

Optimization Design of Technical Personnel Career Planning

-- Taking F Company as an Example

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Abstract

As a kind of resource, technical talents have become the top priority of organization management, and human resources are also important strategic resources. The research on the career of technical personnel in the organization can coordinate the development of technical personnel and the organization, improve their satisfaction and sense of belonging, realize their own value, and make them become the competitive capital of the organization. F company is a Sino Taiwan joint venture high-tech enterprise specializing in the R & D, manufacturing and sales of automotive filters. Due to the changing market environment and the needs of organizational development, the full use of human resources is an urgent problem to be solved. The domestic research on career management is still in its infancy, and the research on the career planning of technicians in small and medium-sized enterprises is also less. Taking the technical personnel of F company as the research object, this paper combs the relevant theories at home and abroad. According to the characteristics of the technical personnel, combined with the development practice, this paper designs the career of the technical personnel from the perspective of individual and organization, so as to provide reference for the career planning of the technical personnel of F company. The implementation of the design system can not only enable employees to clarify their career goals and make correct decisions in career planning, but also enable the organization to improve career promotion channels, motivate employees, improve the stability of the team, help the organization create a good atmosphere, fill the gap in employee career planning, further improve personnel management, and play a positive role in the career management of F company's technical personnel.

Keywords

Scientific and Technological Enterprise; Artisan; Career Path.

1. Introduction

In today's society, with the continuous progress of science and technology, the long-term development of society and the continuous improvement of the quality of technicians, small and medium-sized enterprises are becoming more and more important for the economic and social progress. Like other small and medium-sized enterprises, technology-based small and medium-sized enterprises also have problems such as relatively weak individual size and strength, fierce market competition environment, and their own inherent defects. The introduction and retention of talents is particularly important for the development of important technology-based enterprises. Technical personnel play a decisive role in the development of small and medium-sized science and technology enterprises, and are also the fundamental source of enterprise technology[1].

Scientific and technological enterprises have an increasing demand for technical talents. Technical talents are more and more aware of their own value and eager to become outstanding people in their industry. They have clear goals and specific implementation plans and are eager to be promoted and reused. Enterprises must plan their employees' career and increase their retention rate. Therefore, how to closely link the needs of technical personnel's career development with the enterprise's goals, how to organize and carry out technical personnel's career planning, how to make the employee's goals consistent with the enterprise's goals, and how to help technical personnel complete their career goals and values, how to produce higher benefits for the enterprise and how to achieve the enterprise's development goals, has become an urgent problem to be solved.

With the progress of economy and society, human resources have become the primary productive force of various resources and an important component of the organization, which has been paid more and more attention by people[2]. What distinguishes human resources from other resources is that they can be developed. Human resources with more potential are the key resources of the organization. The number of technicians in an organization also means the strength of the organization, which directly reflects the challenge and competitiveness of the organization[3].

Through the discussion and analysis of the current situation of career planning for technical personnel of F filter Co., Ltd. (hereinafter referred to as F company), deficiencies are found to provide a basis for the next activities. Based on the basic theory of career management, this paper optimizes the career planning of F company's technicians, including the establishment of the system and the strategies to solve the current problems of the company.

2. Current Situation and Analysis of Career Planning of Technical Personnel in F Company

2.1. Questionnaire Survey on the Status Quo of Career Planning of Technical Personnel

In order to investigate the current situation of F company's technicians and understand the needs of the company's technicians for all aspects and stages of career management. The questionnaire consists of 16 questions, including single choice questions, multiple choice questions and matrix single choice questions. The questions are designed according to the career planning and related contents of technical personnel, including the basic information survey of employees, the cognition of their own career, the survey of career objectives and satisfaction, employee training and salary. To understand the key needs of technicians. In this paper, 83 electronic questionnaires were distributed and collected through wechat, QQ and other communication software in the form of electronic questionnaires. The questionnaire recovery rate was 96%.

Among the technicians involved in the investigation, 24% were aged 20-30, 26% were aged 30-40, 30% were aged 40-50, and 20% were aged 50 and above. Among them, men accounted for 67% and women 33%. 38% have college degree or below, 54% have bachelor degree and 8% have graduate degree or above [1]. Through the investigation and analysis of the current situation of technical personnel through the questionnaire, the current situation of career management of technical personnel in F company and the basic situation of employees are found.

2.2. Interview and Investigation on the Current Situation of Career Planning of Technical Personnel

Although F company has done some research on career planning, there are still many deficiencies in the current career planning system. The retention rate of technical personnel is

low and their work enthusiasm is not high. In order to further clarify the current situation and shortcomings of the company, and optimize the career planning of F company. The interview outline is designed through literature research and "career anchor" and other related theoretical research

This interview was conducted in a one-on-one way. Employees who have a good understanding of F company's career planning were selected as the interview objects. A total of 6 people were selected. Face to face conversation is the most direct and fastest way to obtain relevant information. Listen to the suggestions of department members and find out the employees' understanding of technical posts and their evaluation of other employees. In the interview, in order to achieve better interview results, pay attention to the surrounding environment [4] during the interview, so that the interviewees can relax, so that they can get more information, understand and analyze problems more comprehensively.

2.3. Interview Survey Conclusion

2.3.1. Single Career Promotion Path for Technical Personnel

The general path of career promotion is the path of vocational technology. According to the current situation of F company, the general promotion route is "junior technical personnel - intermediate technical personnel - senior technical personnel". If employees want to be promoted to management positions, they not only need to master relevant knowledge, but also the enterprise should provide support. One path can not meet the needs of technical talents, and employees can easily reach the platform stage [4]. The two technicians said that if there is only one promotion route, it is not suitable for everyone, and the employees' work enthusiasm will not be high. Only the construction of a two-way promotion route can solve this problem.

2.3.2. Each Stage of Career Planning is not Perfect

For example, F company is involved in self-evaluation, career evaluation and career development channel construction [5]. However, the existing career planning system of F company has obvious deficiencies in formulation, implementation and feedback. Employees do not know how to plan and implement their career.

2.3.3. Employees Lack Professional Knowledge of Career Decision-Making, are not Clear About Career Planning, and Corporate Publicity is not in Place

Enterprises should participate in and guide this. Although technicians are highly educated, they are helpless in career planning. At this point, enterprises need to play a greater role. Enterprises not only need to plan the organizational career of the whole enterprise from a strategic perspective, but also need to guide the personality of employees. And help them solve relevant problems[6].

2.4. Problems in Career Planning of Technical Personnel

According to the questionnaire and interview results, it can be seen that the existing human resource management level and mode of F company are inconsistent with the organizational development goals, and the systematic and scientific career planning for technical personnel is not perfect. Through questionnaire survey and interview, it is found that the following problems exist in the career planning of F Company.

2.4.1. The Employee Career Planning System is not Sound and Scientific

F company has a high turnover of personnel. There are few ways to make full use of talents in human resource management, especially in the management system of employee career planning. The management of employees is too rigid and the flow of talents is not smooth, which is not conducive to the timely promotion of appropriate talents and the establishment of reasonable goals for employees[7].

2.4.2. The Employee's Personal Career Development Goals are Inconsistent with the Organizational Goals

As F company's own strategic objectives and specific conditions have not been systematically publicized and implemented among employees, employees are not clear about the development direction of the organization. If there is no clear goal, there will be no specific and feasible action plan. Employees' work has no goal, low efficiency and poor enthusiasm, which is not conducive to the improvement of personal ability and the development of the organization.

2.4.3. The Rising Channel of Employees is Narrow, Which can not Fully Match the Person and Post

There is only one path for career development and promotion, which makes the company unable to meet the career development of all technical talents. And the company provides less help to employees. Therefore, some employees have not set reasonable career goals and specific action plans to achieve the goals, and the matching degree of personnel and posts is not high.

2.4.4. The Form of Employee Training is Single and the Content is Unreasonable

Due to the backward mode and level of human resource management, the training methods and contents of employees can not meet the actual needs of employees, which directly affects the improvement of the ability and level of technicians. At the same time, F company's training and guidance on employees' career planning are not in place. Most technicians do not know how to carry out career planning, and there are many internal trainings in the company, so they are unable to grasp the latest scientific theories and methods in the same industry and even in the world in time.

2.4.5. There is no Perfect Incentive Mechanism

In terms of personnel training, recruitment and salary design, there are also problems that do not match the career development of technical personnel. At the same time, the lack of an effective incentive mechanism to motivate employees will make the organization face greater difficulties[8]. Through the above analysis, it can be seen that the existing human resource management level and mode of F company do not meet the needs of organizational development, and there are deficiencies in systematic and scientific career planning for employees.

2.4.6. The Evaluation System of the Organization can not Effectively Promote the Enthusiasm of Employees

There are some deficiencies in the current evaluation system of the company, which affect the enthusiasm of technical personnel. In the interview, it was mentioned that F company's evaluation of talents was not objective and fair enough. At the same time, the evaluation and feedback of training results are not in place. Performance appraisal results are one of the promotion standards and the most basic requirements to ensure employee satisfaction [9]. Any imbalance between responsibility, power and interests will make employees feel unfair, create adverse conditions for their work, and affect their own and other employees' work efficiency.

3. Current Situation and Analysis of Career Planning of Technical Personnel in F Company

The survey shows that although F company is involved in self-evaluation, career evaluation, career development channel construction, etc. However, the existing career planning system of F company has obvious deficiencies in formulation, implementation and feedback. Only when senior management and employees attach importance to relevant work, can they ensure the effective implementation of career planning after designing career planning from both

individual and organizational aspects. According to Schein's career anchor theory, technicians' self-assessment is carried out. According to Parkinson's career person matching theory, technicians are made to establish career goals. According to Schein's career development stage theory, technicians' career cycle management is carried out. Through the combination of theory and the current situation of F company's career planning, this chapter mainly carries out the optimization design of technicians' career planning.

3.1. Establish a Sound Career Planning System

Career planning mainly includes two aspects. First, technical personnel, and second, organization. See Figure 3-1 below for details.

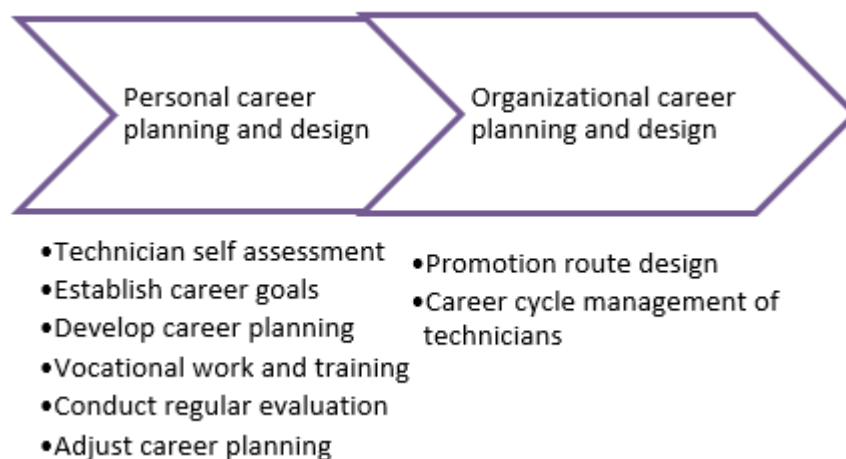


Figure 1. Flow chart of career planning and design for technicians of F Company

3.1.1. Personal Career Planning and Design

(1) Technicians conduct self-assessment. After having a comprehensive understanding of yourself, set career goals. This process is self-assessment. Training and education are very important for employees to provide personal value. The focus of technical personnel's career planning is to understand their professional level and structure. Only by combining personal knowledge structure and personality can they give full play to their potential most effectively. Only when technicians fully understand their mastery of knowledge can they make scientific and systematic career planning and make practical self-assessment. Company f can provide more opportunities for employees to help them revise their career path in time. At the same time of evaluation, we should also pay attention to the changes of the surrounding environment, adjust the career goals of employees in time, and do not deviate from the direction of organizational development, so as to achieve a win-win situation.

(2) Establish career goals. Setting goals is the key to career planning. The relevant departments of company F should scientifically and systematically analyze and comprehensively evaluate the positions of technicians according to the development needs of the enterprise, and at the same time consider the specific conditions of individuals and organizations to help technicians choose feasible career goals. When making plans, technicians should clearly understand the knowledge, skills and professional structure they should master in their career, and the organization will set corresponding goals according to the personal expectations of technicians.

(3) Develop career planning. First of all, let each department analyze the job needs. According to the above planning content, combined with the specific situation of the position and employees, make the personnel department have a clear ranking for the candidates of each position[10]. Through the evaluation of personality and ability, we can clarify the type of job anchors of technicians, so as to arrange their work. Accordingly, according to the characteristics

of technicians, combined with the results of job analysis, help technicians formulate specific and complete career planning.

(4) Vocational work and training. Company f helps different technicians make career plans, help them continue to learn in practical work, improve the skills and knowledge required to achieve their career goals, and let technicians use their knowledge to carry out their work. Therefore, whether the relevant institutions can provide sufficient and high-quality vocational training for technicians and the professional work training required by the company requires company f to provide training and related work for employees according to the specific conditions of different employees[11].

(5) Evaluate regularly. In order to ensure that the career planning can continue to be implemented, F company should evaluate the career planning of technicians. During the implementation process, the relevant departments shall report once a quarter to ensure that the actual implementation situation does not deviate too much from the expected situation. Then summarize twice a year. To make a comprehensive summary in 2-5 years, we should think deeply, spread good experience and improve the existing shortcomings. Once the career planning has been implemented for a period of time among all technicians, it can be comprehensively summarized according to the characteristics and successful experience of the company. Systematic and modular construction of career management system. On the basis of good experience, we can "standardize" the procedures and contents of some repetitive career planning activities. Reduce confusion and improve efficiency[12].

(6) Adjust career planning. Company F should always pay attention to the implementation process and help employees make corrections according to their actual needs and practical changes in the specific implementation process[13]. We should not only make the professional goals of technicians have a long-term and effective incentive effect on technicians, but also match the development of the organization. Only if F company constantly pays attention to environmental changes and timely modifies and adjusts the career planning of technicians, can technicians continuously improve and achieve real success.

3.1.2. Organizational Career Planning and Design

(1) Promotion route design. After determining our career goals, we should also consider which promotion path to choose. Successful career planning is to achieve organizational goals while satisfying employees' needs and goals. Therefore, the following two promotion routes are designed, and the development route to technology is: junior technicians - intermediate technicians - senior technicians; The promotion route in management is: junior technicians - Junior Managers - middle managers - senior managers[14].

The following two promotion routes for technicians are introduced respectively:

After a period of career development, junior technicians can be promoted along the development path of technology after passing the enterprise assessment. This promotion route is very suitable for those technicians who are very interested in technical work. Therefore, this promotion route has a greater incentive effect on them, and can meet their career development ideals at the same time.

By constantly accumulating management experience in their work, technicians can increase their knowledge and skills by not much. After passing various examinations of the enterprise, they can develop upward along the promotion path of management. This way of promotion is very suitable for technicians who want to obtain higher management functions and have greater management power in technical work, but are far more interested in management than in technical work. They are not interested in further research on technical work, but they are interested in management and show strong ability. Then this promotion route can motivate them. Through the promotion of the company and the accumulation of their own experience, they have advantages that other managers do not have. This way of promotion is also in line

with their career development ideal, and it is also a good choice for enterprises and such technicians themselves.

Each technician's goal orientation, ability orientation and environment are different, so the career development route suitable for them is also different. However, employees must make decisions according to their own specific conditions, and cannot follow the tide and follow others.

There are no advantages or disadvantages in the career promotion route, but there are differences in suitability. Even in the same profession, there are different positions. Different people are suitable for different jobs, some are suitable for management, and some are suitable for research. Only by choosing a suitable direction can we make achievements, otherwise it will only increase distress. Therefore, the choice of career path is also very important. When choosing the career promotion route, technicians follow a series of processes of the career planning plan formulated by the enterprise, and with the help of the human resources department, through the evaluation of their own personality and other aspects, have a more comprehensive understanding of themselves, and then make a choice.

(2) Technical personnel career cycle management. F company manages the career cycle of technicians according to the content and the theory of career development stage of Schein, and arranges corresponding tasks, including the following contents:

① just started. The company mainly conducts induction training for employees to help them understand the enterprise and start working as soon as possible. Help them understand the corporate culture and increase their tacit understanding with the company.

② early stage. This stage is for employees to run in with the enterprise and reach an agreement. First, employees should set goals. At the same time, employees should be trained to find their potential and reuse some employees.

③ intermediate stage. Most of the technicians in this period were middle-aged, and their careers were at the peak. The identity of technical personnel has become more, their experience is richer, and their pressure is greater. At this time, F company needs to pay attention to the psychological state of employees on time to reduce their pressure. Help them overcome all kinds of difficulties in work and life. So that they can concentrate on their work and create greater success.

④ later stage and retirement stage. At this time, the psychology of technicians should have a transformation process, and they should realize the change of their rights and responsibilities and the reduction of their energy. The company should help them adapt to this stage and encourage them to teach their experience and skills to young technicians. Or let them return to work. At the same time, the company should also help them arrange the retirement handover work and various arrangements after retirement. We should reduce their pressure, reduce their sense of difference, and ensure that their retirement work can be carried out smoothly.

3.2. Publicize Organizational Objectives and Establish Incentive Mechanism

3.2.1. Organizational Objectives through Corporate Culture Publicity

Career planning and management are inseparable from corporate culture. Through the establishment of a people-oriented corporate culture, the organizational situation, objectives and career planning related concepts are run through the organizational culture. When training employees, we can publicize the contents of these aspects to help employees at all levels of the enterprise understand them, so that they can have awareness of this aspect and take the initiative to set career goals and related planning. This is not only a good way to help employees plan their career, but also help to unify personal goals and organizational goals.

3.2.2. Establish a Perfect Incentive Mechanism

In order to help technicians enhance their professional abilities and make their knowledge and skills meet the requirements of the company, corresponding incentive measures are essential. The incentive measures are mainly from the aspects of remuneration and position grade. The adjustment of the company's salary system should also be adjusted according to the job description of each position and the relevant contents of the promotion channel. In addition, the remuneration of employees must be closely related to their performance, so as to ensure the efficiency and enthusiasm of employees.

Pay system design also needs to pay attention to the contribution of different positions to the enterprise is different. In order to match the qualifications of all levels of the company, the company first designs broadband salary [9]. First of all, the number of job levels in the company should be determined according to the specific situation of the company, and the salary grades should be divided reasonably, in order to match the qualifications of different grades with the corresponding salary grades. In other words, when employees' ability reaches a higher level of qualification, they can not only be promoted, but also accompanied by the improvement of salary. At the same time, it should be noted that several salary levels should be set up in each salary level to ensure that employees can receive corresponding rewards when they perform well in terms of performance.

Different employees have different levels of needs, and salary and career incentives do not necessarily work with every employee. Therefore, the company can start from meeting the needs of employees at other levels. For example, the company can select excellent employees every quarter, give them honorary titles while giving bonuses, and set up honor lists to motivate them and other employees. In addition, the satisfaction of employees' health factors can also eliminate employees' dissatisfaction. For example, the company can provide employees with a better working environment, afternoon tea, and various group building activities. In order to increase the unity and cooperation between employees and motivate them. At the same time, enterprises can strengthen the understanding of employees' personality, meet their needs from this aspect, improve their work efficiency, and motivate them.

4. Conclusion

The development of organizations and individuals is inseparable from career planning and management. This paper takes the technical personnel of F company as the research object. Through the understanding of career planning theory and related concepts, through literature research, questionnaire survey and interview. Analyze the career status of the technicians in F company. Combined with relevant theories, this paper designs the career of technicians in F company. If the above research, this paper draws the following conclusions:

Through the analysis of the questionnaire and interview results, it is found that the following problems exist in the current situation of career planning of technical personnel in F company. First, the staff career planning system is not perfect. Second, employees' personal career goals are inconsistent with organizational goals. Third, the promotion route of employees is narrow, which can not fully match the person and post. Fourth, the form of staff training is single and the content is unreasonable. Fifth, there is no effective incentive mechanism. Sixth, the assessment system can not effectively promote the enthusiasm of employees.

The optimization design of career planning mainly includes three measures. First, through the corporate culture publicity, organizational goals and career planning theory, employees can independently carry out career planning and set career goals that are consistent with the corporate goals. The second is to design personal and organizational career planning to ensure that employees' career planning at all stages can be carried out systematically. Third, establish

an incentive mechanism to motivate employees and improve work efficiency. Finally, the above strategies and various systems can be effectively established and implemented.

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