

Research on Balanced Scorecard in Performance Management of High-tech Enterprises

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Abstract: High-tech enterprises are entities of high and new technology to create economic benefits, which play an important role in promoting the development of high and new technology. In recent years, high-tech enterprises grow rapidly and have broad prospects. Its important influence on economic development determines the significance of "Research on performance management of high-tech enterprises". This paper mainly discusses the current situation of performance management of high-tech enterprises and its countermeasures and suggestions. Taking Gree Electric as an example, taking the Balanced Scorecard as the theoretical basis, it points out the key factors that affect the performance management of high-tech enterprises. It solves the problem caused by the traditional enterprise performance evaluation method which only focuses on the evaluation of the business results and ignores the evaluation of the business process and development ability. The results show that the implementation of the performance index system guided by the Balanced Scorecard theory can promote high-tech enterprises to reduce short-sighted behavior, improve their ability to prevent risks, and achieve the maximization of enterprise value.

1. Introduction

High-tech industry is the sunrise industry in the 21st century, which has been widely penetrated in every aspect of our life. At the same time, as a high-tech industry, the home appliance industry is also the key support industry in China's "Thirteenth Five-Year Plan". It is the perfect integration of the latest science and technology and daily life, and is also the precise embodiment of the effective implementation of the innovation-driven development strategy. Ltd. (hereinafter referred to as "GREE"), whose history can be traced back to December 13, 1989, was successfully listed on Shenzhen Stock Exchange on November 18, 1996 with the code 000651 after several years of continuous development and reform. Because of its huge product market share and strong competitive advantages at home and abroad, it has been closely watched by investors. Therefore, the study of performance management of high-tech enterprises, taking Gree Electric as an example, has very important significance for the performance management of participants in various aspects of economic activities and similar enterprises[1].

As we all know, with the deepening of economic globalization, more and more enterprises are looking abroad, and Chinese enterprises are no longer limited to those operating in China. Therefore,

in the context of increasingly fierce international competition, enterprises need to use technology leadership and management leadership to achieve breakthroughs in both domestic and overseas markets. The characteristics of high-tech enterprises such as high investment, high growth, high risk, prominent innovation status, high revenue and high technology talent density have attracted widespread attention. The willingness of participants in various economic activities to invest in high-tech enterprises has also been actively mobilized by the huge productivity released by it.

While high-tech enterprises in China are in such a competitive external environment, there is not yet a relatively ready-made, operable and localized performance evaluation index system to manage the performance of enterprises. At the same time, the lack of sufficient understanding of performance management theory and the unreasonable internal organizational structure of enterprises have led to the introduction of many advanced performance management methods that are only formal and cannot effectively improve company performance. Therefore, how to obtain the maximum enterprise value, how to enhance the ability of enterprises to prevent facing risks, and how to measure performance with a practical and effective performance management method in the balance of maximizing the value of high-tech enterprises and minimizing risks, in order to achieve the goal of maximizing enterprise value has become a common and urgent problem to be solved.

2. Relevant theoretical basis

2.1 Performance Management Overview and Methodology

Table 1: Six Common Performance Management Methods

Assessment Method	Advantages	Disadvantages	Applicable business type
Balanced Score Card (BSC)	<ol style="list-style-type: none"> 1. Refined management 2. Reduce short-sighted behavior 3. Encourage employees to learn on their own 	<ol style="list-style-type: none"> 1. Higher requirements for the foundation of the enterprise 2. Large workload 3. Difficult to revise 	Larger, relatively mature, relatively high level of management, goal and strategy oriented companies
Management By Objectives (MBO)	<ol style="list-style-type: none"> 1. Clear objectives, easy to examine 2. Benefit employees to master the work content 	<ol style="list-style-type: none"> 1. It is difficult to compare the work performance of employees in different departments 2. Easy to lead to the process of loss of control 	R&D, production, athletic, sales organizations or companies
360 degree feedback evaluation	<ol style="list-style-type: none"> 1. More comprehensive 2. The information obtained by management is more accurate 	<ol style="list-style-type: none"> 1. Higher assessment costs 2. Assessment and training work is difficult 	Mainly used for collaborative performance evaluation within the company, mainly for middle-level and above personnel
Key Performance Indicator (KPI)	<ol style="list-style-type: none"> 1. Establish assessment standards to reduce subjectivity 2. Highlight the work contribution of employees 	<ol style="list-style-type: none"> 1. It is easy to import mechanical assessment methods and lose the efficiency and vitality of organizational operation 2. KPI indicators are more difficult to establish 	Relatively mature, clear strategy and excellent corporate culture
Objectives and Key Results (OKR)	<ol style="list-style-type: none"> 1. Emphasis on employee engagement 2. Emphasis on improving employees' working ability 	<ol style="list-style-type: none"> 1. Not conducive to employees' creativity 2. The appraisal results are highly dependent 	Internet companies
Economic Value Added (EVA)	<ol style="list-style-type: none"> 1. Guarantees the interests of shareholders 2. Business performance is more credible 	<ol style="list-style-type: none"> 1. Promote short-sighted behavior 2. Intrinsic growth opportunities cannot be explained 	Companies with relatively stable profit levels

(1) Overview of Performance Management

The concept of performance management was first introduced by Beer M. and Ruh R. A. in 1976. They defined performance management as "managing, measuring, improving performance and enhancing development potential". In modern management science, performance management is defined as the continuous and effective communication between an organization and its members

based on certain methods and systems that provide them with the opportunity to improve their performance. The goal is to set performance goals and provide continuous feedback, communication, and improvement to ensure that work behaviors are aligned with the organization's performance requirements is a management activity that achieves the organization's strategic goals, as shown in Table 1.

It is found that when selecting performance management methods and formulating performance evaluation index systems, it is necessary to combine the background of the times and the actual problems encountered in the course of business operation, and constantly adjust and improve them, for example, highlighting the characteristics of high-tech enterprises, and the index weights of companies with different industry characteristics are different. To make the transformation and upgrading of high-tech enterprises implemented quickly and well, it is inevitable to make great efforts in management, and performance management is an important and indispensable part of it.

(2) Common methods of performance management

When choosing a performance management approach, a company needs to consider many factors, such as industry characteristics, company size, organizational structure, and company culture. As the table shows, different types of companies can choose the most suitable performance management method according to their own characteristics and needs. Currently, there are six main performance management methods that are well established and systematic, which are commonly used[2-3].

According to the latest survey results, nearly 70% of the world's top 500 companies have started to use the Balanced Scorecard as a performance management method to varying degrees, which shows that it has indeed played a great role in corporate performance management and refinement of operations. Since the balanced scorecard has the advantages of reducing short-sightedness, refining process management, helping managers focus on the long-term development of the company, and adapting to the unique characteristics of high-tech enterprises and meeting their higher requirements for innovative management, it is a more suitable performance management method for high-tech enterprises than other methods.

(3) Balanced Scorecard Theory Review

The Balanced Scorecard was first introduced in 1990 by Professors Robert S. Kaplan and David P. Norton of Harvard Business School, and in 1992 they published the article "The Balanced Scorecard: A Driver of Business Performance" in the Harvard Business Review. The content was aimed at the traditional performance evaluation system, which is based on financial indicators and emphasizes the importance of non-financial indicators. Performance measurement is used to communicate the relationship between strategy and business. The performance assessment focuses on and interacts with each other within the following four dimensions: financial, customer, internal operations and learning and growth dimensions, and breaks down and refines the organization's strategy into feasible metrics and goals.

1) Financial aspects

How can we satisfy shareholders and investors to achieve financial success? How can we maximize shareholder value? The direct result of running a business is the financial benefit to shareholders. It is under good economic conditions that a company can grow better. The resulting financial performance indicators are important parameters that are of interest to the company's shareholders and investors and can directly reflect the company's performance. Many indicators at the financial level can effectively reflect a company's ability to earn profits. The indicators include net profit growth rate, operating income margin, gearing ratio, etc. These indicators provide a comprehensive and integrated measure of the success of business activities and the company's ability to create wealth.

2) Customer level

How should we satisfy our customers in order to achieve our vision? Customers are the basis of a

company's existence, and only by providing them with products and services that meet their needs can we generate profits and contribute to the company's future growth. Customers are usually most concerned with time, quality, performance, service and cost, and companies must strive to improve in these areas by taking other measures such as delivering on time, improving product quality and reducing the price of raw materials.

3) Internal operation level

In what processes should one build strengths in order to satisfy customers and shareholders? A business cannot be perfect in every way, and in order to meet the ever-changing needs of customers for goods, a company must have a strong competitive advantage in some aspect of its internal operations level. At this level, managers should identify the key internal processes within which the business needs to operate, which can help the company achieve its value proposition and find, attract and retain potential customers, as well as meet the expectations of shareholders.

4) Learning and growth level

In order to continuously create shareholder value, meet customer needs and improve internal efficiency, companies and their employees need to continuously learn and grow. This dimension focuses on the improvement of learning and innovation capabilities. The learning and growth dimension is the guarantee for achieving the other three objectives. Learning and growth includes three key objectives: increasing employee motivation, enhancing collaboration, and improving the use of information systems[4-6].

2.2 Overview of high technology enterprises

(1) Identification of high-tech enterprises

China mainly adopts the method of identification to identify high-tech enterprises. According to the "Management Measures for the Identification of High-tech Enterprises" jointly issued by the Ministry of Finance, the Ministry of Science and Technology and the State Administration of Taxation on April 14, 2008, a high-tech enterprise in China is defined as: a resident enterprise registered in China for more than one year, except for Hong Kong, Macau and Taiwan, which continuously conducts R&D and transformation of technological achievements in the high-tech fields supported by the state, thus forming the core of the enterprise's independent intellectual property rights, and use it as the basis for business activities.

In terms of accounting, the following conditions must also be met for the identification of high-tech enterprises.

1) Science and technology personnel with university degrees or above account for more than 30% of the total number of personnel, including more than 10% of R&D personnel.

2) The company continuously conducts R&D activities to make significant improvements to its products (services) using advanced knowledge or innovative technologies, in which the ratio of R&D expenditures to total revenues must meet the following requirements.

A. The share of enterprises with sales revenue of less than 0.5 billion yuan in the most recent year is at least 6%.

B. The share of enterprises with sales revenue between 0.5-200 million yuan in the recent year is at least 4%.

C. The share of enterprises with sales revenue of more than 200 million yuan in the latest year is at least 3%.

In addition, the total R&D expenses incurred by the enterprise in China should account for at least 60% of the total R&D expenditure. If the company is registered for less than three years, it should be calculated based on the actual operating period.

Revenue from high-tech products (services) exceeds 60% of the company's annual revenue

Although experts and scholars at home and abroad still lack a unified and precise definition of high-tech enterprises, they still have great similarities; in other words, they all define high-tech enterprises from three perspectives: the share of scientific and technical personnel and R&D personnel, the share of R&D expenditures and the share of revenues from high-tech products (services).

(2) Characteristics of high-tech enterprises

In addition to the general characteristics of traditional enterprises, high-tech enterprises also have the following main characteristics.

First, high investment. High-tech companies have the characteristic of high investment, which is mainly reflected in high talent, high intelligence and high capital investment. Statistics show that high-tech companies consume 10 to 20 times more resources than traditional companies. For high-tech companies, due to their own unique characteristics, the pull effect of R&D expenditures on corporate performance will also be more obvious than that of other types of traditional companies.

Second, high risk. At present, scholars generally believe that high-tech enterprises have the characteristics of high risk, and there are great uncertainties and risks in the research and development of high-tech and its subsequent industrialization smoothly or not. Compared with traditional companies, high-tech enterprises are characterized by unstable technology, immaturity of the market and lack of management experience. Because of this high risk of R&D investment, the pull effect on performance sometimes becomes less stable, and more R&D investment does not necessarily have better effect, so this instability will affect the evaluation effect of enterprise performance and make it more and more complicated.

Third, high returns. Although most high-tech enterprises have high returns, they also face huge risks. Successful investors receive returns that are usually ten, twenty, or even hundreds of times the initial investment. Therefore, despite the possibility of huge risks, there are still many entrepreneurs who are attracted to the high-tech field.

Fourth, high growth. The growth of successful high-tech enterprises is quite different from the balanced development of enterprises in traditional fields. The development of high-tech enterprises usually manifests itself in a super-regular and leaping manner. They can rapidly occupy the market, which makes the sales revenue, net profit, total assets and other indicators of the enterprise rise rapidly in a relatively short period of time, bringing huge economic benefits and development opportunities for the enterprise.

Fifth, innovation is prominent. Since modern people are extremely individualistic and prefer extreme changes, the market environment and customer demands in which high-tech enterprises are located are ever-changing. Innovation in technology and innovation in management are both very important for high-tech enterprises. Only through continuous innovation can the R&D investment of high-tech enterprises really turn into competitive advantages and form a virtuous cycle of innovation. When establishing the evaluation index system for high-tech enterprises, the characteristics that high-tech enterprises have must be fully taken into account to make the evaluation index more comprehensive and scientific.

Sixth, high technology talent intensive. High-tech enterprises are highly dependent on talents, so they have more high-tech talents than other enterprises. The number of scientific and technical personnel is also specified in the identification criteria of high-tech enterprises. For example, the number of scientific and technical personnel with university degree or higher needs to reach a certain percentage, which is about five times that of traditional companies. Therefore, in the process of creating valuable products or services in high-tech enterprises, the role of intangible capital, especially scientific and technological human capital, becomes more and more prominent[7-9].

3. Status of Performance Management in High-tech Enterprises

3.1 Analysis of the Current Situation of Performance Management in High-tech Enterprises

In order to occupy a place in the fierce market competition and further expand the market share of products and establish brand effect, most managers of high-tech enterprises have started to realize the behavior by increasing R&D efforts, recruiting R&D talents, optimizing marketing channels, diversifying strategic transformation, etc. So how to evaluate whether these behaviors bring the enterprises a continuous stream of revenue or hit the water without results? Therefore, high-tech enterprises need to have a set of applicable, scientific and operable performance evaluation system to evaluate the behavior of enterprises and employees. The performance management method is an indispensable part of the enterprise performance evaluation system. On the one hand, the existing performance management methods are relatively single, and home appliance enterprises have a four-in-one business model integrating R&D, production, sales and after-sales, so the traditional performance management methods are somewhat thin and lagging if we want to evaluate their enterprise performance from different dimensions of home appliance enterprises; on the other hand, because of the close relationship between high-tech enterprises and intellectual capital. On the other hand, because of the close relationship between high-tech enterprises and intellectual capital, home appliance enterprises are no exception, different dimensions of performance evaluation should be hierarchized and specified according to the industry characteristics of home appliance enterprises in order to better evaluate the enterprise performance. Next, the current status of performance management of high-tech enterprises will be analyzed mainly from performance evaluation methods.

As far as the current performance management methods of high-tech enterprises are concerned, the most widely used method is the financial indicator method, which believes that the impact of all actions taken by enterprises will eventually be reflected in the financial indicators for investors and managers to adjust their business strategies. The financial indicators approach is widely used by companies because it is easy to operate, easy to access financial data in the daily operation process, and directly contributes to the economic benefits of the company. However, there are many limitations and shortcomings in the financial index method. Firstly, since most of the data under the financial index method comes from the financial statements prepared by enterprises, if there are mistakes or falsifications in the financial statements, the evaluation of enterprise performance by the financial index method is invalid and untrue. Finally, the traditional financial index method is also easy to lead enterprises to obtain short-term economic benefits and ignore long-term benefits.

Some of the more mature high-tech enterprises have started to pay attention to the importance of employee performance management and actively use new performance management methods, such as Gree Electric, Midea Group and other companies in the home appliance industry have started to use the balanced scorecard performance management strategy. However, for most of the small and medium-sized high-tech enterprises, they still focus only on the financial dimension of performance evaluation, i.e., they pay attention to short-term performance and base on post-evaluation, ignoring their long-term development potential and attitude, which can neither reflect the real situation of high-tech enterprises in a comprehensive manner nor have certain limitations, and is not conducive to monitoring and adjusting the operation of enterprises.

3.2 Performance Management Difficulties in High-Tech Enterprises

Overall, there has been a great progress and breakthrough in the research of performance management of high-tech enterprises, and many valuable results have been achieved. These results provide a solid theoretical foundation for further research on performance management of high-tech enterprises. However, there are still more difficulties in the performance management of high-tech

enterprises.

(1) Limitations of traditional financial performance evaluation

Traditional performance management methods usually involve only financial performance and pay less attention to non-financial indicators, so it is difficult to fully reflect the true state of the business. The data provided by external financial statements of enterprises are all capable of being measured in monetary terms, and the information they reflect can be specifically quantified in numbers. However, there are still many important non-financial information that are difficult to be measured simply by currency. With the further improvement of enterprise performance management theories and methods and the continuous development of modern information technology, the evaluation of non-financial indicators should also become an important part of the overall evaluation of high-tech enterprises.

(2) Intangible assets such as human capital cannot be effectively valued

Traditional performance management methods have not recognized the important role that intangible assets such as human capital play in the development of high-tech enterprises, nor have they included the future development potential of enterprises in the scope of assessment. At present, the current performance evaluation system in China has not involved too many indicators of human capital. The performance management methods and evaluation indexes of high-tech enterprises should be innovative and forward-looking, emphasizing the innovative role of human capital in business development in the era of intellectual capital, so that companies can gradually establish a "people-oriented" innovation management mechanism.

(3) Lack of attention to enterprise development capability and R&D investment

High growth and high risk are the two most obvious characteristics of high-tech enterprises. If investors only focus on growth and ignore the great risk, it will encourage short-term behavior and bring great hidden danger to the future development of the enterprise. Therefore, the performance evaluation of high-tech enterprises should not only look at the current operation level, but also pay attention to the sustainability of future earnings, growth potential and risk level of the enterprise. In order to maintain the continuous, high and stable growth of its sales and profits, high-tech enterprises should strive to continuously increase the investment in research and development expenditures, so as to enhance the innovation capability of enterprises.

(4) Lack of performance assessment of internal input

Internal input is an important part of the capital activities of high-tech enterprises, and the effect of its output can largely affect the core competitiveness of high-tech enterprises, and is also the intrinsic motivation for the existence and growth of enterprises. The current performance management methods all focus on the performance evaluation of external outputs. But the internal performance evaluation indexes of enterprises for their own input construction and internal operation construction are less, which is not conducive to high-tech enterprises to establish a scientific and comprehensive evaluation system.

3.3 Analysis of the causes of the difficulties

(1) Too much pursuit of quantitative indicators

Managers often hope to completely eliminate subjective factors in the evaluation process and achieve fairness and impartiality in performance evaluation by designing and improving the index system. In fact, however, this is difficult to achieve regardless of the performance management method and evaluation indicator system. For example, although salespeople can use their sales volume to measure performance, considering the company's long-term development strategy, qualitative assessments such as salespeople's attitude toward customer service, their ability to retain old customers and develop new ones, and their communication efficiency with customers are also critical. For high-tech companies with a prominent innovation position, a qualitative assessment of

R&D personnel may be more useful than a quantitative one.

(2) Blindly apply the assessment template

In China, the traditional enterprise performance evaluation and assessment system is still mainly based on the core metric of maximizing the company's shareholders' wealth, which is likely to cause high-tech enterprise managers to follow the flow of other enterprises, forming a blind pursuit of speed and expansion of enterprise scale of rough development, which is not conducive to promoting its long-term development.

(3) Leadership anxiety and avoidance

Leaders often take on the role of evaluator and are the lead and coordinator of performance appraisals. In reality, however, many business executives are forced to participate in performance appraisals. Some see performance appraisals as irrelevant, from which they derive no benefit; others fear that they will conflict with employees, and they often view them as a process that pits leaders against their subordinates. Managers should not intentionally avoid or even loathe performance management, but should assume their responsibility to assess the performance of their subordinate employees objectively, fairly, qualitatively and quantitatively.

(4) Insufficient publicity of performance management ideas

In the performance evaluation of many high-tech companies, workers often feel that they are not very clear about the requirements of their jobs and do not know the specific criteria for measuring their performance. This gives workers the idea that whether they can get a good score in performance evaluation is not in their hands, and that the criteria for performance evaluation are fluid and they do not know what they should do best, so they will have negative thoughts about performance management.

(5) Lack of stage feedback mechanism

Many high-tech companies conduct performance reviews only once a year to calculate the amount of the employee's year-end bonus, but many employees question the final evaluation results at the end of the year and are dissatisfied with their leaders for not informing them of their performance data early enough, because it makes them miss opportunities for improvement in the process, which, in the end, is due to the lack of a step-by-step performance feedback mechanism in the company.

3.4 The necessity of applying the balanced scorecard to the performance management of high-tech enterprises

Due to the six characteristics of high-tech enterprises, the selection of performance management methods for high-tech enterprises should meet the following requirements.

(1) Should highlight innovation and growth

Innovation is an important prerequisite for high-tech enterprises to be able to develop, and an enterprise without innovation will soon die out early in the fierce competition. In the complex and fierce market competition environment, whether it is technical innovation or management innovation, both are key factors for high-tech enterprises to maintain competitiveness and improve business capability. Therefore, the performance management of high-tech enterprises should focus on the assessment index of technological innovation and be improved continuously in the management process. At the same time, due to the high growth characteristics of high-tech enterprises, the performance management of high-tech enterprises should also focus on this aspect of growth.

(2) Focus on the evaluation of the efficiency of capital use

Since high-tech enterprises are characterized by fast product renewal, prominent innovation status and high investment, high-tech enterprises need not only high returns but also sufficient cash flow during operation to solve unexpected capital turnover problems, therefore, high-tech enterprises need to focus on the effectiveness and adequacy of enterprise capital use, i.e. capital use efficiency.

(3) Pay attention to the sustainable development of enterprises

The performance management of high-tech enterprises must be based on the strategic objectives of the enterprises, and the establishment of their performance indicators must also be based on the future strategic planning of the enterprises. Unlike traditional enterprises, high-tech enterprises focus more on the future development potential of the company and gradually adjust their business direction and strategic objectives as the market environment changes.

In summary, for high-tech enterprises, the use of advanced balanced scorecard performance management methods can not only meet the development needs of the high-tech industry, but also effectively enhance the sense of independent innovation of high-tech enterprises and their employees, and contribute to the long-term sustainable development of the enterprises[10-11].

4. Performance management case of Zhuhai Gree Electric Co.

After the above elaboration on the principle of Balanced Scorecard, here we further analyze the case company with Balanced Scorecard, which serves the purpose of deeply analyzing the performance management situation of Gree and revealing the opportunities and challenges faced by Gree.

4.1 Analysis of the current situation of Gree

Table 2: Balance Sheet (Summary Table)

Year	2014	2015	2016	2017	Change range	2018	Change range
Monetary Funds (Billions of dollars)	545.5	888.2	956.1	996.1	↑4.2%	1130.8	↑13.5%
Accounts Receivable (Billions of dollars)	26.6	28.8	29.6	58.1	↑96.3%	77.0	↑32.5%
Other receivables (Billions of dollars)	3.8	2.5	2.4	2.5	↑4.2%	25.5	↑920%
Inventory (Billions of dollars)	86.0	94.7	90.2	165.7	↑83.7%	200.1	↑20.8%
Total current assets (Billions of dollars)	661.9	1014.2	1078.3	1222.4	↑13.4%	1433.4	↑17.3%
Long-term equity investments (million yuan)	0.9	1.0	1.0	1.1	↑10.0%	22.5	↑194.5%
Accumulated depreciation (Billions of dollars)	54.7	62.7	78.6	93.2	↑18.6%	122.2	↑31.1%
Fixed Assets (Billions of dollars)	149.4	154.3	176.8	174.7	↓1.2%	183.9	↑5.3%
Intangible assets (Billions of dollars)	24.8	26.6	33.6	36.0	↑7.1%	52.0	↑44.4%
Total Assets (Billions of dollars)	891.7	1258.8	1368.3	1527.4	↑11.6%	1814.0	↑18.8%

Data source: Company's annual reports 14-18

(1) Company introduction

Zhuhai Gree Electric Appliance Company Limited ("Gree" or the "Company") is an international household appliance company, mainly engaged in household air conditioners, central air conditioners, water heaters, refrigerators, cell phones and household appliances. The Company was established in 1991 in Zhuhai, Guangdong Province, formerly known as Zhuhai Special Economic Zone Industrial

Development Corporation. In November 1996, GREE was successfully listed on the Shenzhen Stock Exchange. In 2018, the Company's revenue was 198.1 billion yuan, an increase of 33.61% over the previous year, and its total profit was 26.203 billion yuan, an increase of 16.97%.

Gree Electric is always committed to improving the awareness of independent innovation and exploring the road of independent innovation. According to the website query, Gree Electric passed a new round of review of high-tech enterprises in December 2017, which is valid until December 2020, during which Gree Electric can pay 15% corporate income tax in accordance with the preferential tax policy. According to Gree's internal data, in 2018, Gree enjoyed a total of 5.274 billion yuan of tax reduction, of which 3.172 billion yuan, or 60.14%, enjoyed tax reductions from various preferential policies for corporate income tax.

According to the requirements on accounting aspects in the recognition of high-tech enterprises, GREE's R&D personnel in 2018 accounted for 13.3% (> 10%) of the total number of employees of the company in that year; R&D expenditure accounted for 3.49% (> 3%) of total sales, all of which met the above qualification for the recognition of high-tech enterprises, as shown in Table 2.

(2) Analysis of Gree's financial indicators

① Trend analysis

From 2014 to 2018, Gree's total assets have been on an upward trend. Among them, it can be seen through the financial report that the overall change in non-current assets, except for long-term equity investments, is not significant, so the fluctuation and overall increase in current assets is the main reason for the overall relatively large increase in Gree Electric's total assets in the past five years.

The above table selects four items with a large proportion of current assets, namely: money funds, other receivables, inventories and accounts receivable. The following 2 points can be summarized from the table.

A. The accounts receivable and other receivables line item has increased significantly over the five-year period, especially in 2018, when other receivables increased significantly, by 920%. Other receivables include many accounts receivable, prepayments, dividends and interest receivables, etc. All receivables that are not related to the main business are grouped in this column. Therefore, there are some problems in recent years as Gree's accounts receivable and other receivables have increased as a percentage of revenue, even significantly higher than other competitors for a long time. Excessive other receivables may lead to a significant impact on the liquidity and profitability of the company.

B. Inventory surged in 2017, up 83.7% from 2016, which was a major contributor to the higher total asset value in 2017 and in 2018, monetary funds rose 13.5%, probably due to the fact that Gree obtained funds for its operations from distributors mainly in the form of sales rebates, which led to a significant boost in cash flow, as shown in Table 3.

Table 3: R&D Investment

	2014	2015	2016	2017	2018
R&D investment (billion yuan)	--	--	--	57.67	72.68

Data source: Company's Annual Report 2018

According to the table above, in 2017, Gree's R&D investment was 5.767 billion yuan. In 2018, the accounting statement was changed, and R&D expenses were changed to a separate column in the consolidated balance sheet, and according to the accounting firm's audit, R&D expenses were 3.618 billion yuan. This indicates that the expensing rate of Gree's R&D investment in 2017 was 62.74%; according to the calculation, Gree's expensing rate in 2018 was as high as 96.15%, which was 33.41% higher than last year. Thus, the expensing rate of Gree's R&D investment is climbing year by year and is quite high[12].

4.2 Analysis of Gree's non-financial indicators

According to the characteristics of high-tech enterprises, the corresponding indicators are selected to establish the performance evaluation system of non-financial indicators of Gree Electric, as shown in Table 4.

Table 4: Non-financial indicators performance evaluation system in Gree

Level	Tier 1 Indicators	Secondary indicators
Clients	Market Control	Market share
Internal Operations	Customer Control	Customer Satisfaction
	Product quality improvement	Product Qualification Rate
	Improved management efficiency	Plan target completion rate
Learning and Growth	After-sales service optimization	Timeliness of after-sales service
	Technology Development	R&D cost investment rate
	Staff Quality	Composition of highly educated employees
	Employee Recognition	Employee Satisfaction

(1) Customer level

For the customer level, in order for its effects to be better reflected in financial indicators, each company should perform effective product market segmentation, find the most appropriate target groups and set relevant marketing and sales targets for the target customers. The key to establishing customer-level metrics is to identify the company's current and potential customer base and work to improve the quality of service. Of these, market share and customer satisfaction are the two most important aspects of achieving a company's financial goals at the customer level.

① Domestic market share

According to the data, GREE's air conditioning production and sales have been ranked first in China's air conditioning industry for more than 20 years, and has been the world leader for 14 consecutive years since 2005; according to the data shown by the industry's most well-known media, "HVAC Information", GREE has steadily ranked first in the domestic central air conditioning market for seven consecutive years.

② Foreign market share

According to the data of global well-known economic news, it is known that in 2018, Gree Electric easily won the first place in the global market share in the field of household air conditioners, and the second place was 7 percentage points lower than it; Gree Electric has always focused on how to effectively optimize the product sales structure overseas in recent years, and strived to seize the middle and high-end markets such as central air conditioners and inverter air conditioners to further increase Gree's share of foreign markets.

③ Customer satisfaction

Good and bad products are not easy for consumers to distinguish quickly in a short period of time, but the service gap can be perceived immediately by consumers and become the reason for their decision to purchase goods. Customer satisfaction can be divided into three main parts, namely: providing customers with the most popular products, improving product quality and after-sales service, and setting and maintaining reasonable market prices. Under these three components, high-tech companies need to focus on the dynamic evaluation of the products by customers, the failure rate of the products and the timeliness of the after-sales service of the products.

According to the "Air Conditioning and other 6 types of home appliances customer satisfaction

survey results" released in 2018, GREE air conditioners are in the lead with 82 points, followed by Haier with 79 points and the United States ranked third with a score of 78 points. This can also reflect the Gree air conditioning in user satisfaction has a good reputation, loved by consumers.

(2) Internal operation level

According to the balanced scorecard theory, the improvement of customer satisfaction and the effective achievement of financial management goals depend primarily on the efficiency and orderliness of the company's internal operations. Operational processes that affect the company's overall performance must be focused on, for example, optimizing production processes and the development cycle of new products and technologies, which will largely determine whether the company will have an advantage in the face of fierce competition. In short, the company must improve the quality of its products and the efficiency of its internal operations in order to provide more guaranteed services to its customers and turn its internal operational capabilities into the company's core competencies in order to outperform its competitors.

The total process of GREE's internal operation is mainly broken down into three processes: product realization process, management process and technical support process. Through the layer management of each process and the completion of each process focus on the content, the final realization of customer-level demand satisfaction.

① Product realization process

Product qualification rate. Gree Air Conditioning has a unique perspective on service, which consists of two main aspects: firstly, the quality of air conditioners must be qualified, and secondly, the installation of air conditioners must be standard. By strengthening internal quality control, Gree's product quality level has been steadily improving, with a process one-time delivery pass rate as high as 99.24% at 2018. The product after-sales failure rate has also decreased by an average of 20% for 15 consecutive years, successfully dropping from 16.43‰ (2004) to 0.60‰ (2018).

② Management process

Completion rate of planned target. Since Gree has been implementing the sales policy of "payment before delivery", it has not established the assessment system of "sales plan made by distributors", and the assessment for branches is mainly the annual sales and profit rate indicators, so the accuracy of sales plan is actually not high. Therefore, the accuracy of the sales plan is actually not high. For the management department, the plan was only required to be submitted on time at the end of the month and the end of the year, and there were no clear rules on accuracy.

③ Technical support process

Timeliness of after-sales service. Gree's specific standard for after-sales service assessment is "to make arrangements within 1 hour, within 24 hours to the door in the city, and no more than 3 days to complete in remote areas; user visits must be carried out within 3 days." Therefore, the timeliness of the service is high, but there is still a lot of room for improvement.

(3) Learning and growth level

The major difficulties at the learning and growth level are whether the R&D expenditures and human resource costs invested by high-tech enterprises can be transformed into direct benefits that drive enterprise development, how to quantify them, and the long performance cycle generated by these inputs. In addition, how to motivate employees with high-tech knowledge and skills to create output for the enterprise is also a challenge. We can start from three aspects: R&D investment, composition of highly educated employees, and employee satisfaction.

① R&D input

At present, GREE has 14 research institutes, nearly 12,000 R&D personnel, 4 national R&D centers, more than 900 laboratories, and has successfully established two academician workstations for "electric motor and control" and "building energy saving", and has been approved to set up further postdoctoral research workstations and doctoral workstations in Guangdong Province. In 2018, Gree

invested 7.268 billion yuan in R&D, an increase of 26.04% over the previous year. In terms of patent applications, Gree ranked sixth in the country with 13,683, of which 1,834 were granted invention patents, and became the only household appliance company to squeeze into the top 10 in terms of the number of invention patents and the number of invention patents granted for three consecutive years.

② Employee satisfaction

A. Rationalization of compensation system

The remuneration mechanism of Gree Electric is currently a combination of fixed salary and variable performance pay, which is approved and paid on time for employees by taking into account their job characteristics, work performance, work geography, technical difficulty, etc.

In a 2018 release, Gree Electric said, "The company has decided to: increase the total monthly salary by RMB 1,000 per person based on performance, as a way to improve the salary level of employees." This means the company's current figure of 88,000 employees means that this pay increase will increase GREE's annual employee costs by at least nearly 1.056 billion yuan, which is no small amount. And behind this move, perhaps it also illustrates the current dilemma of talent loss within Gree. Therefore, the pay raise to reward employees is not the intention of the company, "retention" is perhaps the ultimate purpose of Gree.

B. Employee benefits

In addition to the salary increase, Gree President Dong Mingzhu also provides housing benefits to employees, that is, "one suite per person". Gree has about 600 people poached by competitors every year, most of whom have excellent working ability and have been carefully cultivated by the enterprise for 5 to 10 years, each valuable talent is the heart and soul of the enterprise, and the loss caused by the enterprise once they are poached by competitors is huge.

As the leading home appliance manufacturer in the high-tech industry - Gree Electric Appliance has a large amount of talent loss, not to mention other small and medium-sized high-tech manufacturing companies. In short, although large companies like Gree can retain talents by frantically increasing the salary and benefits of their employees, this method is not suitable for all companies.

4.3 Analysis of the difficulties and causes of GREE performance management

(1) Difficulties of Gree performance management

① High inventory risk

From 2014 to 2018, Gree's inventory amount showed a trend of high-speed climbing year by year, and from 2016 to 2018, its inventory amount rose significantly and always remained at a high level. In the first quarter of 2019, Gree's inventory amounted to 21.215 billion yuan. Although the annual report shows that Gree's sales targets are basically accomplished, and it also has very bright sales performance, but because Gree has a special dealer model and has implemented a rebate system of "payment before delivery" for dealers, it can regulate itself to a certain extent by transferring products to terminal channels and dealer channels. Therefore, the amount of inventory reflected in the statement may not be the real total.

② Online sales are slightly weaker

As mentioned earlier, in 2018, GREE's online retail sales of air conditioners accounted for only 17%, while offline is about twice as much as online, for example, AUX, Midea and other air conditioning companies, whose online sales are relatively weak. With the change in the age group of consumers and the development of online shopping habits, the change in consumption patterns may bring radical changes to the business. It is because of the expansion of the air conditioning online market, making AUX, Xiaomi and other brands focused on online, low-cost growth rapidly, and has always been the leading air-conditioning industry, Gree Electric, is also facing a serious challenge to

the competitiveness of products under the Internet sales model.

③ Irrational organizational structure of performance management

In the past few years, Gree Electric has made a lot of moves, making a series of major decisions such as making cell phones and cars, but most of them look like Dong Mingzhu's personal decisions, not the collective decisions of the board of directors, which is often criticized by the outside world as a problem of Gree's governance structure. Dong Mingzhu, the president of GREE, is known for her toughness and her "Iron Lady", and her unusual ability and boldness have undoubtedly elevated GREE to an unprecedented height. But this overpowering personality is a double-edged sword, which has formed a powerful management mode in the management process of Gree Electric. In a subtle way, the powerful culture of the head office group will also have a certain influence on the management style within the group, and the middle and senior managers will gradually follow this strong leadership style, which will, to a certain extent, lead to the process of uploading and transmitting, no one is willing to undertake those tasks with unclear division of responsibilities, and no one is willing to do the seemingly "superfluous" but really beneficial tasks outside the responsibilities. "It will not only affect the group relationship, but also lead to low efficiency within the company and the failure to implement performance management work. It will not only affect the group relationship, but also lead to low efficiency within the enterprise, and performance management is not implemented in practice.

④ Vague generalization of KPIs

Gree is ambiguous about the setting of specific key performance indicators, such as how to count "good" for employee compensation and benefits, how to count "high" for employee training, and how to count "strong" for work responsibility. "These are not clearly and explicitly explained in the performance appraisal system of the company, which leads to the fact that Gree's performance appraisal in non-financial aspects only has more general criteria as the basis for evaluating all functional departments (sales department, finance department, technology department, etc.), and lacks detailed division, so the operability is poor and the subjectivity of the management is strong, which to a certain extent will cause employees to be unconvinced of the results of the performance appraisal. To a certain extent, it will cause employees to be unconvinced of the results of performance appraisal.

(2) Analysis of the causes of difficulties

① Gree's corporate culture

GREE's president Dong Mingzhu is a woman who insists on principles at all times, and the first thing she looks at when assessing cadres is the loyalty of this person to the enterprise. However, in the process of actual implementation of the enterprise, this absolute loyalty will make the employees obey the boss's strategic planning, regardless of whether it is correct or not, they dare not appear a little disobedience, which will to a certain extent hinder the healthy development of the enterprise.

For modern enterprises, especially huge international enterprises like Gree Electric, the most difficult problem is talent management and the overall management of the company, which can never be done by individual ability alone, but must be managed by many people with vision and wisdom, and leadership is also productivity. Secondly, is the manager's delegation of authority. The trust of the manager to "let go" may make the company's management level increased, affecting the manager to obtain grass-roots information, affect decision-making, but also inevitably lead to its ability to control the enterprise decreased; but at the same time, the enterprise's efficiency and organizational innovation will be a great progress.

② Dealer inventory backlog

In the past few years, Gree has been accused of forcing its dealers to increase withdrawals by strong-arm tactics in order to better meet performance targets, and a considerable amount of inventory has been transferred to the sales channel. Therefore, the inventory reflected in Gree's annual report

may not be the true total, and the air conditioners it sells may not all be sold to consumers, but to Gree's dealers. Gree shifted the pressure of inventory partly to the downstream, artificially smoothing out a series of order fluctuations to achieve the goal of production and sales balance. According to the financial report, Gree's distributor "Henan Shengshi Xinxing Gree Trading Company Limited" provided Gree with sales revenue of about 10.496 billion yuan in 2018, making it the largest customer of the year for mortgage financing appeared. Therefore, in addition to being able to conclude that Gree's annual report does not reflect the true inventory data, the inventory situation and operational risks under its dealer system are not optimistic.

③ Insufficient development of e-commerce channels

Gree Electric's dealer model has made great contributions to Gree in the past, and is one of the treasures of Gree in the field of air conditioning, and its offline stores are also an excellent sales channel for Gree. If Gree still insists on adhering to the inefficient and sloppy distribution model, it will miss out on the massive demand brought by the new channel. In addition, its rival Midea Group has started to be dragged down by channel inventory in 2018, leading to an imbalance in production and sales, so in 2019, Midea began to pay attention to online sales, de-agentization and channel transformation. In the long run, if Gree Electric does not develop some new online sales plan like Midea Group, then the air conditioning industry landscape may also produce some changes in the future.

④ Inherent limitations of the internal organization

Dong Mingzhu, president of GREE, has described GREE as a combination of centralization and decentralization. All bold decisions of GREE are made by Dong Mingzhu, who is the chairman and general manager, while decentralization is only to issue the targets to the hands of each person in charge. Both the managers and the employees have a certain inertia of thinking, that is, the performance indicators are formulated only for the implementation of the tasks, rather than considering their interests from the employees' point of view, which leads to certain deviation from the actual situation of the enterprise.

In addition, if a company's chairman and leadership team are very good, and it also has advanced manufacturing technology and excellent products in its exclusive field, such as Gree Electric, the leading air-conditioning industry, the next step, perhaps, should focus on whether the leader of this company can continue to lead the enterprise to create sustained, good profit growth, Gree President Dong Mingzhu is indeed very good, but it is worth us The question to ponder is, aside from this excellent manager who is nearly 65 years old, does Gree have other outstanding successors or second in command? Dong Mingzhu once responded to the topic of retirement in a program, saying that when someone can take over Gree, it is the time to leave, she currently has a training target, but the other party does not know, and no one knows. In other words, the successor also has not really appeared in the public eye, the new successor's management style may also determine the future of Gree Electric where to go.

⑤ Lack of employee ownership participation

However, many employees of the company still think that performance management is only a formality, and some senior employees neither analyze the evaluation results seriously and objectively, nor do they really participate in the setting of performance indicators, nor do they really play their subjective the employees are not really involved in the setting of performance indicators, nor do they really play their own initiative to provide their own opinions for performance management. Therefore, even if a performance appraisal system is well designed, it cannot effectively improve and enhance the business performance and future development capability of the company without the active participation of employees.

⑥ Not making the most of advanced performance management methods

At present, Gree Electric uses the balanced scorecard method in its usual performance management

work, which is one of the most common performance measurement methods that can break down the company's strategic goals into actionable performance indicators and target values, but there is still much room for improvement in the use of this method and the implantation and development of the balanced scorecard idea when breaking down the indicators into the company's actual operation process, failing to fully play The company has not been able to play its monitoring and motivating role adequately[13].

5. Countermeasures and Suggestions

5.1 Countermeasures to strengthen the performance management of Gree Electric

After analyzing the difficulties in the performance management process of Gree Electric using the above ideas of balanced scorecard principles, the following countermeasures are proposed.

Reasonable control of production capacity, reduce dealer inventory. For Gree, as long as the goods out of the warehouse, whether sold to dealers or final consumers, are recorded as a business income, but for the channel dealers, those piled up in the warehouse not really sold out of the goods, are spending a large amount of money to purchase, the operating risks and financial pressure is huge, especially for some small dealers, accidentally will fall into The price war in the victims. Therefore, Gree can't put the pressure of completing the sales target on the dealers continuously, in the long run, when the downstream dealers have certain operation problems, it will also reverse the negative impact on Gree Electric.

Fully understand customers and broaden new marketing channels. Gree Electric needs to actively broaden marketing channels, in addition to the existing agency system with regional sales companies as the main body, but also actively use physical stores, e-commerce platforms, online batch and other direct-to-terminal efficient means of air conditioning sales, but also market segmentation, for different target customers using different pricing strategies, high prices to sell quality products, to enhance customer satisfaction at the same time, to earn more for the enterprise profits.

Encourage employees to collect their own performance appraisal data. In the process of performance appraisal, there needs to be sufficient data as a factual basis. Managers can use the "ABCD" file to classify an employee's performance level, not by the appraisers' feelings but by using data to speak, but the collection of these data is not easy, and the task is usually very large, and the accuracy of the data may also be controversial. Therefore, companies can encourage employees to collect and organize data related to their performance appraisal, just like "whoever claims is the one to prove", which can largely reduce the workload of managers, motivate employees, and ensure the authenticity and verifiability of information. In addition, it enables employees to discover the gap between themselves and the best employees in the work process, realize their own shortcomings in the work process, and correct them in time to do a better job.

Set up specialized performance appraisal positions and standardize the workflow. As the current performance appraisal work of Gree Electric is still mainly performed by leaders on a part-time basis, there is a lack of professional management of performance appraisers. Once a specialized performance appraisal position is set up, the appraiser can evaluate employee performance independently from the department leaders and reduce subjectivity. At the same time, because professional performance appraisers have relevant knowledge, they can make some suggestions on the performance management of each department in a more scientific way.

Deeply analyze the business substance and refine the design of key performance indicators. Gree needs to properly analyze the processes of its internal business and continuously refine the design of performance indicators accordingly. It mainly analyzes the objectivity and compatibility of the indicators related to performance evaluation, as well as whether they are adapted to the work of the appraisee, fairness in the case of multiple appraisers, etc. Secondly, both sides of performance

management should communicate and give more feedback, and reach a consensus on the determination of their key performance indicators and the achievement of their goals in order to serve as an incentive and enhance the operability of the indicators.

Gree Electric is a star brand in the home appliance industry in China's high-tech industry and holds a high position in the hearts of consumers. However, in such a context, GREE still has a great threat of substitution and will be easily surpassed by other competitors if it does not continue to improve its core competitiveness. In order to reverse the uncertainty in the market, it is necessary for high-tech companies to reduce short-term behavior, enhance their ability to withstand risks, and measure company value through performance evaluation, focusing on combining short-term benefits with long-term goals to maximize corporate value and achieve sustainable corporate development. Gree has to seize the opportunities provided by the general environment while making efforts from itself to promote the development and growth of the company.

5.2 Suggestions for strengthening performance management of high-tech enterprises

(1) "Quantifiable" is not the ultimate goal of performance indicators, but "verifiable" indicators are what high-tech enterprises really need. In the process of performance management of high-tech enterprises, there is often the misconception that "quantifiable is the only way to assess". Performance appraisers always hope to quantify all performance indicators with numbers, so as to completely avoid the disadvantages of subjectivity in appraisal work, reflect fairness and justice, and reduce conflicts between superiors and subordinates. But in fact, even if all the performance indicators are quantified, it does not mean the fairness and impartiality of their evaluation results, not to mention that for some positions, it is unrealistic to use quantitative indicators to measure his work ability and loyalty. Therefore, it is suggested that high-tech enterprises can pay more attention to some meaningful descriptive indicators and reflect them indirectly to the quantitative level that can bring actual benefits to the company.

(2) Establish and improve the key performance indicators for highly knowledgeable employees. Highly educated employees are an important guarantee for high-tech enterprises to maintain their competitiveness. Since the work performance of highly knowledgeable employees may not be reflected in the short term, it is difficult to be measured by general economic performance indicators. Therefore, their performance appraisal also has certain special characteristics compared with ordinary employees, and failure to accurately assess their work performance will greatly reduce both their motivation and initiative. The KPIs of such employees can generally be divided into performance indicators describing the work results and performance indicators describing the work process.

(3) Pay more attention to the sustainability of future earnings, growth potential and risk level of high-tech enterprises. Combined with the characteristics of high-tech enterprises, indicators such as the proportion of enterprise R&D expenditure and sales of high-tech products can be established. These indicators are relatively comprehensive and not limited by industry, which can comprehensively measure the future development ability of enterprises as well as prompt high-tech enterprises to pay more attention to R&D investment.

(4) The full implementation of performance management requires the attention and support of senior leaders. The human resource department will face layers of obstacles when evaluating employee performance. In addition to the lack of cooperation from grassroots employees, the most important thing is the contempt and obstruction from middle and senior leaders. They must have sufficient and correct understanding of performance appraisal, because they are both the appraiser and the appraised object. Therefore, the leaders should personally participate in top-down training and give full affirmation to HR department in the appraisal process, so that performance management will not be superficial and will really be transformed into the internal motivation of employees,

creating a continuous flow of performance for the company. motivation, and create continuous value for the enterprise.

(5) Increase the audience group of performance management training. An important reason why employees' performance management mindset is weak is that they do not have the means and opportunities to learn and get in touch with the knowledge about comprehensive performance management of the enterprise, they only need to care about the parts related to their own work, and they have neither motivation nor enthusiasm to learn about performance knowledge. At this time, companies need professionals with performance management knowledge to train employees on how to use the newly invested performance management system, to help department heads and junior employees understand the final attribution of indicators, and to increase their motivation to use the performance management system. In addition, the training should not be limited to departmental executives, but should penetrate into the hearts and minds of every employee, which requires a dedicated person to provide continuous guidance on performance communication.

(6) Conduct regular performance reviews and communicate feedback. After a year-long performance evaluation, employees will encounter a variety of performance-related problems, and in the process, they also have many opportunities to improve, so timely access to performance information and improve the performance situation is very much needed by employees. Managers should establish good communication and feedback mechanisms with employees, which can be quarterly, monthly or even on a weekly basis. These timely communications and feedback can, to a certain extent, greatly reduce the time that companies spend on solving employee performance management problems each year and greatly enhance the efficiency of the company.

6. Conclusions

The paper mainly discusses the performance management research of high-tech enterprises, in order to solve the defects of the existing performance assessment methods of high-tech enterprises, the balanced scorecard is now introduced to manage the performance of high-tech enterprises, and taking Gree Electric as an example, the factors affecting the performance management of high-tech enterprises are specifically analyzed from four levels: financial, customer, internal operation, learning and growth, which can be concluded as follows.

First, through the evaluation results of the balanced scorecard, high-tech enterprises can analyze their strengths, weaknesses and existing gaps with other enterprises with the help of evaluation indicators and actual results, so that the evaluated enterprises can benefit and eliminate the defects in the management system, and the evaluators can also adopt certain methods to reward and punish the evaluated objects according to the evaluation results, and the managers should actively take effective measures to narrow the gap and promote the rapid and healthy development of the enterprise.

Second, by establishing an internal performance evaluation system managed by the balanced scorecard, the internal management system of high-tech enterprises can be standardized. As the balanced scorecard is different from the traditional enterprise performance evaluation system which only relies on financial statement data, it provides high-tech enterprises with a new way of thinking to improve their management methods. According to the company's current management situation and strategic goals, using the thinking method of balanced scorecard to establish an internal performance evaluation system can refine specific indicators, such as business development goals, management standards, efficiency levels, strategic plans, etc., which is conducive to a scientific and effective approach to comprehensive and integrated management of the company.

Third, through the performance assessment method of balanced scorecard, the level of capital input and output, i.e. the level of return on investment, can be improved. From the perspective of investors, in order to assess the good or bad business performance of high-tech enterprises, the return on

investment of capital should be the core, prompting business managers to strengthen capital management, pay attention to human resources, R&D input and output efficiency, improve the quality of capital operation and market adaptability, so as to ensure the maximization of shareholders' equity.

Fourth, the balanced scorecard can explore the development potential of high-tech enterprises from four levels and decompose them at each level to fundamentally guarantee the maximization of enterprise value. Traditional enterprise performance evaluation methods all focus on financial operation status, which can motivate enterprises to pursue current benefits to a certain extent, but do not focus on future development capability. For high-tech enterprises like Gree, short-sighted behavior will make them lose their core competitiveness and lack strategic vision. In order to promote high-tech enterprises to strengthen capital accumulation and technological innovation and enhance their future value, enterprises must have a set of performance evaluation methods that can examine their development capability and encourage high-tech enterprises to focus on long-term development and building core competitiveness.

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