

Research on Incentive Factors for R&D Personnel of Chinese Self-owned Brand Automobiles

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Abstract

The automotive industry is a talent, technology, capital, and resource-intensive industry, with talent ranking first. A stable and harmonious internal relationship within a technical R&D team not only enhances the cohesion of the entire team but also ensures the efficient operation of the organization. Therefore, how to attract and retain excellent technical R&D talents is a constantly evolving and important topic in management practice and theoretical research. This paper conducts research from four aspects: incentive theory, characteristics and turnover reasons of technical employees, demand for technical R&D personnel in Chinese self-owned brand automobiles, and incentive measures to improve job satisfaction and retention rate of technical employees. The research team followed strict theoretical paradigms such as incentive theory, and internal marketing, and adopted a qualitative research method combining literature review, interviews, and grounded theory to collect and organize data. The research results indicate that technical R&D personnel in Chinese self-owned brand automobiles possess high levels of professional expertise, have strong self-motivation and self-actualization desires, enjoy challenging and fulfilling tasks, and aspire to acquire more professional knowledge and skills in practical work to enhance their professional proficiency. They value internal recognition more and are not satisfied with general salary incentives. Employees with shorter years of experience mentioned more requirements regarding salary and benefits. Based on the research team's reflections and summaries from engaging in technical R&D and technical team management in the automotive industry, practical incentive methods and measures for technical R&D personnel in Chinese self-owned brand automobiles are proposed, with the aim of fully stimulating the

subjective initiative and innovation ability of technical R&D personnel and contributing to the sustainable development of Chinese self-owned brand automobiles.

Keywords: motivation; chinese Independent brand automotive; R&D personnel; team stability

Introduction

The automotive industry is a talent, capital, and resource-intensive industry, and a stable and harmonious technical R&D team plays a crucial role in the development of a company. Compared to manual laborers, technical research and development employees have higher professional technical knowledge and relatively affluent material living standards. They have distinct personalities, dislike constraints, and pursue themselves. Their cultivation, management, and motivation will become the central issue for enterprises to manage employees and the biggest challenge for management in the 21st century (McMEEKIN, 1999, Macpherson, 2023).

The automotive industry is a talent, technology, capital, and resource intensive industry, with talent ranking first. For car companies, the technology research and development team is a core resource, and a stable and harmonious internal team relationship is a concentrated reflection of overall awareness and collaborative spirit. This spirit will enhance the cohesion of the entire team, thereby ensuring the efficient operation of the organization. Its role plays a crucial role in the development of the company.

Chinese self-owned brand automobiles have been deeply integrated into the process of globalization. In the process of transitioning from a major automobile manufacturing country to a strong automobile manufacturing country, technological innovation is an important lever for climbing the high-tech tree, and the cultivation of talents with technological innovation capabilities is an urgent task. Therefore, how to motivate excellent technical R&D personnel and enable them to fully tap into their potential is an eternal theme in management practice and theoretical research, as well as an important research content in many management branches such as leadership and decision-making (Zhang, 2025). This study mainly focuses on four aspects: motivation theory, characteristics and reasons for turnover of technical employees, needs of technical R&D personnel for Chinese self-owned brand automobiles, and motivation measures to improve job satisfaction and retention rate of technical employees. Automotive technology research and development involves a wide range of fields and a high degree of confidentiality. Furthermore, there is an ancient Chinese proverb that goes, "If you teach your apprentice, you will starve your

master." This proverb has led to a relatively closed and conservative attitude among this group, and research on them is rarely reported.

Research Objectives

1. To identify motivational factors
2. Propose measures to improve job satisfaction and reduce turnover rates for Chinese independent brand automotive technology R&D personnel.

Literature Review

1. Motivation

Motivations refer to motivating and encouraging individuals to perk up, primarily used in the management of people or teams and groups composed of people, often to encourage positive and proactive behaviors. Since the 1940s, psychologists, sociologists, and behaviorists have studied how to motivate employees from different perspectives and proposed various motivation theories, such as content-based motivation theories that focus on motivations and satisfying individual needs, process-based motivation theories that study the psychological process from motivation generation to action taking, and comprehensive motivation theories that attempt to fully reveal human behavior. Bandhu (2024) pointed out that motivations can stimulate people to generate desires and needs, making them strive towards set goals and serving as the driving force behind employee behavior.

Due to differences in objective environments such as geography, culture, politics, and economy, research on motivation in China differs to some extent from that in the West. Representative motivation theories in China include the theory of simultaneous material and spiritual motivation, the three-factor motivation theory, and the fair difference threshold motivation theory. Lin (2025) proposed optimization strategies for motivation from the perspectives of motivation forms, institutional improvement, salary structure, team building, and cultural integration, aiming to provide theoretical reference and practical guidance for small and medium-sized enterprises to build a scientific and effective motivation system. Zheng et al. (2022) proposed a multi-stage dynamic basic salary model to address two major pain points: the inability of traditional fixed basic salary models to generate motivational effects and the imbalance in salary structure.

Motivation is a continuously evolving and iterative process. Once the needs in a certain aspect or at a certain level are met, new needs in other aspects or at higher levels will arise, which will drive people to generate new motivation and move towards the next goal. Although there are certain differences in the research on motivation between the East and the West, from a chronological perspective, there are certain similarities between the two. Early research on motivation was mainly based on material needs. With the development of society and the gradual enrichment of material foundation, research on motivation has gradually extended to the spiritual level, exploring the potential and latent abilities of motivated individuals from a deeper level.

2 Technical employees

Technical employees refer to those who possess professional technical knowledge and skills in specific industries and can apply these knowledge and skills to perform complex tasks. They usually have higher education and professional backgrounds, rich knowledge reserves, strong learning abilities, and a high degree of autonomy. They have a deep understanding and mastery of the technology and fields they are engaged in. They can bring higher added value to products or services and are an important cornerstone for ensuring the stable development of enterprises.

Characteristics of Technical Employees

Automotive technology research and development involves a wide range of knowledge, including mechanics, materials, electrical engineering, marketing, and user psychology. It requires technical researchers to not only understand technology but also possess skills in team collaboration, project management, marketing, and psychology, making them composite technical talents. They have put in more effort in their professional growth, and therefore have relatively higher expectations for work and life. Through literature review and combined with the author's work experience in the automotive research and development industry, technical employees typically exhibit the following characteristics: (1) Technical employees possess a strong sense of innovation and pioneering spirit, and usually have a strong desire to learn and master new technologies and skills; (2) Technical employees possess a strong sense of self-actualization and higher psychological expectations, and they place great importance on spiritual pursuits and achievement motivation; (3) Technical employees possess a high degree of professional loyalty and a lower degree of corporate loyalty. They place great importance on their profession, yet feel a certain degree of alienation towards the company they serve; (4) Technical employees possess a high degree of value creativity and relative scarcity, enjoying more career opportunities and

advantages in switching jobs; (5) Technical employees are active in thinking and sensitive in their inner world, but they appear dull and reticent in interpersonal communication.

Analysis of Reasons for the Turnover of Technical Employees

Scholars have conducted extensive research on the reasons for the turnover of technical employees and found that the factors contributing to their departure can be summarized into three major aspects: personal, organizational, and societal. These factors encompass career development, the job itself, leadership, learning and training, corporate culture, compensation and benefits, among others. Macpherson (2024) pointed out that enhancing skills and training for employees, and ensuring the development and maintenance of a talent pool, are stable talent strategies for South African automotive organizations in the context of Industry 4.0. Kuzior et al. (2022) noted that employee turnover is due to a lack of development opportunities, disagreement with the company's culture and values, etc. Hoffman et al. (2021) pointed out that there is a strong negative correlation between organizational management capabilities and employee turnover rates. Serenko (2024) noted that reasons for employee turnover include insufficient external motivation, job burnout, and grievances towards managers or the organization. Yamin (2020) pointed out that employee retention rates are influenced by factors such as organizational environment, intrinsic motivation, knowledge management, and external connections. Zhong et al. (2023) found that work environment, perception of promotion opportunities, emotional commitment, and organizational support have a significant positive impact on employee satisfaction. Hur et al. (2024) found that factors such as job involvement, job satisfaction, organizational commitment, and participation in decision-making are important factors affecting employee turnover. Chang et al. (2023) noted that organizations valuing the balance between employees' work and life can enhance their job satisfaction.

Zheng et al. (2010)'s research shows that there are numerous and complex factors that affect employees' willingness to stay, including salary, career development opportunities, employment conditions, and employees' satisfaction with their work and company culture. In addition, employees with professional skills are highly attractive to competitors and are easily poached by them with more generous salaries and benefits. Fulmer et al. (2022) pointed out that compensation motivations are key factors in creating value exchange between employees and organizations, shaping human capital, and ensuring that employees contribute to organizational goals. Chen et al. (2024) research showed that factors such as compensation systems, motivation

mechanisms, and company benefits can all contribute to employee turnover. Fallucchi et al. (2020) noted that the lack of an effective compensation motivation system in companies can lead to significant turnover in technical departments. Salary and benefits can directly reflect the abilities and value of technical personnel, as well as the organization's recognition of them, so they have a significant impact on the turnover of technical employees. However, it is worth noting that when salary levels rise to a certain extent and basic living security for employees is met, their impact on turnover rates will diminish and they will no longer be the main factor. In summary, the reasons for the loss of technical talents can be summarized into three major aspects: individual, organizational, and societal, as shown in Table 1.

Table 1 Analysis of Reasons for the Loss of Technical Employees

personal factors	Factors such as age, gender, experience, personal growth, self-actualization consciousness, perception of fairness, job achievement, job involvement, job satisfaction, career planning, job burnout, marriage, and family
Organizational factors	The job itself, work environment, organizational stability, compensation and benefits, performance evaluation, work pressure, organizational strategy, corporate culture, leadership style, distribution system, incentive mechanism, talent system, promotion opportunities, organizational commitment, organizational support, job authorization, participation in decision-making, organizational trust, learning and training, etc
social factors	Social environment, economic development, regional disparities, and corporate competition

Demand for Chinese independent brand automotive technology R&D personnel

Regarding the demand for R&D personnel in Chinese self-owned brand automobile technology, existing research mainly focuses on demand theory, mostly exploring it based on the needs of "natural persons" and "social persons", ignoring the impact of the market environment, development stage, cultural heritage, and characteristics of technical employees on the demand for R&D personnel in Chinese self-owned brand automobiles. According to cognitive interaction theory, demand is the result of continuous coordination and interaction between people and the environment, influenced by external environment and individual resources. Therefore, variables often examined in previous research on R&D personnel demand, such as salary level, work pressure, and organizational fairness, need to be re-examined in the current development stage

of Chinese self-owned brand automobiles. This also inspires us to explore the demand for R&D personnel in Chinese self-owned brand automobile technology research and development, which cannot simply be applied to existing theoretical paradigms.

To achieve the aforementioned objectives, this paper adopts qualitative research methods to collect data and summarizes it from the perspective of grounded theory. In terms of sample selection, the snowball sampling method was employed to select R&D employees from independent brand automobile enterprises located in Anhui Province, China (such as CHERY, JAC, NIO, BYD, CHANGAN, etc.). From July to August 2025, the research team conducted a total of 43 interviews with R&D personnel through a combination of face-to-face interviews and telephone interviews. Due to the sensitivity of topics such as "turnover intention" and "turnover factors," terms such as "intention to stay" and "factors for staying" were used in this interview. During the data collection process, in addition to demographic information such as gender, age, marital status, and education level of the interviewees, in-depth interviews and surveys were mainly conducted focusing on the needs of R&D personnel and factors that promote their intention to stay.

The content of this interview is for academic research purposes only. We strictly abide by professional ethics and confidentiality standards, and assume confidentiality responsibilities for personal information, business data, internal information, and non-public content involved. We will not disclose, disseminate, or abuse them without authorization. Adhere to objectivity, fairness, honesty and trustworthiness, abide by professional ethics, and ensure information security and legal compliance.

Based on demographic information, the interviewees are predominantly male (38 individuals), with ages mostly clustered between 25 and 40 years old (36 individuals). Most of them hold a master's degree or above (35 individuals, including post-employment degrees). Their years of professional experience are primarily concentrated within 1–15 years (40 individuals). Nearly 40% of the interviewees are married (17 individuals). Additionally, 32 individuals hail from fourth- and fifth-tier cities as well as rural areas. Evidently, this industry is dominated by young, highly educated male individuals. This is partly due to the high academic requirements for the automotive technology research and development industry, which generally demands a master's degree, and partly because the industry involves significant work pressure, requiring adaptability to business trips and overtime work, which is less friendly to female employees.

An analysis of the interviewees' years of experience reveals that those with 1–15 years of experience constitute the largest group, accounting for 93.02%. This group is in the prime of their lives, energetic, and also indicates from a side that China's self-owned brand automobiles have entered a rapid development stage in the past 20 years (Liu, Wang, & Peng, 2021). Finally, in the marital status column, although all interviewees have reached the marriageable age, less than 40% (39.53%) are married. The high cost of marriage and childbirth, housing prices, education expenses, and living expenses have made many young people hesitant to get married (Rackin 2017). With the development of the times, the cost of marriage and love remains high, and most young people do not want to be tied up by their families. They enjoy a free and unrestrained life, and the concept of late marriage, late childbirth, and even infertility has deeply penetrated the thinking of the younger generation. However, the high pressure, intensity, gender imbalance, and difficulty in finding a partner in the technology research and development industry cannot be ignored. Through sorting out interview data, it was found that 32.56% (14 people) of the respondents mentioned the low number of female employees in the industry, the occupation of dating time by work, the high cost of marriage, and unwillingness to get married.

When asked about their needs, the most frequently mentioned ones include working environment, team atmosphere, skill improvement, promotion, fairness and justice, work authorization, organizational recognition and support, work–life balance, etc. Salary and benefits, which are often mentioned in traditional demand research, are less frequently mentioned, only appearing among employees with shorter years of experience. Upon further investigation into this issue, it was found that R&D personnel have a lower sensitivity to salary and benefits, and they prioritize psychological satisfaction. For example, some interviewees mentioned, "*One cannot live only for money*" and "*I have no pursuit for material things. Both my parents have pensions.*" This issue cannot be simply understood as R&D personnel not pursuing material life. It should also be analyzed in conjunction with the current economic development level of China and the development status of domestic automobile brands. Automobile R&D is a technology–intensive job that requires high academic qualifications and skills from employees, and the salary is relatively high, which can meet or partially meet the material needs of employees. On the other hand, automobile R&D work often involves frequent business trips and overtime, leaving little free time and relatively fewer opportunities to spend money. Employees with shorter years of experience

have higher demands for salary and benefits because they have just started working and are in the stage of material accumulation, requiring more material to meet their living needs.

Regarding the factors that promote the willingness to stay in their positions, most interviewees expressed their hope that the organization can provide a relaxed and pleasant working environment and team atmosphere, a fair and just corporate culture and distribution system, as well as the realization of personal values and career ideals. Interviewees repeatedly mentioned that the current research and development (R&D) circle of Chinese self-owned brand automobiles is highly competitive. In order to meet the deadline and seize the market, the R&D cycle has been shortened from the original four to five years to about two years now. It is very common for R&D personnel to work on multiple projects at the same time. KPI assessments are becoming increasingly strict, and various systems are emerging endlessly. These situations have exacerbated employees' physical and mental exhaustion. Some interviewees said, *"I would rather have less salary than being so competitive"*, *"Although working conditions were tough before, I'm not as tired now"*, *"There are intrigues and scheming within the company, and transparency is getting lower and lower"*, *"I left my previous company because the leaders suppressed employees' promotion"*.

In summary, R&D personnel for Chinese self-owned brand automobiles possess a high level of professional expertise, exhibit a strong sense of self-motivation and a desire for self-actualization, enjoy challenging tasks that offer a sense of accomplishment, aspire to acquire more professional knowledge and skills, value organizational recognition, and are more concerned about non-material motivations compared to other types of employees.

Conceptual Framework

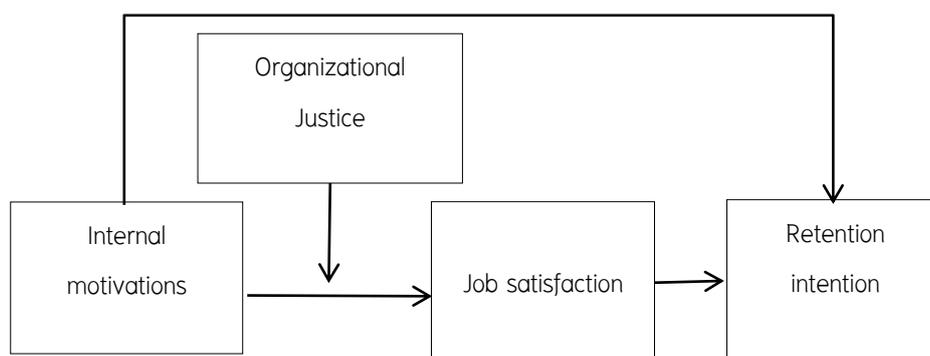


Figure 1 Conceptual Framework

Research Methodology

This study employs qualitative research methods to collect data and utilizes the perspective of grounded theory to summarize and analyze the characteristics, reasons for turnover, demand factors, and incentive measures of Chinese independent brand automotive technology R&D employees.. In terms of sample selection, the snowball sampling method was adopted to select representative technical R&D employees from Chinese self-owned brand automobile enterprises (such as CHERY, JAC, NIO, BYD, CHANGAN, etc.). From July to August 2025, the research team conducted a total of 43 interviews with technical R&D personnel from Chinese self-owned brand automobile enterprises through a combination of face-to-face interviews and telephone interviews. The content of this interview is for academic research purposes only. We strictly abide by professional ethics and confidentiality standards, and assume confidentiality responsibilities for personal information, business data, internal information, and non-public content involved. We will not disclose, disseminate, or abuse them without authorization. Adhere to objectivity, fairness, honesty and trustworthiness, abide by professional ethics, and ensure information security and legal compliance.

Research Results

In this study, 43 participants were mainly male, aged between 25 and 40 years old, with a master's degree and 1–15 years of experience in the industry. Research indicates that the majority of China's automotive technology R&D personnel are primarily the new generation of knowledge workers, characterized by active thinking, distinct personalities, and a reverence for freedom.

Research shows that the majority of automotive technology R&D personnel in China prioritize intrinsic motivation, challenging work, and professional growth over traditional salary incentives. They possess high levels of education and skills, and enjoy a stable and comfortable work and life environment. They value corporate social responsibility, prefer a fair and just work atmosphere, and crave attention. They believe that being valued and needed is more important than high salaries, and they pursue greater development opportunities and chances to showcase themselves. They emphasize the realization of self-worth and the balance between work and life. With the enrichment of society's material standards, their initial pursuit of material life has shifted towards the pursuit of quality of life. Therefore, the incentives for R&D personnel of China's self-

owned brand automobile technology should primarily focus on spiritual motivation, honor motivation, and job motivation, supplemented by salary motivation. Targeted incentive measures should be formulated based on the actual situation of employees.

Special attention should be paid to the fact that junior employees with short tenure still attach great importance to salary and benefits.

Discussion

In this study, it was found that Chinese independent brand automotive technology R&D personnel have shifted from material needs to spiritual/quality-of-life pursuits, while traditional demand research has mentioned more about salary and benefits, but less about them. R&D personnel are less sensitive to salary and benefits, and they prioritize psychological satisfaction. Compared to manual laborers, they place greater emphasis on quality of life, self-improvement, and the realization of their career aspirations

The interviewee repeatedly mentioned that there is serious competition within the current Chinese independent brand automobile R&D circle. In order to meet the deadline and seize the market, the R&D cycle has been shortened from the original four to five years to about two years now. It is very common for R&D personnel to work in multiple projects at the same time. KPI assessments are becoming increasingly strict, and various systems are emerging, all of which have exacerbated the physical and mental exhaustion of employees.

The results of this study indicate that the turnover rate of technical employees is related to personal factors, organizational factors, and social factors, which is similar to the findings of Zheng et al. (2010). The factors influencing employee retention intention are numerous and complex, including salary, career development opportunities, employment conditions, and employee satisfaction with work and company culture.

Motivation Measures for Chinese Independent Brand Automotive Technology R&D Personnel

Traditional management systems emphasize salary motivations, often relying on salary increases and financial rewards to retain employees. Undeniably, salary motivations are direct, efficient, and have a strong impact, providing a strong motivating effect for employees with lower salaries. However, most automotive technology researchers in China are primarily members of the new generation of knowledge workers. They have distinct personalities, pursue fairness and

justice, value corporate social responsibility, and believe that being valued and needed is more attractive than high salaries. They pursue the realization of self-worth and prioritize work-life balance.

Therefore, the motivations for R&D personnel of Chinese self-owned brand automobile technology should primarily focus on spiritual motivation, supplemented by salary motivations, and tailored motivations should be formulated based on the actual situation of employees. For example, some interviewees expressed the hope that enterprises could assist in solving issues such as household registration, school enrollment for children, vehicle restrictions, and gender imbalance. From the perspective of the scale and tax revenue of automobile enterprises, they all belong to enterprises above a certain size and have good interactive relationships with the local government. They enjoy preferential policies in terms of household registration, school enrollment for children, and vehicle restrictions. Enterprises should assist employees in solving the above problems. Regarding the gender imbalance, enterprises can appropriately increase the recruitment of female employees and place them in administrative and auxiliary technical positions. In addition, they can organize networking activities with local enterprises that have a higher proportion of female employees to address the difficulty in marriage caused by gender imbalance.

Of course, while strengthening spiritual motivations, we must also recognize the diverse needs of employees at different stages and in different situations. For example, for employees who have just started working, their material needs are relatively strong. For this group, salary motivations should be strengthened to stimulate their work enthusiasm and willingness to stay, providing a strong talent reserve for the stable and long-term development of the company. Motivations are not a fixed formula, nor are they a universally applicable theorem. Based on the principles of fairness, feasibility, and effectiveness, this article proposes comprehensive and multi-channel motivation measures that take into account national conditions, industry status, and the actual situation of individual employees.

1) Provide a relaxed and pleasant working environment and team atmosphere, as well as a fair and just corporate culture and distribution system (Kuzior, 2022). Technical employees are reticent and frank, not good at words. Therefore, an open and respectful communication environment, a comfortable and welcoming workplace, a harmonious and collaborative team atmosphere, a positive corporate culture, a fair and just reward and punishment and distribution

system, as well as the immersive service of managers, can effectively reduce conflicts and enhance team harmony.

2) Establish and improve a long-term training mechanism, rationally utilize internal and external learning resources of the enterprise, and comprehensively cover professional technical training and academic upgrading training (Li, 2023; Macpherson, 2024). Deeply integrate the training mechanism with the company's business strategy, focus on core content such as new technologies, new processes, and academic upgrading that technical employees are concerned about, and ensure that the training content is synchronized with employee needs and company strategy.

3) Provide challenging work content and decision-making autonomy to inspire employees' sense of pride and responsibility (Augustin, 2012; Sergio, 2018). Challenging work content such as technical breakthroughs or cross-departmental collaborative research and development can ignite employees' intrinsic motivation, push them beyond their comfort zones, and shift from "passive execution" to "active creation," thereby enhancing their professional pride.

4) Enhance employees' sense of organizational support and recognition, realize their personal values and career aspirations, and promote a win-win situation for both the organization and individuals (Zhong, 2023). Organizational support and recognition are key factors in motivation research, involving how organizations can make employees feel valued and cared for through various means, thereby enhancing employee satisfaction, performance, and loyalty.

5) Provide competitive salary and welfare systems to establish a good work-life balance (Fallucchi, 2020). In today's workplace, work-life balance has become a core demand for excellent talents when choosing careers, and competitive salary and welfare systems are the key cornerstones for attracting and retaining excellent talents.

New Knowledge from Research

This study explores the motivational and turnover factors of automotive technology R&D personnel, proposes practical and feasible incentive methods and measures for Chinese independent brand automotive technology R&D personnel, in order to fully stimulate their subjective initiative and innovation ability, and make certain contributions to the long-term development of Chinese independent brand automobiles.

Conclusion

A stable R&D team is the core cornerstone for enterprises and organizations to achieve long-term sustainable development. A stable, experienced, and collaborative R&D team can continuously accumulate technical capabilities, optimize R&D processes, reduce project iteration costs, and avoid knowledge gaps, efficiency declines, and resource waste caused by frequent personnel changes. A stable team not only ensures the continuity of technological innovation and the reliability of product iteration, but also forms sustainable technological competitiveness and innovation vitality, providing solid support for long-term strategic implementation, market expansion, and high-quality development. Therefore, a stable R&D team is crucial for sustainable development.

The incentive measures for automotive technology R&D personnel are as follows: (1) Provide a relaxed and enjoyable work environment and team atmosphere, as well as a fair and just corporate culture and distribution system. (2) Establish and improve a long-term training mechanism, make rational use of internal and external learning resources, and comprehensively cover professional technical training and academic upgrading training. (3) Provide challenging work content and decision-making autonomy to stimulate employees' sense of pride and responsibility. (4) Enhance employees' sense of organizational support and recognition, realize their personal values and career ideals, and promote a win-win situation for both the organization and individuals. (5) Provide a competitive salary and welfare system to build a good balance between work and life.

Suggestions

This study adheres to rigorous theoretical paradigms such as motivation theory, and internal marketing. It adopts a qualitative research method combining literature review and interviews to collect and organize data. Incorporating some reflections and summaries from the research team's experience in technology research and development and team management in the automotive industry, this study, based on the current socio-economic level of China, the development status of domestic brand automobiles, and the personal situation of automotive R&D personnel, summarizes the characteristics, turnover reasons, demand factors, and motivational measures of technology research and development employees in domestic brand automobiles in China through grounded theory. This forms an effective supplement to existing research. However,

due to various limiting factors, this study still has certain limitations, which are also key directions for future research.

This study adopted the snowball sampling method, the core logic of which is to recruit subsequent samples through recommendations from initial respondents. This chain reaction may lead to a highly homogenous sample group. Additionally, due to time and resource constraints, the sample selection in this study was limited to automotive R&D personnel in Anhui Province, China. Given the uneven development of the automotive industry across provinces, the data collected inevitably has certain limitations. Future research should expand the survey subjects as much as possible to make the conclusions more universally applicable.

We hope for a united and stable technical team, but we should also acknowledge that if the team remains too stable, issues such as rigid thinking and slow technological updates will inevitably arise. Therefore, an appropriate turnover rate is beneficial to the company's development. The injection of fresh blood can promote team progress and technological innovation. This requires us to find a balance point for the inflow and outflow of technical talents, ensuring that the technical team possesses long-term stable research and development capabilities, while also maintaining freshness and vitality.

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