, and Outstanding Innovators become Leading Innovators after one year of training. The fastest development cycle is three years, achieving remarkable results in one year and outstanding performance in three years, rapidly cultivating and discovering high-potential talents.

3.3.2. Formulating Training Guidelines

Based on clear strategies. Grasp key training strategies for each stage of talent development from the perspective of talent development and development, understand the important role of external factors such as apprenticeship,

cooperation, and experience in talent development, and clarify key training strategies for talents at each stage; Based on commonality, select measures. Based on the principle of "hierarchical implementation" and the full career training tracking system, create platforms such as training, communication, practical combat, and incentive guarantee, and design targeted training and learning, cooperative communication, project practice, and incentive guarantee measures for talents at various stages to ensure the implementation of innovative talent advancement plans.

3.4. Targeted Implementation of Training

Adhere to individualized teaching and carry out training work, grasp the main contradictions, target the "core groups," and implement "accurate strategies" in stages according to needs to achieve targeted progressive training from Young Innovators to Outstanding Innovators to Leading Innovators.

3.4.1. Implementing the "Young Innovators Project" to help new employees realize their dreams

Carry out "dual-mentor" support. Relying on the "double mentor" training mechanism for young employees, assign professional mentors and technical mentors to new employees. Professional mentors provide career guidance and ideological guidance to new employees through words and deeds, while technical mentors are responsible for teaching and practical guidance. Help new employees integrate into the enterprise as soon as possible, improve their technical level in a short time, and enrich their practical experience; Strengthening "three-cross" exchanges. Increase the intensity of interdepartmental, cross-professional, and cross-unit job rotations to achieve "professional-professional" and "professional-functional" job mobility. Allow new employees to acquire various skills through different learning opportunities, further broaden their work horizons, improve their horizontal communication skills, create a harmonious atmosphere, and cultivate innovative talents. Through the "Sailing Project," help new employees quickly transition from new employees to professional technical personnel, and rapidly develop into skilled professional technical personnel. Those who pass the assessment enter the "Young Innovators" talent pool.

3.4.2. Implementing the "Outstanding Innovators Project" to help young employees grow and succeed.

Selecting outstanding mentors. Give full play to the leading and guiding role of high-end talents, rely on scientific research teams, laboratories, and other scientific and technological innovation carriers, carry out mentorship pairing, and let young employees participate deeply in innovation activities with experts to lay a solid foundation for scientific research; Conducting competitive horse racing. Implementing a target-oriented "military order" system, tracking the progress of selected teams. Establish an incentive assessment and evaluation system, conduct annual selections for "advanced workers in science and technology" and "young innovation stars," and allow young scientific and technological talents to stand out through comparison and competition. The "Navigation Project" implements the

"Outstanding Innovators" talent advancement plan, focusing on cultivating a group of young innovative talents who have emerged in their own fields and entering the "Outstanding Innovators" talent pool.

3.4.3. Implementing the "Leading Innovators Project" to help technical backbones build their brands.

Leading project bidding. Targeting the forward-looking fields of the power industry, coordinate advantageous resources, match research funds, encourage backbone personnel to take the initiative in bidding, undertake major projects of provincial and ministerial levels, key research and development projects, and major demonstration projects, give them greater autonomy, create a good research environment, continuously improve their scientific and technological innovation capabilities and problem-solving abilities, and gradually establish industry authority. Relying on projects, arrange visits and exchanges to famous universities and institutes, master advanced frontier technologies; Conducting joint research. Cooperate with well-known universities, research institutes, key laboratories, and engineering technology research centers at home and abroad to conduct in-depth research cooperation, achieve complementary advantages, promote resource integration, and jointly cultivate high-level scientific research and innovation achievements.

4. Main Effects

Currently, the application effect of the progressive training system for innovative talents is remarkable, which not only clarifies the growth path for young employees but also quantifies the assessment of young employees, effectively improving their work enthusiasm. It has important reference significance for motivating other young employees in enterprises. In an era of high-speed information circulation, enterprise training systems and quantitative assessment mechanisms should keep pace with the times, as much as possible, applying big data technology to not only effectively motivate employees to complete their duties seriously but also achieve benign competition, promoting enterprises to become more mature in management efficiency.

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