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on: **«Human Resource Information Management Process
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ABSTRACT

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The cost of human resource information management is one of the important factors for companies to gain competitive advantages. The cost of human resources is like a double-edged sword. The greater the human capital a company possesses, the greater the possibility of creating high value, but at the same time, the pressure on cost management also increases. Therefore, doing a good job in human resource cost management and keeping the company operating smoothly is a core weapon for the company to achieve stability and long-term development.

In the process of analyzing and researching the current status and improvement strategies of human resource information management processes at Shenzhen Jiedi Technology Co., Ltd., this paper mainly adopts a literature review, quantitative analysis, and questionnaire survey methods. Emphasis on human resource cost management from the perspective of human capital. Emphasize the link between human resource cost management and human resource management. The flexible control analysis method is used to study the cost management of human resources.

In terms of solutions, firstly, we should strengthen management awareness by advocating a high level of attention and full mobilization, shifting perspectives and enhancing understanding, and strengthening learning and skills. Secondly, we should enhance accounting and analysis by establishing accounting reports and indicator systems to improve data accuracy and analysis effectiveness. Thirdly, we should strengthen budget management by intensifying overall control in four aspects: organizational guarantee, budget preparation, budget execution, and budget evaluation. Lastly, we should strengthen the power of key links by proposing specific countermeasures to increase development cost investment, reform the salary incentive mechanism, seek alternative costs, and optimise inefficient costs.

Keywords: human resource cost; human resource cost management; human resource management; human capital.

АНОТАЦІЯ

Ян Южі. Удосконалення процесу управління інформацією про людські ресурси.

Кваліфікаційна робота за спеціальністю 073 «Менеджмент» ОП «Адміністративний менеджмент» СНАУ, Суми-2024 - Рукопис.

Вартість управління інформацією про людські ресурси є одним із важливих факторів для отримання компаніями конкурентних переваг. Тому ефективне управління витратами на людські ресурси та безперебійне функціонування компанії є основною зброєю компанії для досягнення стабільності та довгострокового розвитку.

У процесі аналізу та дослідження поточного стану розглядаються стратегії удосконалення процесів управління інформацією про людські ресурси в Shenzhen Jiedi Technology Co., Ltd. Акцентується увага на управлінні витратами на людські ресурси з точки зору людського капіталу. Підкреслюється зв'язок між управлінням витратами на людські ресурси та управлінням людськими ресурсами.

З точки зору рішень, по-перше, розроблено підходи для посилення обізнаності керівництва, пропаганди високого рівня уваги до процесів виробництва, зміни пріоритетів та покращення розуміння виробництва, а також зміцнення навчання та навичок. По-друге, пропонується покращити облік і аналіз шляхом створення бухгалтерських звітів і систем показників для підвищення точності даних і ефективності аналізу. По-третє, необхідно посилити управління бюджетом, зосередити на загальному контролі в чотирьох аспектах: організаційні гарантії, підготовка бюджету, виконання бюджету та оцінка бюджету. Нарешті, пропонується зміцнити ключові ланки управління, розробивши конкретні контрзаходи для збільшення інвестицій у витрати на розвиток, реформування механізму стимулювання заробітної плати, пошук альтернативних витрат та оптимізацію неефективних.

Ключові слова: вартість людських ресурсів; управління витратами на людські ресурси; управління людськими ресурсами; людський капітал.

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INTRODUCTION

Relevance of the topic. For enterprises, human resource cost management is particularly important in sustainable development. First, for a long time, the phenomena of "eating from the same pot" and "iron rice bowl" have been prevalent in state-owned enterprises. Many state-owned enterprises have not truly realized the "able to enter and exit" mechanism in their employment. The excessive labour force and high human resource costs in state-owned enterprises have affected their benefits, and the problems need to be solved urgently. Second, the state is vigorously promoting the reform of state-owned enterprises. From 2020 to 2022, the State-owned Assets Supervision and Administration Commission of the State Council required central enterprises and local state-owned enterprises to thoroughly implement the three-year action plan for the reform of state-owned enterprises. The reform of the three systems of labor, personnel, and distribution is an important part of this plan. The reform of these three tasks is closely related to human resource cost management, which means that human resource cost management has become an important part of improving the market-oriented operation mechanism and enhancing the competitiveness of the state-owned economy for state-owned enterprises.

Scientists such as C.W. Cobb, Paul H. Douglas, G Hermanson, Erie G. Flamholtz, Eugene, Xu Qintao, Fan Xing, Zhang Ying, Zhu Chuanshu, Zhang Hong, and Zhao Shuming have researched issues related to the improvement of human resource information management processes. However, despite the large number of papers on this topic, the issue of strengthening human resource cost management still requires broader research as times change.

Theoretical significance. This paper systematically sorts out relevant research and theories on human resource cost management, analyzes the current situation of human resource cost management in Shenzhen Jiedi Technology Co., Ltd. by using human resource cost composition, total indicators, benefit indicators, and elastic control, emphasizes the connection between human resource cost and various activities of human resource management, and proposes corresponding countermeasures, which enriches the application scope of relevant theories. At the same time, it also enriches the case studies

of small and medium-sized enterprises in human resource cost management.

Practical Value. This paper takes Shenzhen Jiedi Technology Co., Ltd. as the research object. Through the vertical comparison of historical data and the horizontal comparison of industry levels for the human resource cost data of Shenzhen Jiedi Technology Co., Ltd. in the past three years, combined with interviews and questionnaires, the paper analyzes the current situation of human resource cost management in Shenzhen Jiedi Technology Co., Ltd. and discovers the existing problems, enabling Shenzhen Jiedi Technology Co., Ltd. to understand and grasp its actual situation, which is conducive to timely discovery and resolution of problems, and plays a role of "taking the pulse and diagnosing" for management work. This paper, by "prescribing the right medicine" for the current problems and their causes in Shenzhen Jiedi Technology Co., Ltd., proposes targeted countermeasures and suggestions, which are conducive to improving the level of human resource cost management and other aspects of human resource management in Shenzhen Jiedi Technology Co., Ltd., and helping Shenzhen Jiedi Technology Co., Ltd. to increase investment returns on human capital and enhance market competitiveness.

Connection of work with scientific programs, plans, and topics. The qualification work was completed by the directions of research work of the Department of Accounting and Taxation: "Theoretical, methodological and practical aspects of transformation of formation and audit of accounting and reporting component of management of enterprises (institutions, organizations) in transparent conditions of innovative economy" (state registration number 0122U001378, 2022-2026).

Purpose of the study. The cost of human resource information management is one of the important factors for companies to gain competitive advantages. The cost of human resources is like a double-edged sword. The greater the human capital a company possesses, the greater the possibility of creating high value, but at the same time, the pressure on cost management also increases. Therefore, doing a good job in human resource cost management and keeping the company operating smoothly is a core weapon for the company to achieve stability and long-term development.

Achieving the stated goals requires completing the following tasks:

- Introduces the background and research significance of the topic selection, and focuses on collating domestic and foreign research on human resource cost management to find the main content and methodological entry points for this paper's research, thereby clarifying the research approach of this paper.

- Basic Concepts of Human Resource Cost Management. The first clarifies the definitions and relationships between "human resource cost" and "human capital".

- It defines the content of human resource cost management, and elaborates on its management indicators and methods.

- The current status of human resource cost management in Shenzhen Jiedi Technology Co., Ltd.

- Analysis of the main problems and causes of human resource cost management in Shenzhen Jiedi Technology Co., Ltd.

- Finally, Countermeasures for human resource cost management in Shenzhen Jiedi Technology Co., Ltd.

The object of the research is the process of human resources management.

The subject of the research is theoretical, methodological, methodical and practical aspects of human resources management.

Methods of research. This thesis takes Shenzhen Jiedi Technology Co., Ltd. as the research object and collects and organizes human resource cost data for the past three years from 2021 to 2023. Through vertical comparison of historical data and horizontal comparison with industry benchmarks, the current status is analyzed in terms of cost composition, total indicators, benefit indicators, and elastic control. Combining interviews and questionnaire surveys, four major issues are identified: "inadequate cost management mechanisms, low effectiveness of development cost investment, low return on use cost investment, and ineffective safeguard cost investment." The main reasons for these issues are analyzed as insufficient attention from the management level, lax control over key development costs, inflexible incentive mechanisms for use costs, and inadequate promotion and implementation of safeguard costs. Finally, countermeasures are proposed from four aspects: strengthening management awareness, accounting and analysis, budget management, and cost control. Among them, for strengthening cost

control, it is proposed to increase investment in development costs, reform the salary incentive mechanism, explore alternative costs, and optimize inefficient costs.

Interview method: Conduct interviews with managers of Shenzhen Jiedi Technology Co., Ltd. to collect and sort out deficiencies in human resource cost management, identify problems in human resource cost management, and propose countermeasures and suggestions through investigation combined with data analysis.

Quantitative analysis method: Conduct ratio analysis, trend analysis, and structural analysis of Shenzhen Jiedi Technology Co., Ltd.'s human resource cost data and operating data for the past three years. Compare and analyze these data horizontally with industry benchmarks. Finally, use a mathematical model to analyze the current status of human resource cost management in Shenzhen Jiedi Technology Co., Ltd. from the perspectives of total indicators, benefit indicators, and elasticity control.

Questionnaire survey method: Conduct a questionnaire survey within Shenzhen Jiedi Technology Co., Ltd. with the company's employees as the survey respondents. The survey content is related to human resource cost management in Shenzhen Jiedi Technology Co., Ltd. The purpose is to uncover human resource cost management issues hidden behind the data analysis after analyzing the current status of human resource cost data in Shenzhen Jiedi Technology Co., Ltd.

The information base of the study was the scientific works of scientists, monographs, own scientific research, materials of the enterprise under study.

The scientific novelty of the results of the dissertation research consists in substantiating the theoretical and practical aspects of human resources management.

- Emphasis on human resource cost management from the perspective of human capital.

- Emphasize the link between human resource cost management and human resource management.

- The flexible control analysis method is used to study the cost management of human resources.

The practical significance of the results obtained. The theoretical results of qualification work enrich the theoretical of human resource management and play a

certain guiding role in the research of human resource management researchers. The materials of the qualification work from a theoretical point of view can be implemented in the educational process of Sumy National Agrarian University in teaching disciplines related to labour management.

Personal contribution of the acquirer. Qualification work is an independent scientific work of the author. The author obtained scientific results, conclusions, and proposals submitted for defence.

Recognition of research results. The main results of the research were tested at conferences at all levels, in particular: I International Scientific and Practical Conference "Braslav Readings. Economy of the XXI Century: National and Global Dimensions" (November 1, 2023, Odesa); II International Scientific and Practical Conference "Strategic Priorities for the Development of Accounting, Auditing and Taxation in the Context of Globalization" (November 16, 2023, Sumy).

Personal Achievements:

1. Yan Yuzhi. Application analysis of enterprise human resource information management. Матеріали XXXVI-ої Міжнародної науково-практичної конференції «Сучасні аспекти модернізації науки: стан, проблеми, тенденції розвитку». м. Софія, Болгарія, 7 вересня 2023р. – ГО «ВАДНД», 2023.

2. Yan Yuzhi. The improvement strategy analysis of enterprise human resource management informatization. Матеріали XXXVI-ої Міжнародної науково-практичної конференції «Сучасні аспекти модернізації науки: стан, проблеми, тенденції розвитку». м. Софія, Болгарія, 7 вересня 2023р. – ГО «ВАДНД», 2023.

The structure and scope of work. Qualification work consists of an introduction, three chapters, conclusions and suggestions, a list of references, which consists of 59 titles. The main text is placed on 78 pages of computer text, the work contains 21 tables, 9 figures.

CHAPTER 1

HUMAN RESOURCE IN THE ENTERPRISE MANAGEMENT

Human resource cost is the foundation of human resource cost management. Human resource cost consists of acquisition cost, development cost, use cost, guarantee cost, and turnover cost (Table 1.1).

Human resource cost differs from labor cost. Labor cost originates from the financial concept, generally including total wages, social insurance, welfare, education, labor security, housing expenses, and other labor cost expenses. However, human resource cost is not only a financial category, but also more from the perspective of human resource management expertise [14].

Although some items of labor cost are different from the human resource cost under the human resource management system, they basically cover the content of enterprise human resource cost. In the comparison of industry levels in the following text, this article will use the labor cost information collected by the human resources department for industry level comparison.

Table 1.1 Human resource cost components

Level 1 subjects	Level 2 subjects	Level 3 subjects
Human resource costs	1. Acquisition costs	(1) Recruitment costs (2) Screening costs (3) Hiring costs (4) Placement costs
	2. Development costs	(1) Pre-job training costs (2) Job training costs (3) Off-the-job training costs
	3. Cost of use	(1) Maintenance costs (2) Incentive costs (3) Transfer costs
	4. Protection costs	(1) Regular security costs (2) Labour accident protection costs (3) Health protection costs
	5. Separation costs	(1) Separation indemnity costs (2) Pre-employment inefficiency costs (3) Empty job costs

Source: Based on information collated.

Human capital refers to the total amount of skills and productive knowledge carried by individuals, usually manifested as personal skills, knowledge, experience, etc., which together manifest as human quality. As the investment subject, enterprises obtain and increase the value of employees' human capital through investment behaviors, thus maximizing investment returns. Human capital investment has organizational attributes, and employees are its investment objects. Both enterprises and employees can share the returns on human capital investment. Forms of human capital investment include recruitment, compensation, education, training, welfare, and other channels [26].

There is a close correlation between human resource cost and human capital. Enterprises need to invest in human resource cost to cultivate and accumulate human capital to obtain investment returns. Through investment in human resource cost, human capital can be increased in value, improving the quality and efficiency of enterprise human resources, and further enhancing enterprise investment returns. Viewing human resource cost from the perspective of human capital emphasizes and focuses more on the returns brought by cost investment, rather than merely focusing on "cost" and blindly reducing cost without considering investment returns.

Human resource cost management refers to the management of cost expenses incurred during the recruitment, development, use, security, and turnover of enterprise human resources, with the aim of maximizing human resource efficiency and enterprise economic profits [35, 52].

1. Specific Content

The content of human resource cost management refers to conducting human resource cost analysis, budgeting for human resource costs, and controlling each link of human resource costs based on the calculation of human resource costs (Table 1.2).

Table 1.2 - Human Resource Cost Management Elements

Human resources cost management Content	Human resources costing
	Human resources cost analysis
	Human resources cost budget management
	Human resources cost control

Source: Based on information collated.

2. Basic Principles

(1) Principle of Systematicness. Human resource management emphasizes systematicness, and human resource cost management is a part of human resource management. Therefore, it is also necessary to emphasize systematicness, which should be linked with every link of human resource management and maintain the unity and systematicness of both.

(2) Principle of Dataization. The content of human resource cost management is human resource cost, which needs to be based on data and provide suggestions for management decisions through data analysis.

(3) Principle of Maximizing Efficiency. Improving the efficiency of human resource use is the core of human resource management and also the core of human resource cost management. The purpose of human resource cost management is to maximize the efficiency of the costs incurred, reduce cost waste, and improve the operating efficiency of the enterprise.

Common human resources cost management indicators can be divided into two categories, namely total indicators and benefit indicators.

Total indicators are those that measure the total level of human resources costs in an enterprise, including the average cost of human resources and the average salary. Through analyzing total indicators, enterprises can have a more comprehensive understanding of the human resources cost situation, which is conducive to the formulation of more effective management strategies.

1. Average cost of human resources

Since the number of employees in different enterprises is different, the average cost of human resources can be used to measure the level of human resources costs in enterprises. It can indicate how much human resources cost an enterprise needs to pay for hiring an employee. The calculation formula is: average cost of human resources = (total human resources cost ÷ average number of people) × 100%. The establishment of the average cost of human resources indicator can help enterprises to analyze and manage human resources costs more comprehensively, providing a powerful reference for enterprises to adjust the direction of cost use and improve the efficiency of cost use.

2. Average salary

Average salary refers to the average level of salary paid by enterprises, which reflects the salary level of enterprise employees. The calculation formula is: average salary = (total salary ÷ average number of people) × 100%. The average salary indicator can help employees understand their salary level in the enterprise on one hand, and on the other hand, it can help enterprises compare with the industry level, adjust the investment in human resources costs in time, and maintain the enterprise's attractiveness in talent acquisition in the market [46].

Benefit indicators are the core indicators for enterprises to analyze human resources costs, which connect human resources costs with economic benefits and can help managers better grasp the actual situation of human resources cost management. They mainly include the following four major indicators:

1. Labor distribution rate

The labor distribution rate refers to the ratio between the human resources cost invested by an enterprise in a certain period of time and the added value of the enterprise. The calculation formula is: labor distribution rate = (total human resources cost ÷ added value) × 100%. A comparison of the labor distribution rates between the same enterprise in different years and different enterprises in the same industry can reflect the relative level of human resources costs. Added value refers to the total value created by an enterprise through production activities within a certain period of time, which mainly includes wage compensation, depreciation, net tax, and profit.

2. Personnel cost rate

The personnel cost rate refers to the ratio between the investment in human resources costs and operating income. The calculation formula is: personnel cost rate = (total human resources cost ÷ sales revenue) × 100%. The lower the personnel cost rate is, the smaller the proportion of human resources costs invested by the enterprise in the production and sales process, and vice versa.

3. Proportion of human resources costs

The proportion of human resources costs refers to the proportion of human resources costs in the total costs of an enterprise. The calculation formula is: proportion of human resources costs = (total human resources cost ÷ total cost) × 100%. Different

industries have different degrees of factor intensity, such as labor-intensive, technology-intensive, capital-intensive, and other types. Therefore, the proportion of human resources costs may vary greatly among different industries.

4. Profitability of human resources costs

The profitability of human resources costs is an important indicator to evaluate the effect of enterprise human resources cost management. It is the ratio of total profit to human resources costs, reflecting the contribution of human resources costs to enterprise profitability. The calculation formula is: profitability of human resources costs = (total enterprise profit in a certain period $\div$ total human resources cost of the enterprise in the same period) $\times$ 100%. In the same industry, the higher the profitability of human resources costs, the better the enterprise performs in managing human resources costs and can obtain higher benefits. This indicator reflects the relationship between human resources costs and enterprise profits as well as the economic benefit status of the enterprise.

Methods of human resources cost management include flexible control method, ratio control method, etc. The ratio control method measures the deviation degree between enterprises and their competitors in the same industry. It needs to take the industry averages of labor distribution rate, proportion of total human resources cost in total cost, and personnel cost rate as references. However, on the one hand, it is difficult to accurately obtain the industry ratio indicators, and on the other hand, inaccurate comparison objects will greatly affect the analysis results. Therefore, this paper mainly adopts the flexible control method for research [33].

Flexible control of human resources cost links human resources cost with enterprise benefits, calculates the ratio of changes in per capita human resources cost and per capita added value, per capita sales, and per capita total cost between the current year and the previous year, and then substitutes it into comprehensive flexible control to obtain the elasticity coefficient and carry out input-output analysis. Flexible control examines the growth status of human resources costs, which means controlling the increase of human resources cost levels within the allowable range of enterprise input and output [39].

1. Basic index formula for flexible control of human resources cost

This study introduces three basic indicators of flexible control, namely the elasticity

of per capita human resources cost to added value, the elasticity of per capita human resources cost to sales revenue, and the elasticity of per capita human resources cost to total cost. The calculation formulas of the three basic indicators of flexible control are as follows:

$$E_v = \frac{(L - L_0) / L_0}{(V - V_0) / V_0} \quad (1.1)$$

$$E_s = \frac{(L - L_0) / L_0}{(S - S_0) / S_0} \quad (1.2)$$

$$E_c = \frac{(L - L_0) / L_0}{(C - C_0) / C_0} \quad (1.3.)$$

E_v represents the elasticity of per capita human resources cost to added value, which is the ratio of the change in per capita human resources cost to the change in per capita added value. E_s represents the elasticity of per capita human resources cost to sales revenue, which is the ratio of the change in per capita human resources cost to the change in per capita sales revenue. E_c represents the elasticity of per capita human resources cost to total cost, which is the ratio of the change in per capita human resources cost to the change in per capita total cost. L and L' represent the per capita human resources cost of the current year and the previous year, respectively. V and V' represent the per capita added value of the current year and the previous year, respectively. S and S' represent the per capita sales revenue of the current year and the previous year, respectively. C and C' represent the per capita total cost of the current year and the previous year, respectively.

2. Comprehensive elasticity of human resources cost

Let the comprehensive elasticity of human resources cost be X , and the weighted sum of E_v , E_s , and E_c be 1. E_c reflects the relationship between human resources cost and total cost. Compared to E_v and E_s , which are linked to added value and sales revenue, they can better reflect the input-output of human resources cost, and thus should be assigned a higher weight than the average level of the three and should account for a larger proportion. Drawing on the practice of Zhang Li and Liu Xisong [53] in establishing an enterprise labor cost control system, this paper assigns a weight of 0.4 to both E_v and E_s ,

and a weight of 0.2 to E_c . Based on the above, the comprehensive elasticity calculation formula for human resources cost can be obtained as follows:

$$X = 0.4E_v + 0.4E_s + 0.2E_c \quad (1.4.)$$

The comprehensive elasticity formula is applicable for analysis when the per capita human resources cost is in a state of growth, specifically including the following three situations:

(1) When $X < 0$, it indicates that the investment in human resources cost not only failed to bring expected returns to the enterprise, but also led to a decline in its economic profits, indicating that the management of human resources cost is out of control.

(2) When $0 < X \leq 1$, it indicates that the year-on-year growth of operating income benefit indicators exceeds the growth level of human resources cost, indicating that the enterprise is developing well and the management of human resources cost is under control.

(3) When $X > 1$, it indicates that although the investment in human resources cost has driven the economic growth of the enterprise, the growth rate of enterprise benefits is lower than the growth rate of human resources cost, indicating that the input-output of human resources cost is decreasing and has not exerted its due value. Scientific and effective human resources cost management in enterprises should control the comprehensive elasticity coefficient X within the range of 0 to 1.

When the per capita human resources cost is in a state of decline, the cost investment of the enterprise in each employee is decreasing. Although the benefit indicators may also increase at this time, it is not conducive to improving the work enthusiasm of employees and developing human resources. Especially when the per capita human resources cost decreases and the benefit output indicators also decrease, the enterprise's operation is under great threat, which requires the enterprise to pay high attention. Therefore, when the per capita human resources cost decreases, the enterprise should first change the above unreasonable phenomenon, and then conduct elastic control analysis of human resources cost and various output indicators on this basis.

CHAPTER 2

ANALYSIS OF THE MAIN PROBLEMS AND REASONS OF HUMAN RESOURCES COST MANAGEMENT IN SHENZHEN JIEDI TECHNOLOGY CO., LTD

2.1. The main financial and economic indicators of the enterprise.

Shenzhen Jiedi Technology Co., Ltd. is a company established on February 10, 2017, located at Room 637, Gangshen International Center, Xinniu Road, Xinniu Community, Minzhi Street, Longhua District, Shenzhen. The legal representative of the company is Kong Weiying. Its business scope covers multiple fields, including electronic product technology development, electronic components, communication products, telecommunication equipment, and more. Additionally, it engages in computer hardware and software R&D and sales, wedding photography, enterprise management consulting, information consulting, and the sale of various commodities. Currently, the company is in operation and is dedicated to providing high-quality services and products across multiple industries. Next, I will make a brief analysis of the financial situation of Shenzhen Jiedi Technology Co., Ltd. in the past three years.

Development costs include expenses incurred during pre-job, on-the-job, and off-the-job training. The development costs of Shenzhen Jide Technology Co., Ltd. in the past three years are shown in Table 2.1.

Table 2.1 - Development cost of Shenzhen Jiedi Technology Co., Ltd. in recent three years Unit: ten thousand yuan

item	In 2023	In 2022	In 2021
Cost of pre-job training	0	0	0
Job training cost	0.3	0.9	4.3
Off-job training costs	0	0	0
Total development cost	0.3	0.9	4.3
Gross wage	6191.32	5852.9	4781.86
As a share of total wages	0.05%	0.02%	0.09%

Source: Shenzhen Jiedi Technology Co., LTD. Human resources department and this study collated.

In terms of pre-job training, Shenzhen Jiedi Technology Co., Ltd. has not systematically organized it, and thus no related expenses have been incurred. In terms of on-the-job training, the company attaches great importance to it. Employee development training is a crucial aspect of enhancing the quality of human resources and investment benefits for enterprises [20, 45]. The state has also made relevant regulations on its investment. According to the "Decision of the State Council on Vigorously Promoting the Reform and Development of Vocational Education" (Guo Fa [2002] No. 16), "General enterprises should withdraw education and training funds in full according to 1.5% of the total wages, and enterprises with high technical requirements for employees, heavy training tasks, and good economic benefits can withdraw up to 2.5%." However, Shenzhen Jiedi Technology Co., Ltd. has not met the regulatory requirements in the past three years. Overall, Shenzhen Jiedi Technology Co., Ltd. has seen a notable underinvestment in development costs over the past three years, with an overall downward trend and no stable pattern.

Table 2.2 Use cost of Shenzhen Jiedi Technology Co., Ltd. in recent three years

Unit: ten thousand yuan

Items		In 2023	In 2022	In2021
Maintenance cost	Fixed wage	3573.10 (↑9%)	3282.9 (↑14%)	2892.03 (↑178%)
	Proportion of fixed salary	58%	56%	60%
	Overtime pay	812.02 (↑1%)	800.35 (↑31%)	609.65 (↑223%)
	Percentage of overtime pay	13%	14%	13%
	Month award, year award	1266.88 (↓0%)	1271.4 (↑40%)	907.18 (↑161%)
	Bonus ratio	20%	22%	19%
	Various subsidies	539.32 (↑8%)	497.55 (↑33%)	373.00 (↑101%)
Incentive cost		0	0	0
Adjustment cost		124.04 (↓11%)	139.61 (↑60%)	87.25 (↑204%)
Total cost of use		6315.36 (↑5%)	5991.9 (↑23%)	4869.11 (↑172%)

Note: "↓" indicates a year-on-year decrease, and "↑" indicates an increase

Source: Shenzhen Jiedi Technology Co., LTD. Human resources department and this study collated

Utilization costs mainly include employees' labor remuneration, over-quota rewards, and expenses incurred to adjust employees' work pace and stabilize the team. Table 2.2 shows the utilization costs of Shenzhen Jiedi Technology Co., Ltd. over the past three years.

The maintenance costs mainly consist of the following four aspects:

Firstly, the fixed salary part, accounting for 55% to 60% of the maintenance costs. In 2020, the growth rate was relatively high due to the approximately triple increase in the number of employees after the company merger, while the growth rate in other years was around 10% to 15%.

Secondly, the overtime pay part, accounting for approximately 10% of the maintenance costs. In both 2022 and 2023, the overtime pay reached 8 million yuan. According to the management of Shenzhen Jiedi Technology Co., Ltd., the large number of engineering projects, tight deadlines, and insufficient personnel have led to more overtime hours for frontline employees, resulting in higher overtime costs.

Thirdly, the bonus part, accounting for approximately 20% of the maintenance costs. The growth rate of bonuses fluctuates significantly. In 2021, the growth rate exceeded 150%, and in 2022, it was also relatively high, reaching 40%. After the completion of the reform in 2022 and the payment of some bonuses in arrears, the growth rate of bonuses in 2023 was relatively high.

Fourthly, after the merger of Shenzhen Jiedi Technology Co., Ltd., the number of employees surged, leading to a sharp increase in various allowances and subsidies. In 2021, the growth rate of allowances and subsidies exceeded 100%. From 2021 to 2022, there was little change in the number of employees, but the growth rate of allowances and subsidies exceeded 30%. The reason for this is also related to the salary reform of Shenzhen Jiedi Technology Co., Ltd., as mentioned above.

In terms of incentive costs, Shenzhen Jiedi Technology Co., Ltd. does not specifically set up incentive schemes such as over-quota rewards, so this expenditure is zero yuan.

In terms of adjustment costs, the primary expense is for union fees. After the

company merger, the number of employees tripled, resulting in a significant increase in union fees in 2021. Although there was not a significant difference in the number of employees between 2021 and 2022, union fees increased by 60%. However, in 2023, despite an increase in the number of employees compared to 2022, union fees decreased by 11%. The reason for this is that the union of Shenzhen Jiedi Technology Co., Ltd. truly began its construction phase in 2022. During that year, the company actively organized various union activities such as employee birthday parties, Women's Day celebrations, spring and autumn outings, and summer cooling events. Therefore, union fees increased significantly in 2022. The decrease in 2023 is due to the surplus of union fees in 2022, leading to a decrease in the growth rate.

Overall, the usage cost of Shenzhen Jiedi Technology Co., Ltd. has accounted for over 80% of the total human resource cost in the past three years, making it the largest proportion of the total human resource cost. While the overall trend is towards growth, the growth rate has been unstable [19, 32].

Table 2.3 Guarantee cost unit of Shenzhen Jiedi Technology Co., Ltd. in recent three years

Unit: ten thousand yuan

Items		In 2023	In 2022	In2021
Conventional support cost	Medical insurance	273.65	191.57	150.23
	Endowment insurance	672.24	57.60	337.18
	Industrial injury insurance	26.38	7.01	4.27
	Unemployment insurance	11.57	10.51	5.35
	Maternity insurance	0	44.15	54.40
	Housing accumulation fund	264.65	242.15	191.04
	Enterprise annuity	212.14	208.89	64.76
	subtotal	1460.63	1275.88	807.22
Labor accident protection cost		0.24	0.1	0
Health care cost		0	0	0
total		1460.87	1275.98	807.22

Source: Shenzhen Jiedi Technology Co., LTD. Human resources department and this study collated.

The safeguard costs mainly include regular safeguard costs such as social insurance (pension, medical insurance, unemployment insurance, work-related injury insurance, and maternity insurance) and housing fund, commercial insurance, and enterprise annuity, as well as economic compensation for work-related injuries. The safeguard costs of Shenzhen Jiedi Technology Co., Ltd. in the past three years are shown in Table 2.3.

In terms of conventional security costs, they doubled in 2021, partly due to corporate mergers and partly due to the further optimization of the company's security system, which increased the expenditure on corporate annuities. From 2020 to 2021, the number of employees in the company was similar, but in 2022, it increased by nearly a quarter compared to 2021. Among them, pension insurance increased by approximately 2.4 million yuan, with a growth rate of 70%, and annuities increased by about 1.5 million yuan, with a growth rate exceeding 200%. The reasons, as mentioned above, are also due to the implementation of salary reforms in 2022, which led to an increase in the wage base and, in turn, an increase in related conventional security costs. In 2023, the year-on-year growth rate of conventional security costs was 14%, with zero expenditure on maternity insurance because maternity insurance expenses were merged into medical insurance expenses and were no longer separately listed.

Regarding labor accident security costs, the main expenditure is economic compensation for work-related injuries, which is uncertain and accounts for relatively low expenses, with expenses in the past three years being less than 20,000 yuan. In terms of health security costs, there were no expenses incurred.

Overall, the security costs of Shenzhen Jiedi Technology Co., Ltd. accounted for approximately 16% to 17% of the total human resource costs in the past three years, showing an overall growth trend. The investment in security costs has increased significantly in the past three years.

The per capita human resource cost can show approximately how much human resource cost an enterprise needs to pay for hiring an employee. The per capita human resource cost of Shenzhen Jiedi Technology Co., Ltd. in the past three years is shown in Table 2.4.

Table 2.4 Per capita human resource cost of Shenzhen Jiedi Technology Co., Ltd.

in recent three years

Items	In 2021	In 2022	In 2023
Number of employees (persons)	999	1026	1109
Total cost of human resources (ten thousand yuan)	5685.02	7269.18	7779.32
Total human resource cost growth rate (%)	166.79	27.87	7.02
Per capita human resource cost (ten thousand yuan)	5.69	7.08	7.01
Per capita human resource cost growth rate (%)	-1.45	24.50	-0.99

Source: Shenzhen Jiedi Technology Co., LTD. Human resources department and this study collated.

From a comparison of historical data, over the past three years, Shenzhen Jiedi Technology Co., Ltd. had the highest per capita human resource cost in 2022. On the one hand, this was due to the increase in the total number of employees after the merger, leading to a surge in the total human resource cost. On the other hand, after the merger, the company's systems became more optimized, with increased expenditure on welfare benefits, leading to an increase in per capita human resource costs. The per capita human resource costs in 2022 and 2023 were 70,800 yuan and 70,100 yuan, respectively, with a slight decrease.

As a quantitative analysis method of human resource cost management, flexible control can be used to analyze the current situation of human resource cost management in Shenzhen Jiedi Technology Co., Ltd.

Based on the basic data, the per capita human resource cost (L), per capita output value (V), per capita operating income (S), and per capita total cost (C) are calculated respectively, and the results are shown in Table 2.5. According to the calculation results, there are two situations. The first is the situation where the per capita human resource cost decreases, which is the case in 2023. In 2023, while the per capita human resource cost decreased, the benefit indicators of per capita added value and per capita sales revenue also decreased, and the decline was even greater, indicating that Shenzhen Jiedi Technology Co., Ltd. is facing significant risks in its business development, which should be highly concerned by the management. The second is the situation where the per capita human resource cost increases, which is the case in 2022, and the basic index formula of human resource cost elasticity control is applicable. Firstly, E_v (output value elasticity of

per capita human resource cost), E_s (sales revenue elasticity of per capita human resource cost), and E_c (total cost elasticity of per capita human resource cost) are calculated respectively. Then, they are substituted into the comprehensive elasticity formula $X = 0.4E_v + 0.4E_s + 0.2E_c$, and the elasticity coefficient can be obtained as 0.62.

Table 2.5 Current situation of elastic control of Shenzhen Jiedi Technology Co., Ltd. in recent three years

Unit: ten thousand yuan

Items	In 2023	In 2022	In 2021
Total cost of human resources	7779.32(↑7%)	7269.18(↑28%)	5685.02(↑163%)
Value added	8693.69(↑4%)	8333.00(↑21%)	6909.13(↑199%)
Operating income	12559.93(↓2%)	12814.89(↑16%)	11026.90(179%)
Operating cost (total cost)	10056.52(↓0%)	10099.94(↑25%)	8078.94(↑147%)
Number of employees	1109.00(↑8%)	1026.00(↑3%)	999.00(↑171%)
Per capita human resource cost L	7.01(↓1%)	7.08(↑25%)	5.69(↓3%)
Value added per capita V	7.84(↓3%)	8.12(↑17%)	6.92((↑10%)
Per capita operating income S	11.33(↓9%)	12.49(↑13%)	11.04(↑3%)
Total cost per capita C	9.07(↓8%)	9.84(↑22%)	8.09(↓9%)
Ev		1.41	
Es		1.86	
Ec		1.13	
X		1.53	

Note: "↓" indicates a year-on-year decrease, and "↑" indicates an increase

Source: Shenzhen Jiedi Technology Co., LTD. Human resources department and this study collated

In 2022, the elasticity coefficient X was -0.60, less than 1. Its per capita human resource cost increased by 25%, but the per capita value-added and per capita operating income growth rates were 17% and 13% respectively, both of which were less than the per capita human resource cost growth rate, failing to achieve a balance between the input and output of human resource costs.

2.2. The main problems of human resource cost management in enterprises

In order to comprehensively analyze the current situation of human resource cost management in Shenzhen Jiedi Technology Co., Ltd., this paper adopts three methods to find out the problems in human resource cost management of Shenzhen Jiedi Technology Co., Ltd. Firstly, through the quantitative analysis of the human resource cost data of Shenzhen Jiedi Technology Co., Ltd. in the past three years, we can preliminarily find the existing problems or abnormal data. Secondly, through the interview method, we can understand the overall situation of human resource cost management of Shenzhen Jiedi Technology Co., Ltd., and make a detailed understanding of the specific content of human resource cost investment or the abnormal data. Thirdly, through the questionnaire survey, on the one hand, it can compare whether the situation presented by interviews, data analysis and questionnaire survey is consistent; on the other hand, it can find out other problems or analyze the reasons through the questionnaire survey.

(1) Data analysis. Firstly, collect and sort out the human resource cost data of Shenzhen Jiedi Technology Co., Ltd. from 2021 to 2023, and conduct classified statistical analysis of the composition of human resource costs through the historical data method to intuitively present the changing trends of various sectors of human resource costs. Secondly, calculate the total indicators and benefit indicators of human resource cost management according to the formulas, and conduct a vertical comparison of historical data to analyze the changing trends of total indicators and benefit indicators of Shenzhen Jiedi Technology Co., Ltd. in the past three years. Thirdly, conduct a horizontal comparison of industry levels by comparing the wage prices and industry labor cost information in the human resource market of the provinces and cities where Shenzhen Jiedi Technology Co., Ltd. is located in 2023 and 2022, and analyze the level of total indicators and benefit indicators of Shenzhen Jiedi Technology Co., Ltd. in the industry. Fourthly, calculate through the elasticity control formula to determine whether the human resource cost investment of Shenzhen Jiedi Technology Co., Ltd. is balanced with the company's economic benefits.

(2) Interview survey. Firstly, in June 2022, a preliminary telephone communication

was conducted with the deputy general manager in charge of personnel at Shenzhen Jiedi Technology Co., Ltd., detailing the research direction of the paper and the assistance needed, and obtaining their strong support. Subsequently, in October 2022, a formal face-to-face interview was conducted with them to understand the level of attention and awareness of the senior management of Shenzhen Jiedi Technology Co., Ltd. towards human capital and human resource cost management, as well as the overall situation of human resource cost management in the company. Secondly, in September 2022, data from 2021 to 2023 were collected and sorted out, and telephone interviews were conducted with personnel department managers to understand the specific situation of each component of human resource costs, such as the main areas of recruitment costs in acquisition costs, and the main areas of job training in development costs. Subsequently, in January 2023, human resource cost data for 2022 were collected, and telephone interviews were conducted with them to understand the detailed situation of the 2022 data.

(3) Questionnaire survey. From the perspective of the effectiveness of human resource cost management, combined with interview research, data analysis, and material review, a questionnaire was designed that included questions on employee development, compensation incentives, performance management, and other issues. This survey was targeted at both managers and frontline employees of Y Company. For managers, an online questionnaire survey was conducted, with a total of 109 managers (including senior, middle, and junior-level employees) at Shenzhen Jiedi Technology Co., Ltd. receiving the questionnaire. A total of 102 questionnaires were returned, with a recovery rate of 93.58%. Due to the large number of frontline employees and their older age, which posed difficulties in filling out online questionnaires, paper questionnaires were randomly distributed instead. A total of 50 paper questionnaires were issued, and all 50 were returned, achieving a 100% recovery rate. In total, 152 questionnaires were collected from this survey, with respondents covering various positions and ranks within the company, making the survey sample representative.

Through the analysis of the human resource cost data of Shenzhen Jiedi Technology Co., Ltd. in the past six years, combined with the results of interview surveys and

questionnaire surveys, the following main issues were found in the management of human resource costs in Shenzhen Jidi Technology Co., Ltd.

The cost management mechanism is not sound enough.

Human resource cost management is an important aspect of enterprise human resource management. However, Shenzhen Jidi Technology Co., Ltd. faces the issue of inadequate cost management mechanisms, which is mainly manifested in unclear management objectives, unclear management targets, and incomplete management content [18, 43]. Details are as follows:

(1) Unclear management objectives. Shenzhen Jidi Technology Co., Ltd. is managed by the superior state-owned asset department and has set targets for business performance. However, it has never systematically managed human resource costs over the years and has not set clear management objectives for human resource cost management.

(2) Unclear management targets. Shenzhen Jidi Technology Co., Ltd. has a relatively complete and mature cost accounting system, which is mainly focused on the accounting of operating and production costs. In terms of human resource cost control, the company has not seriously regarded "human resource cost" as a management target. The cost data obtained this time was merely extracted by the human resources department from the company's financial statements and placed in the corresponding category of human resource costs [51].

(3) Incomplete management content. Human resource cost management includes human resource cost accounting, human resource cost analysis, human resource cost budget management, human resource cost control, and other aspects. Currently, Shenzhen Jidi Technology Co., Ltd. only has basic human resource cost data and has not established a dedicated accounting system. Other aspects are basically blank.

The effectiveness of development cost investment is low.

Increasing investment in development costs is an important way to improve the return on investment in human capital for enterprises. However, currently, Shenzhen Jidi Technology Co., Ltd. faces the issue of low effectiveness in investment in development costs, which is mainly manifested in insufficient investment in development costs, lack

of pre-job training for employees, and poor effectiveness of on-the-job training. Details are as follows:

(1) Insufficient investment in development costs. According to national regulations, "general enterprises should extract educational and training funds in full accordance with 1.5% of the total salary of employees. Enterprises with high technical requirements for employees, heavy training tasks, and good economic benefits may extract 2.5%". The results of the previous analysis of development costs show that the proportion of human resource development costs to total salary in Shenzhen Jidi Technology Co., Ltd. in the past six years only exceeded 1.5% in 2018, indicating that the company has obviously insufficient investment in human resource development costs. It has not extracted employee development and training costs in full accordance with national regulations, and there is considerable randomness in the investment in development and training costs. The company only spends and records whatever amount is spent in a given year, lacking a systematic plan for investing in human resource development costs.

(2) Lack of pre-job training for employees. The statistical results of the questionnaire survey on "whether employees have participated in pre-job training" are shown in Figure 2.1. 88.16% of the respondents have not participated in pre-job training, while only 11.84% have participated.

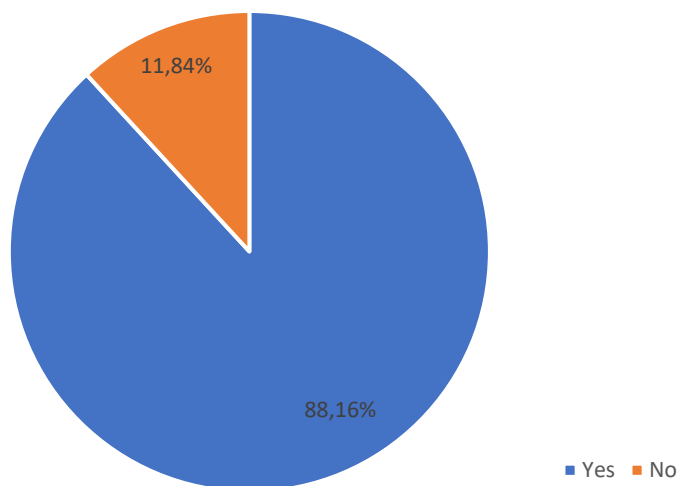


Figure 2.1 Statistical results of pre-job training

Source: Based on the questionnaire survey of employees of Shenzhen Jidi Technology Co., LTD.

As mentioned earlier, Shenzhen Jidi Technology Co., Ltd. has not invested any funds in pre-job training in the past six years. Through interviews, it was learned that the company has not conducted standardized and systematic pre-job training, and daily work mainly relies on the "mentorship" model. This approach is relatively monotonous and heavily dependent on the level of senior employees, which has a certain impact on the work efficiency and effectiveness of newly hired employees.

(3) Poor effectiveness of on-the-job training. According to the data from the questionnaire survey on "which on-the-job trainings have you participated in?" 91.02% of the respondents have participated in safety production training, 28.95% have participated in party building training, 64.47% have participated in job-related trainings such as mechanical operations and management skills, and 2.63% have not participated in any training. This indicates that most people in Shenzhen Jidi Technology Co., Ltd. have participated in on-the-job trainings. However, in the survey on the effectiveness of training (see Figure 2.2), it was found that over 80% of the respondents were "generally satisfied" or "dissatisfied", with only a few expressing "complete satisfaction". This suggests that the effectiveness of employee training still needs to be improved.

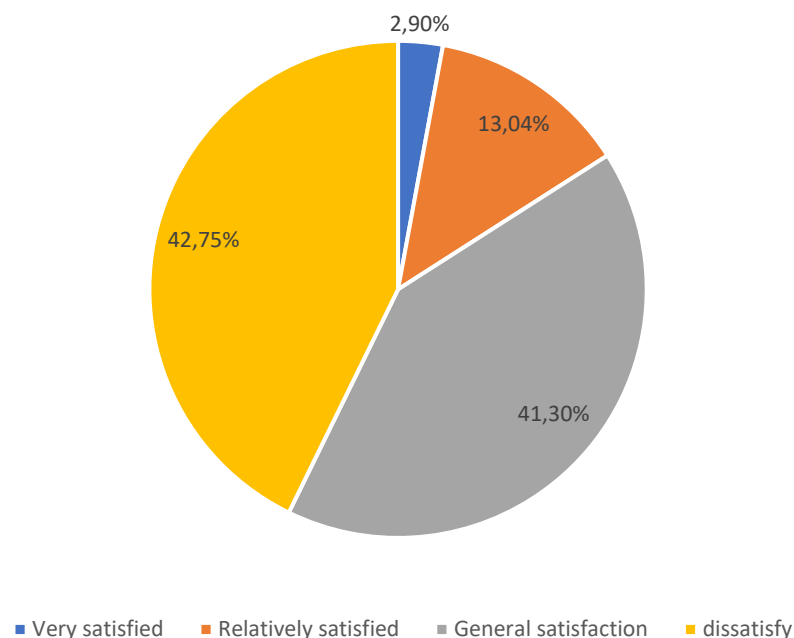


Figure 2.2 Statistical results of training satisfaction

Source: Based on the questionnaire survey of employees of Shenzhen Jidi Technology Co., LTD.

The return on the use cost input is not high.

The usage cost accounts for the largest proportion of the total human resource cost in Shenzhen Jidi Technology Co., Ltd., but there is a problem of low return on investment in usage cost, which is mainly manifested in the lack of attractive salary levels, the high proportion of fixed salary resulting in insufficient incentives, the failure of performance-based salary to play an important role, and the large investment in overtime pay with limited effect. Details are as follows:

(1) Lack of attractive salary levels. When comparing the total indicator data of human resource costs in Shenzhen Jidi Technology Co., Ltd. with the market level horizontally, it was found that the per capita human resource cost of the company was below the 50% percentile, indicating insufficient investment in per capita human resource costs. Although the per capita salary was slightly higher than the 50% percentile but lower than the 75% percentile, its attractiveness and competitiveness in the labor market were not strong. According to the data statistics of the questionnaire survey on "satisfaction with the salary of Shenzhen Jidi Technology Co., Ltd." shown in Figure 2.3, more than 75% of the employees expressed "general satisfaction" or "dissatisfaction", indicating that the attractiveness of the salary level needs to be improved.

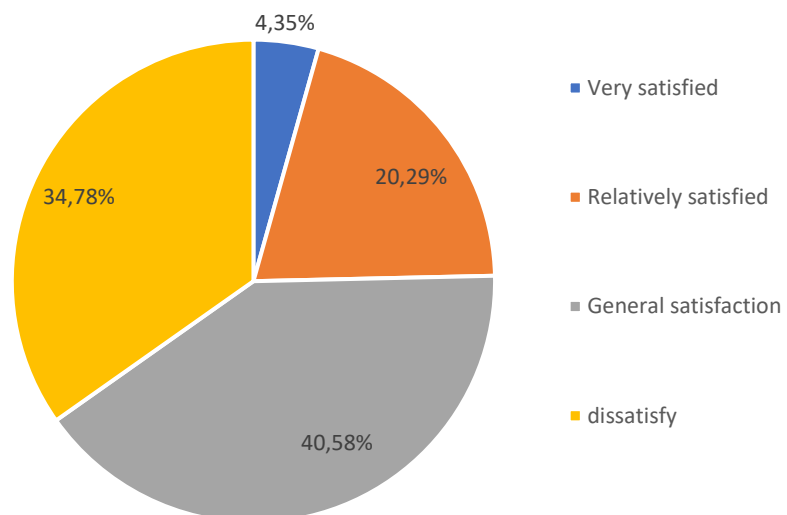


Figure 2.3 Statistical results of salary satisfaction

Source: Based on the questionnaire survey of employees of Shenzhen Jidi Technology Co., LTD.

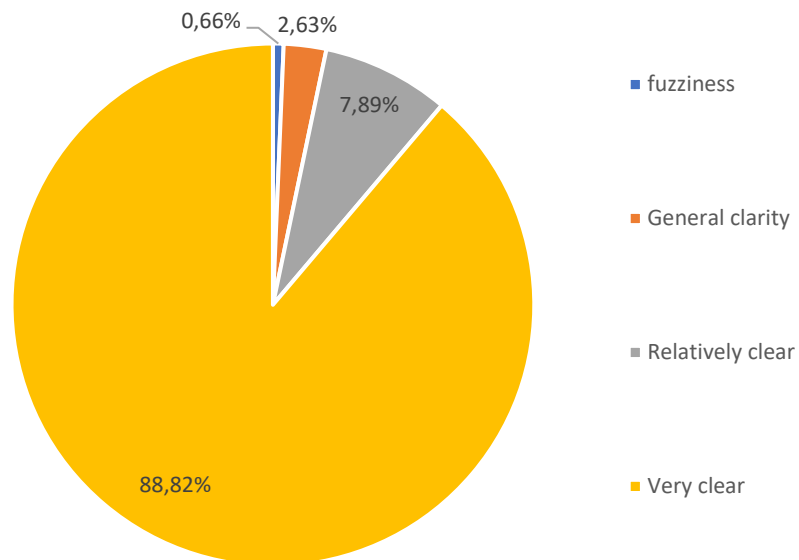


Figure 2.4 shows the statistical results of whether the compensation system and its composition are clear

Source: Based on the questionnaire survey of employees of Shenzhen Jidi Technology Co., LTD.

(2) High proportion of fixed salary and insufficient incentives. Through interviews, it was learned that Shenzhen Jidi Technology Co., Ltd. has provided sufficient training to employees in terms of compensation, so that each employee has a clear understanding of their salary structure. The statistical results of the questionnaire survey on "whether employees clearly understand the company's compensation system and their own salary structure" are shown in Figure 2.4. About 97% of the employees expressed "very clear" or "relatively clear", indicating that most employees are aware of the company's compensation system and their own salary structure. However, the survey results on the effectiveness of compensation incentives (see Figure 2.5) showed that half of the employees felt that the compensation mechanism had no incentive effect. Meanwhile, it was found in the maintenance costs of Shenzhen Jidi Technology Co., Ltd. in the past six years that its fixed salary accounted for about 60%, resulting in a high proportion of fixed salary and insufficient incentives. Shenzhen Jidi Technology Co., Ltd. adopts a fixed salary system based on job positions, with a fixed annual salary, leading to employees' lack of enthusiasm for working harder.

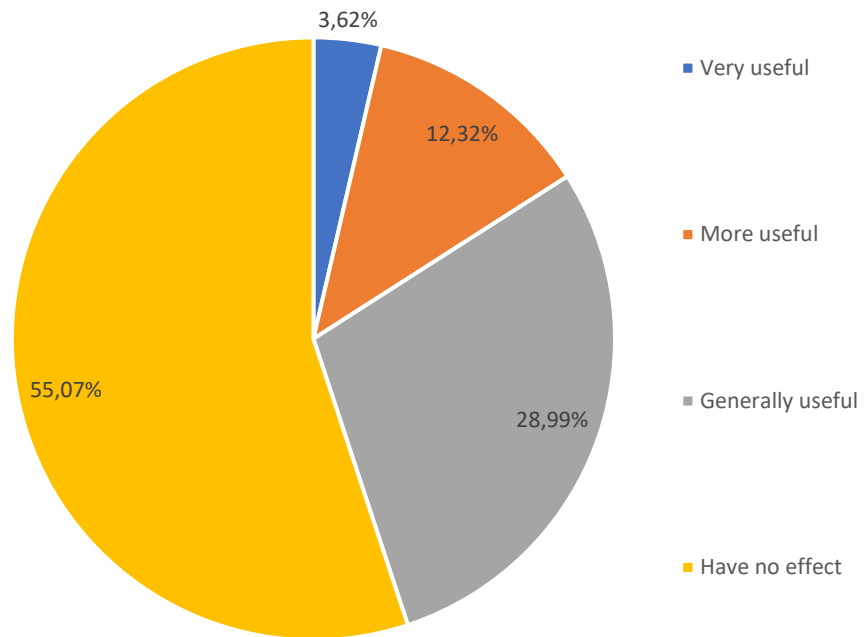


Figure 2.5 Statistical results of salary incentive effect

Source: Based on the questionnaire survey of employees of Shenzhen Jidi Technology Co., LTD.

(3) Performance-based salary has not played an important role. In the past six years, Shenzhen Jidi Technology Co., Ltd. has invested nearly 20% of its maintenance costs in "monthly and annual bonuses". "Monthly and annual bonuses" belong to performance-based salary in Shenzhen Jidi Technology Co., Ltd., and are a manifestation of performance appraisal results [42]. However, according to the statistical results of the questionnaire survey on the "evaluation of the performance appraisal effect of Shenzhen Jidi Technology Co., Ltd." shown in Figure 2.6, more than 60% of the employees believe that the performance appraisal effect is average or ineffective. The failure to effectively leverage the guiding role of performance appraisal has led to low efficiency in the use of performance-based salary costs.

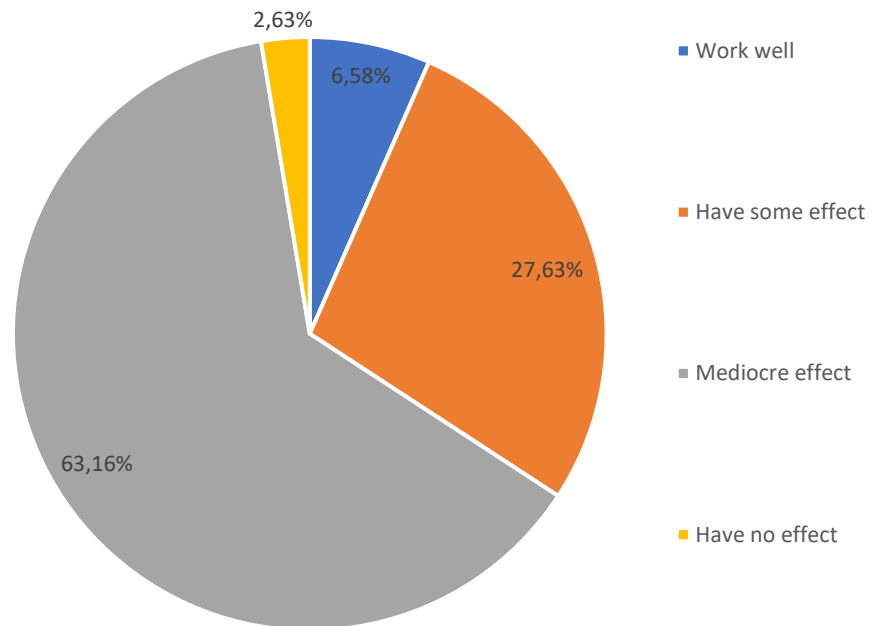


Figure 2.6 Statistical results of the effect of performance pay

Source: Based on the questionnaire survey of employees of Shenzhen Jidi Technology Co., LTD.

(4) Large investment in overtime pay with limited effect. Shenzhen Jidi Technology Co., Ltd. spends a considerable amount on overtime pay each year. In 2021 and 2022, the overtime pay exceeded 8 million yuan, mainly for front-line personnel. Due to excessive overtime work, employees are prone to burnout and have reduced efficiency during regular working hours. On the other hand, the effectiveness of overtime work is also affected, resulting in reduced output during both regular working hours and overtime.

The effect of ensuring cost input is not good.

Apart from the usage cost, the second largest expenditure of human resource cost is the safeguarding cost. After its merger in 2020, Shenzhen Jidi Technology Co., Ltd. increased its investment in safeguarding cost. In addition to purchasing the five social insurances and one housing fund for employees, it also added the enterprise annuity. In 2021, the enterprise annuity increased by approximately 1.5 million yuan, with a growth rate exceeding 200%. The pension insurance increased by approximately 2.4 million yuan, with a growth rate of 70%. The investment in safeguarding cost has further improved the safeguarding system, which should make employees feel more happy and

secure. However, according to the survey data on the question "whether employees clearly understand the five social insurances and one housing fund paid by the company and the company's welfare safeguards" (see Figure 2.7), more than 70% of the employees expressed "general understanding" or "no understanding". This indicates that the investment in safeguarding cost of Shenzhen Jidi Technology Co., Ltd. is not highly perceived by employees, and its effect on promoting employees' work enthusiasm is poor.

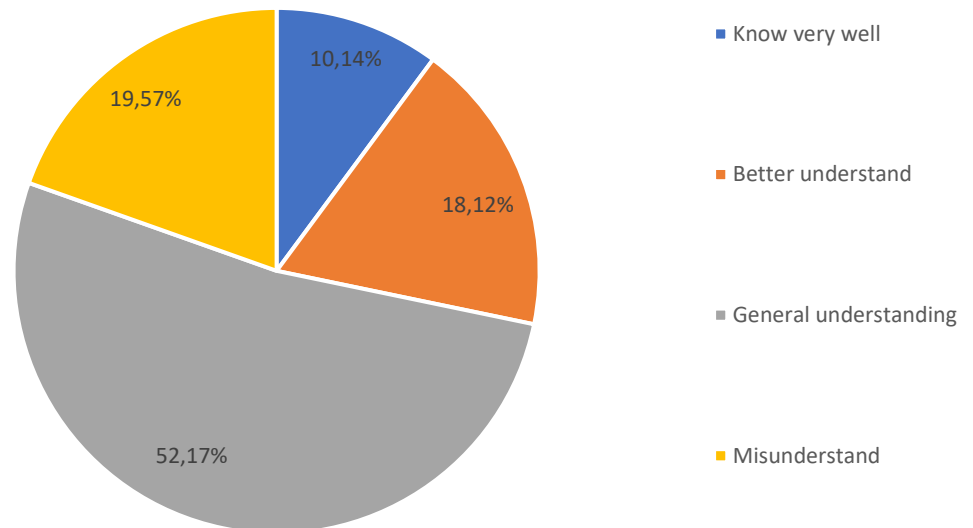


Figure 2.7 Statistical results of guarantee cost input effect

Source: Based on the questionnaire survey of employees of Shenzhen Jidi Technology Co., LTD.

2.3. Current Status of Human Resource Cost Composition and Its Impact on Employee Performance

Shenzhen Jidi Technology Co., Ltd. has the problem of insufficiently sound cost management mechanisms, which is mainly due to insufficient attention from the management level. There are both objective and subjective reasons for this [23].

(1) Objective reasons. Since Shenzhen Jidi Technology Co., Ltd. is a local state-owned enterprise and has undertaken many government-funded livelihood projects, its management believes that they have sufficient projects and do not face much performance pressure, thus lacking sensitivity to cost expenditures.

(2) Subjective reasons. There are mainly four reasons:

Firstly, insufficient attention. The management of Shenzhen Jidi Technology Co., Ltd. has not realized the significant role of human capital and human resource cost management in enterprise development, and has not attached importance to it in daily operation and management.

Secondly, lack of reform momentum. The management of Shenzhen Jidi Technology Co., Ltd. understands that the enterprise is a labor-intensive enterprise with a high proportion of human resource costs, but they only stay at the level of thinking and even use the fact that they are a labor-intensive enterprise with a high proportion of human resource costs as a protective shell, showing insufficient enthusiasm in pursuing benefits.

Thirdly, outdated concepts. The management of Shenzhen Jidi Technology Co., Ltd. has not really dug into the problems existing in human resource cost management from the operational level. Currently, they only view human resources from the perspective of costs, rather than from the perspective of human capital, and have not formed a correct and comprehensive understanding of the content of human resource cost management [40].

Fourthly, lack of professional talent. Since human resource cost management involves both financial and human resource content, on the one hand, the human resource department needs more professional talents who understand financial knowledge, and on the other hand, it needs the support and cooperation of the financial department. The financial department personnel also need to be familiar with the indicator system of human resource costs to better facilitate the advancement of work. It is understood that currently, the human resource department of Shenzhen Jidi Technology Co., Ltd. lacks professional talents, mainly relying on the deputy general manager in charge of human resources and finance to promote, with a lack of middle-level strength, and less collaboration between departments. The management has not taken measures to strengthen personnel allocation or improve employees' professional knowledge, which has created certain resistance to the promotion, implementation, and execution of work.

The development of training activities in enterprises involves the issue of controlling development costs. However, the efficiency of development cost utilization in Shenzhen Jidi Technology Co., Ltd. is still relatively low due to the lack of strict control

over the key points of training development. There are three specific reasons for this:

(1) Lack of a systematic training system in planning. Firstly, there is a lack of planning in the annual plan. Shenzhen Jidi Technology Co., Ltd. currently does not formulate an annual training plan at the company level, but only carries out training due to certain business or performance evaluation needs, such as safety production, without comprehensiveness and planning, and without considering the importance of employee training from the perspective of human capital growth and input-output. Secondly, there is a lack of planning for pre-job training. Shenzhen Jidi Technology Co., Ltd. currently does not have a plan for pre-job training and has not systematically conducted new employee training, resulting in a significant amount of time wasted for new employees during their initial period of employment. Thirdly, there is a lack of planning for business process training. Shenzhen Jidi Technology Co., Ltd. currently has not conducted business process planning, and various departments have not conducted a comprehensive and systematic review of their own business processes or conducted related training, resulting in poor time utilization efficiency and effectiveness during the execution process, and low utilization efficiency of human resources.

(2) Lack of classified and layered training in content. Shenzhen Jidi Technology Co., Ltd. has 1,000 front-line operators, and their management and training are significantly different from those of management personnel. From the perspective of management levels, Shenzhen Jidi Technology Co., Ltd. is divided into grass-roots, middle, and senior management personnel; from the perspective of job classification, it involves technical and functional positions such as finance, personnel, party affairs, technical maintenance, etc. However, the training content of Shenzhen Jidi Technology Co., Ltd. has not been targeted to different levels and job characteristics to carry out training and education improvement.

(3) Lack of tracking and closed-loop management in output. There is no tracking and research on the training effectiveness at the company level. Currently, most employee job training is in a passive state of "listening" with little opportunity for practice and output, and there is no closed-loop management of "input-output-feedback". Therefore, the effect of employee development training is poor.

Compensation is a major component of operating costs, and the focus of human resource cost control in compensation management lies in improving the effectiveness and cost controllability of compensation incentives and reducing compensation waste. Currently, Shenzhen Jidi Technology Co., Ltd. has a relatively low effectiveness in the use of operating costs, mainly due to the following four reasons:

(1) Insufficient targeting of compensation plans. Shenzhen Jidi Technology Co., Ltd. previously adopted the compensation plan issued by the superior state-owned asset system. Since the compensation plan is targeted at the entire state-owned asset system, it lacks specific targeting and flexibility.

(2) Insufficient incentive in the compensation system. Currently, the state-owned asset reform compensation plan has implemented "classified management and one enterprise, one policy". However, Shenzhen Jidi Technology Co., Ltd. has not conducted in-depth research on the "one enterprise, one policy", especially in the floating compensation part. There is no reward plan for employees who have made outstanding contributions, and there is no adjustment to the ratio of fixed compensation to floating compensation.

(3) Insufficient control over total wage. The total wage of Shenzhen Jidi Technology Co., Ltd. in the past six years has only been aggregated based on the salaries of employees for that year, without implementing annual total wage control. Therefore, the total wage for each year has shown an unstable pattern. From 2020 to 2022, the national level required the implementation of the three-year action plan for the reform of state-owned enterprises, one of which was the comprehensive implementation of total wage control. The state-owned asset system where Shenzhen Jidi Technology Co., Ltd. is located issued a relevant plan in 2022. Currently, Shenzhen Jidi Technology Co., Ltd. is still in the trial and exploration stage, and there have been no phased achievements yet.

(4) Insufficient scientific performance appraisal. The accuracy of performance appraisal results will directly affect the effectiveness of the use of performance-based compensation. The low effectiveness of performance-based compensation in Shenzhen Jidi Technology Co., Ltd. is mainly due to the imprecision in setting performance indicators. Currently, Shenzhen Jidi Technology Co., Ltd. adopts a performance

management system based on key performance indicators (KPI), but the company's management believes that the biggest problem lies in the scientific nature of KPI indicator setting. Most job performance evaluation indicators are mainly qualitative, with fewer quantitative indicators. The results of performance evaluation are greatly influenced by subjective factors of the evaluators, and many employees are not satisfied with the results of performance evaluation.

Most of the security costs paid by Shenzhen Jidi Technology Co., Ltd. are not directly paid to employees. Some of them can only be enjoyed by eligible employees under certain conditions. For example, the pension insurance, which accounts for the highest proportion, and the enterprise annuity purchased by Shenzhen Jidi Technology Co., Ltd. for employees in recent years can only be enjoyed after retirement. In other words, a large proportion of the security costs are deferred. However, since Shenzhen Jidi Technology Co., Ltd. has not specifically conducted training related to security costs, and the promotion and implementation are inadequate, many employees only see the part they pay, and even feel that various insurance premiums are deducted too much, resulting in less take-home pay every month. Various insurances are the parts that enterprises must bear according to national regulations. Many employees do not know how much the company has increased the payment. This leads to the situation that although the company has increased the investment in security costs, employees do not feel that their income has increased. It has little effect on improving employees' work enthusiasm and initiative, which means that the cost investment has not been well transformed into enterprise output [30].

The performance appraisal method adopted by Shenzhen Jiedi Technology Co., Ltd. for employees analyzes the overall performance of employees from three major aspects, namely, "quality and appearance", "work attitude and ability", and "work performance". Among them, "quality and appearance" accounts for 10%, "work attitude and ability" accounts for 30%, and "work performance" is divided into positive performance, accounting for 50%, and negative performance, accounting for 10%. These three levels of employee evaluation criteria are difficult to describe through specific data, and they are more like qualitative evaluation criteria. Although the company currently

covers 19 different scales of indicators in the setting of employee performance appraisal indicators, due to the fact that the company's initial training and research on employee performance appraisal only stay in form, it does not really play its due role. Therefore, there are differences between the implementation of these three levels of assessment and the actual assessment results, and these results have relatively little impact on the company's actual work.

Among these three aspects, the main focus is on measuring "work performance", which refers to the overall performance of employees in their work. Not only are positive performance indicators set, but also negative indicators, accounting for a total of 70% of the total. Among them, the addition of negative indicators can also play a role in restraining employees and punishing those who do not work seriously, which will affect the overall performance [44]. In actual work, the company's management team is often troubled by other tasks and does not have enough time to delve into the performance evaluation of company employees. Therefore, their work system does not truly play its due role. Therefore, the performance evaluation of Shenzhen Jiedi Technology Co., Ltd. is essentially based solely on the independent evaluation criterion of "work performance". The performance appraisal indicators set for employees of Shenzhen Jiedi Technology Co., Ltd. are shown in Table 2.6 below.

In order to more effectively and comprehensively identify some obvious shortcomings and loopholes in the implementation of performance management in Shenzhen Jiedi Technology Co., Ltd., we immediately conducted a comprehensive and in-depth investigation and analysis by combining the questionnaire survey (see Appendix C).

In order to gain a deep understanding of the performance appraisal implementation status of Shenzhen Jiedi Technology Co., Ltd., I conducted a systematic questionnaire survey on performance management. This questionnaire survey was targeted at all employees of Shenzhen Jiedi Technology Co., Ltd., which shows that the scope of this survey is quite extensive and the collected data is quite reliable. A total of 329 questionnaires were distributed, and 281 questionnaires were recovered, with a questionnaire recovery rate of 85.41%. This questionnaire was produced and distributed

by me, and its content is detailed in Appendix C.

Table 2.6 "Quality outlook, work attitude and ability, work performance" three levels of assessment elements

Index element	Specific index	Specific content
Quality appearance (10%)	Own moral quality	Every word and action have the quality, save and take care of the company's resources
	Professional moral quality	Be responsible for your work
	Political status	Party members, league members, the masses and others
	Educational background	Graduate and above, undergraduate, junior college, high school, others
	Work experience	Divide according to years of service
Work attitude and ability (30%)	Communication ability	Ability to communicate with clients, colleagues and mentors
	Social ability	Ability to communicate with colleagues, superiors and subordinates
	Innovation ability	The ability to propose innovative services conducive to the development of the company
	Sense of responsibility	Sense of responsibility at work
	Attendance rate	Attendance for each month
	Sense of discipline	Contact the red line
	enthusiasm	The speed with which the work is completed, the attitude towards the work
Job performance (positive 50%)	Favorable rate	Praise from customers or good comments from colleagues and leaders
	Work evaluation	Measured by the amount of revenue they bring to the company
	Summary of comments	Summary of their work by colleagues and leaders
Job performance (negative 10%)	Economic sanction	Penalties in the form of cash
	Disciplinary action	Demerits given by the company
	demotion	downsizing
	Pay cut	Pay reduction

Source: prepared by the author.

In this section, we conducted an in-depth data analysis of the collected survey questionnaires and sorted the answer options provided by the participants from high to low, with answers ranging from a to e corresponding to 1 to 5 points respectively. After organizing the collected survey data, we used Excel software and mathematical statistical methods to calculate the arithmetic mean R for each question, and conducted a detailed analysis of these data. The corresponding grade settings for the scores are shown in Table 2.7 below:

Table 2.7. Average score and grade table of the questionnaire

mark	rank
Score 2.4 and below	Poor
2.5-3 points	Middle
3-4 points	Good
Score 4.1 or above	outstanding

Source: prepared by the author.

Combining the above table of corresponding average score grades, the following Table 2.8 is obtained, which shows the analysis results of the survey questionnaire on the performance management system of Shenzhen Jiedi Technology Co., Ltd.:

Table 2.8 Results of performance management questionnaire survey of Shenzhen Jiedi Technology Co., LTD

Item number	Questionnaire questions survey contents	Average score	Rate
6	How closely the company's performance appraisal is aligned with its strategic objectives	2.3	Poor
7	The importance of senior managers to corporate performance management	3.2	Good
8	Whether the company's performance appraisal measures are effective in improving work performance	2.4	Poor
9	Whether employees understand the purpose of the company's performance management system	2.3	Poor
10	Employee satisfaction with performance appraisal	2.8	middle
11-12	The rationality of performance management evaluation index	2.1	Poor
13	The accuracy of performance management assessment results	3.5	Good
14	Whether performance management appraisal can motivate employees	2.9	middle
15	Performance management evaluation results are fed back to the staff's implementation efforts	2.7	middle
16	Comprehensiveness in the application of performance results	2.3	Poor
17-18	Employee participation in the development of performance appraisal	2.2	Poor

Source: prepared by the author.

According to the above data from the performance management survey questionnaire, we can observe that among the 18 test questions, a total of 11 aspects of

performance appraisal are covered. Among them, 6 aspects have low scores, 3 have medium scores, only 2 aspects have good scores, and none has excellent scores. The overall average score is only 2.61 points. Therefore, it is imperative to carry out performance management reform in this enterprise. It can be inferred that Shenzhen Jiedi Technology Co., Ltd. is currently facing multiple challenges in its performance management framework, especially in the aspects of establishing performance appraisal standards, the comprehensive application of performance appraisal results, and the feedback mechanism of performance appraisal, all of which have considerable potential for optimization and improvement.

CHAPTER 3

DEVELOPMENT DIRECTION OF ENTERPRISE HUMAN RESOURCE COST MANAGEMENT

3.1. Approaches to managing human resource costs and increasing the level of managerial cognition

Shenzhen Jidi Technology Co., Ltd. will carry out the human resource cost management improvement with the guiding ideology of regarding human capital as "profit center" and connecting human resource cost with each link of human resource management, so as to achieve the purpose of maximizing the efficiency of human resources and promoting the improvement of business performance [16]. Specifically, it should first improve the cognition of human resource cost management, secondly strengthen various contents of human resource cost management, establish the calculation and analysis of human resource cost from the overall level, strengthen the budget of human resource cost, strengthen the control of human resource cost from the local level, and take measures such as increasing the investment in development cost, reforming the salary incentive mechanism, finding alternative cost, optimizing inefficient cost, etc., to improve its input-output efficiency.

(1) High attention and full mobilization. The management of Shenzhen Jidi Technology Co., Ltd. should deeply recognize the current issues in human resource cost management and make a big decision to strengthen human resource cost management [31]. It is suggested to convene relevant meetings to emphasize the importance of this work to the company's development and make specific work arrangements for the future, so that all employees attach great importance to it and it will be beneficial for the follow-up work.

(2) Change mindset and enhance understanding. If the management of Shenzhen Jidi Technology Co., Ltd. wants to promote the reform of human resource cost management, they should set an example by changing their own mindset of "cost center" that focuses solely on reducing costs without paying attention to returns. Because if only

costs are focused on without considering returns, it may lead to the situation in 2022, as can be seen in the previous elasticity analysis, where the per capita human resource cost decreased while the per capita value added and per capita operating income also decreased, causing significant impact on the company's business development. Shenzhen Jidi Technology Co., Ltd. should regard human resource cost management as a value investment process of input and return, and view human resource cost investment from the perspective of "profit center" or human capital, focusing on its input and output. If greater investment in human resource costs can bring higher benefits, it is necessary to increase investment in human resource costs [49].

(3) *Strengthen learning and skills.* As the professional strength of Shenzhen Jidi Technology Co., Ltd. is relatively weak at present, it is recommended to hire a third-party to provide classified training to employees of the company with the help of external forces, so as to continuously improve the human resource cost management skills and techniques of relevant management personnel.

In summary, strengthening the awareness of human resource cost management and enhancing the level of management cognition are crucial for enterprises to achieve sustainable development and enhance their core competitiveness. This is summarized in Table 3.1. as follows:

Table 3.1. Strengthen the awareness of human resource cost management and improve the level of management cognition

(1) High attention and full mobilization.
(2) Change mindset and enhance understanding.
(3) Strengthen learning and skills.

Source: prepared by the author.

Shenzhen Jidi Technology Co., Ltd. should not only increase awareness and understanding of human resource costs but also develop a comprehensive management system that includes the calculation, analysis, and forecasting of costs at all levels. This system must be integrated with other key business functions such as financial planning, performance evaluation, and strategic decision-making. By creating a unified framework, the company can better monitor and control expenditures, ensuring that human resource

investments are aligned with the company's long-term goals. Implementing a robust data management and reporting system will enable real-time tracking of human resource-related expenses, providing accurate insights for decision-making.

To ensure that human resource cost management achieves its intended results, Shenzhen Jidi Technology Co., Ltd. should focus on developing strict budgetary controls for human resource expenses. This can be done by establishing clear accountability at each level of management, from department heads to senior leadership, and setting specific budgetary targets that align with the company's performance goals. Each department should be responsible for monitoring its human resource costs and justifying any deviations from the budget. Additionally, a periodic review process should be put in place to evaluate the effectiveness of human resource cost allocation and to identify areas for improvement.

One of the core challenges identified in the human resource cost management analysis is the ineffective salary structure and insufficient incentives for employees. Shenzhen Jidi Technology Co., Ltd. should reform its compensation system to make it more dynamic and performance-driven. By implementing flexible salary packages that reflect both the market conditions and the company's performance, the firm can motivate employees more effectively. Introducing a mix of financial and non-financial incentives, such as bonuses, recognition programs, and career advancement opportunities, will further enhance employee satisfaction and retention, ultimately contributing to the company's productivity and cost-efficiency.

Continuous investment in the development of human capital is essential for improving overall performance and productivity. Shenzhen Jidi Technology Co., Ltd. must allocate more resources to training and professional development programs that will equip employees with the necessary skills to meet the evolving demands of the business. By enhancing the workforce's capabilities, the company will increase its return on human resource investments. Specific programs could include leadership training for management, technical skills development for operational staff, and innovation workshops to foster creative problem-solving. These efforts will not only boost individual performance but also create a more skilled and adaptable workforce, leading to long-term

business growth.

To further improve the input-output efficiency of human resource costs, Shenzhen Jidi Technology Co., Ltd. should explore alternative cost management strategies. For example, outsourcing certain non-core activities or leveraging automation for routine tasks could significantly reduce labor costs. In addition, the company can explore flexible working arrangements, such as part-time or contract-based work, to optimize labor resources according to seasonal or project-based demands. Implementing such alternative cost-saving measures will allow the company to allocate resources more efficiently, reduce unnecessary expenditures, and improve the overall profitability of its human resource investments.

In conclusion, by strengthening awareness of human resource cost management and improving management cognition, Shenzhen Jidi Technology Co., Ltd. can create a more efficient, performance-driven organization. The company's ability to invest wisely in its human capital and adopt modern cost-control mechanisms will enhance both short-term operational success and long-term strategic growth.

3.2. Strengthening accounting and analysis of human resource costs. Consolidate the foundation of cost management.

The accounting and analysis of human resource costs is the prerequisite for human resource cost management. Through accounting and analysis, it can more accurately indicate the impact of various human resource work on the enterprise, which is conducive to evaluating the human resource costs and the effect of human resource management activities [41].

In the accounting phase, Shenzhen Jidi Technology Co., Ltd. should separately categorize the human resource cost module and formulate reports, including the classification of human resource cost items, establishment of accounts, and report design, in order to obtain basic cost information for human resource cost management. For details, refer to Table 3.2.1. At the same time, human resource management personnel should cultivate the awareness and habit of recording human resource cost expenses and

timely conduct monthly records. On the other hand, they need to continuously refine and deepen the working techniques and skills of human resource cost accounting in their work, continuously improving the accuracy, scientific nature, and completeness of accounting [38]. For example, based on actual needs, they can add third-level items, and maintenance costs can be subdivided into fixed salaries, overtime pay, bonuses, allowances, etc. Routine security costs can be further divided into basic medical insurance, pension insurance, work injury insurance, unemployment insurance, maternity insurance, annuities, etc.

Table 3.2. Human resource cost accounting statement of Shenzhen Jidi Technology Co., LTD

Level 1 project	Level 2 project	Monthly	Quarterly	For the year
Cost of acquisition	Total acquisition costs			
	Cost of recruitment			
	Cost of screening			
	Cost of employment			
	Cost of placement			
Cost of development	Total development costs			
	Cost of pre-job training			
	Job training costs			
	Off-job training costs			
Cost of use	Total cost of use			
	Maintenance costs (total payroll)			
	Cost of reward			
	Adjustment costs (union fees)			
Cost of protection	Total protection cost			
	Routine guarantee cost			
	Labor accident insurance cost			
	Health care costs			
Turnover costs	Total turnover costs			
	Inefficient costs before leaving the job			
	Severance compensation costs			
	Cost of vacancy			
Total cost of human resources				

Source: organized by this study.

After establishing the human resource cost accounting report for Shenzhen Jidi Technology Co., Ltd., in order to better analyze the effectiveness of its human resource cost management, an indicator system including total volume indicators, benefit

indicators, elastic control, and structural indicators can be established.(See Table 3.3) Total volume indicators analyze from the perspective of overall situation, benefit indicators analyze from the perspective of input and output, and elastic control analyzes from the perspective of out of control or controllable. As mentioned earlier, the acquisition cost and turnover cost of human resource cost in Shenzhen Jidi Technology Co., Ltd. are relatively low. Therefore, the structural indicators focus on the use cost, security cost, and development cost that account for the largest proportion of the total cost for key monitoring and analysis. Among them, the largest proportion of use cost is total wages. Combined with the actual situation, the ratio of fixed salary to variable salary, and the proportion of management personnel and front-line personnel's wages should be monitored. At the same time, Shenzhen Jidi Technology Co., Ltd. can dynamically adjust the indicators that need to be focused on during the actual operation process.

Table 3.3 Human resource cost index system of Shenzhen Jidi Technology Co., LTD

Type of indicator	Monitoring Indicators	statistical cycle
Total index of human resource cost	Per capita human resource cost	Quarterly/annual
	Per capita wage	
Cost effectiveness indicators of human resources	Labor distribution rate	
	Staff expense rate	
	Proportion of per capita human resource cost	
	Human resource cost margin	Monthly/quarterly /annual
Human resource cost elasticity control	Elastic control coefficient	
Indicators of human resource cost structure	Proportion of development cost in total human resource cost	Monthly/quarterly /annual
	Proportion of security cost in total human resource cost	
	Proportion of fixed salary in total salary	Quarterly/annual
	Proportion of variable salary in total salary	
	Proportion of total salary in total human resource cost	
	Proportion of managerial salary in total salary	
	Proportion of front-line personnel salary in total salary	

Source: organized by this study.

After establishing the indicator system, Shenzhen Jidi Technology Co., Ltd. can

propose corresponding strategies based on the internal vertical and external industry level analysis mentioned earlier. (See Table 3.4). To quickly improve the investment benefit of human capital in Shenzhen Jidi Technology Co., Ltd., the first priority should be to focus on the benefit indicators of input-output ratio. Only by effectively improving the input-output of human resource costs can the company obtain sufficient returns from every investment in human resource costs and form the company's human capital competitiveness [56]. After improving the investment benefit of human capital, Shenzhen Jidi Technology Co., Ltd. needs to start paying attention to the total volume indicators of human resource costs, such as increasing the per capita human resource cost and per capita wage level compared with the industry. Only by improving the input-output ratio and gradually raising the level of human resource costs can a positive cycle be formed.

Table 3.4. Human resource cost index strategy of Shenzhen Jidi Technology Co., LTD in 2023

Level 1 indicator	Level 2 indicator	Internal longitudinal comparison	External industry level comparison	Strategy
Index of benefit	Labor distribution rate	Go up	/	Lower down
	Staff expense rate	Go up	Above the industry level	Lower down
	Proportion of human resource cost	Go up	Above the industry level	Lower down
	Human resource cost margin	Go down	Below the industry level	Raise up
Total amount index	Per capita human resource cost	Go up	Middle and downstream level	Raise up
	Per capita wage	Go up	Median percentile	Raise up

Source: organized by this study.

Strengthening human resource cost accounting and analysis is a crucial step for enterprises to enhance their cost management foundation and achieve refined management. By accurately accounting for human resource costs and conducting in-depth analysis, enterprises can gain a clearer understanding of the relationship between human resource inputs and outputs, thereby providing strong support for the formulation of scientific and rational cost management strategies. The summary is as following table 3.5.

Table 3.5. Strengthen human resources cost accounting and analysis, consolidate the foundation of cost management

Establish human resource cost accounting report to improve data accuracy
Establish a human resource cost index system to improve the effectiveness of analysis
Establish a human resource cost index system to improve the effectiveness of analysis
We will strengthen budget management of human resources costs and strengthen overall control

Source: organized by this study.

By strengthening the management of human resource cost budgeting, Shenzhen Jidi Technology Co., Ltd. can timely discover existing problems and formulate targeted measures, which is conducive to improving the overall management and control of human resource costs.

1. Organizational guarantee:

Firstly, from the decision-making level, Shenzhen Jidi Technology Co., Ltd. should establish a human resource cost budget management committee as the decision-making body for human resource cost budget management. Its members can include the chairman, directors, general manager, deputy general managers in charge of human resources and finance, as well as heads of the personnel department and finance department. Secondly, at the execution level, the human resource cost budget management organization is composed of heads of various departments. Among them, the personnel department serves as the centralized department for human resource cost budget management, responsible for budget preparation, monitoring, evaluation, and other work. Other departments, as specific execution units, implement the budget plan and timely feedback problems.

2. Budget preparation:

Shenzhen Jidi Technology Co., Ltd. can set the budget form as a first-level project based on the components of human resource cost mentioned earlier, including acquisition cost, development cost, usage cost, security cost, and turnover cost [50]. The second-level project is a subdivision of the first-level project, and can be further subdivided based on actual needs.

The budget expense section should reflect the actual occurrence of the previous year and the planned occurrence of the next year based on the company's planning. The specific process is shown in Figure 3.1.

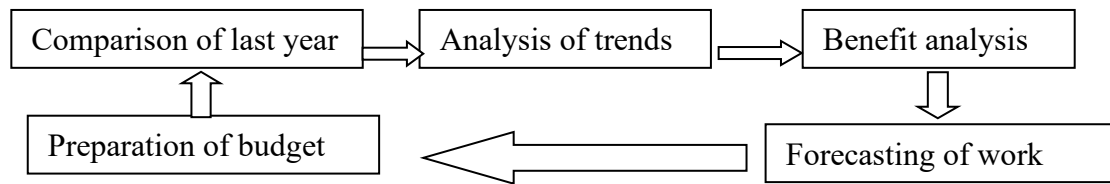


Figure 3.1. Human resource cost budgeting process of Shenzhen Jidi Technology Co., LTD

Firstly, compare with the previous year. Compare the pre-settlement situation of human resource costs in the previous year to identify projects with significant differences, analyze the main reasons and existing problems, and judge whether similar situations will occur in the next year. Since Shenzhen Jidi Technology Co., Ltd. has not previously conducted comparisons of pre-settlement situations, this step will be implemented after experiencing the first budget process.

Secondly, trend analysis. Mainly analyze the historical data of human resource cost composition to identify the changing trends in the use of human resource costs, which projects may increase, and which projects may decrease. Since Shenzhen Jidi Technology Co., Ltd. underwent a company merger in 2020, it is recommended to use data from the previous three years, namely 2020 to 2022, for trend analysis when preparing the first human resource cost budget.

Thirdly, benefit analysis. This step mainly analyzes total indicators, benefit indicators, and elastic control, and adds horizontal analysis of industry levels to timely understand input-output situations through benefit analysis.

Fourthly, work prediction. Based on the previous analysis, list the main factors currently affecting the budget preparation of human resource cost management in Shenzhen Jidi Technology Co., Ltd. For example, due to the nature of Shenzhen Jidi Technology Co., Ltd. as a state-owned enterprise, its total wage is controlled by the

superior state-owned asset supervision department. Therefore, compliance with superior regulations on total wage is a key factor influencing the preparation of human resource cost budgets in Shenzhen Jidi Technology Co., Ltd.

Lastly, budget preparation. Based on the analysis and predictions of the previous steps, derive the changes in expenses for the next year, and compile specific numerical values for each human resource cost budget item (including acquisition cost, usage cost, development cost, security cost, turnover cost, and total human resource cost). Among them, development costs are calculated according to the national regulation of 1.5% of the total wage. The strategy for determining the total wage strictly follows the regulations of the superior supervision department, including that "if the preservation and appreciation of state-owned assets are not achieved, the total wage may not increase or may decrease moderately; if economic benefits decline, the total wage for the year should in principle decrease accordingly, with the magnitude corresponding to the increase in the total wage when economic benefits increase; the growth rate of the total wage must not exceed the growth rate of total profits; the calculation method for the total wage: the total wage for the current year = the base of the total wage for the previous year * (1 + the annual growth rate of the total wage)" according to management regulations.

Budget preparation is a crucial activity for governments at all levels, departments, and budget units to plan the allocation and allocation of budgetary funds within a fiscal year. This process not only concerns the efficient allocation of resources but also directly impacts the smooth progress of national economic and social development.

Shenzhen Jidi Technology Co., Ltd. can adopt a combination of regular and irregular reports to monitor the budget execution process. In the regular reports, the Human Resource Cost Budget Management Committee can listen to quarterly and annual reports to keep abreast of budget execution differences and improvement measures. In the irregular reports, special reports can be made when significant situations or problems arise in the implementation of human resource cost management in Shenzhen Jidi Technology Co., Ltd., analyzing key links or issues and proposing improvement suggestions for a specific project. During the monitoring process, it is necessary to promptly identify problems in budget execution from the reports and take corresponding countermeasures

to ensure the maximization of the effectiveness of human resource cost investment. The Human Resource Cost Budget Management Committee should propose appropriate adjustment opinions on the problems in the execution process and supervise the implementation of the opinions.

The evaluation target of the human resource cost budget in Shenzhen Jidi Technology Co., Ltd. is mainly the executive department, namely the Personnel Department. The evaluator is the Human Resource Cost Budget Management Committee. The evaluation content includes the accuracy and timeliness of budget preparation, the deviation of budget execution, and the quality of budget analysis. After the evaluation, corresponding reward or punishment measures can be set to ensure the continuous improvement of the human resource cost budget management level. The budget preparation, budget execution, and budget evaluation together constitute the human resource cost budget management system of Shenzhen Jidi Technology Co., Ltd. Each link interacts with each other and continuously cycles to continuously improve the company's human resource cost budget management level.

Strengthen human resource cost budget management and overall planning and control. The summary flowchart is shown in Table 3.2 below:

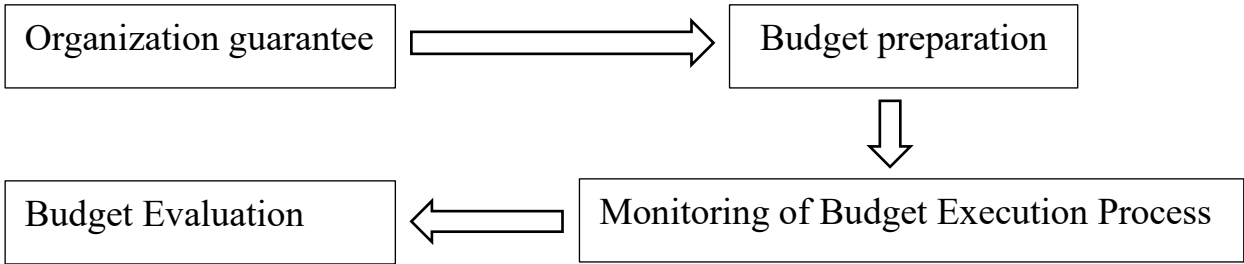


Table 3.2. We will strengthen budget management of human resources costs and strengthen overall control

In the realm of business management, strengthening human resource cost accounting and analysis is a cornerstone for building a solid foundation of cost management. This process involves meticulously tracking and evaluating the expenses associated with acquiring, developing, and maintaining a workforce, ultimately leading

to more informed decisions and optimized resource allocation. The summary is shown in Table 3.6 below:

Table 3.6 Strengthen human resources cost accounting and analysis, consolidate the foundation of cost management

Establish human resource cost accounting report to improve data accuracy
Establish a human resource cost index system to improve the effectiveness of analysis
We will strengthen budget management of human resources costs and strengthen overall control

Source: organized by this study.

3.3. Optimize efficiency and strengthen control of human resource costs.

Human resource costs occur in human resource management activities, and the effectiveness of the use of human resource costs is closely related to various human resource management activities. Therefore, to improve the management of human resource costs, it is necessary to control human resource management activities, including recruitment management, training and development, compensation management, performance evaluation, welfare management, and other aspects [53]. By improving or adjusting the management methods in various aspects of human resources, the effectiveness of human resource cost investment can be improved, thereby enhancing the efficiency of human resources. Specifically, Shenzhen Jidi Technology Co., Ltd. should focus on increasing investment in development costs, reforming compensation incentive mechanisms, finding alternative costs, optimizing inefficient costs, and other aspects.

The investment in development costs is an important way for companies to grow their human capital. The management of Shenzhen Jidi Technology Co., Ltd. should re-recognize the important role of training as an investment in human capital and attach importance to employee development and training with a strategic perspective for long-term development. The increase in investment in human capital and the improvement of human resource quality will become an important magic weapon for the sustainable development of Shenzhen Jidi Technology Co., Ltd. in the future.

1.Strengthen the management of development costs

Firstly, in response to the current insufficient investment in human resource development costs in Shenzhen Jidi Technology Co., Ltd., budget management should be conducted based on more than 1.5% of the total salary. Secondly, effective management of direct and indirect costs should be conducted. Direct costs include lecturer fees, venue usage fees, course fees, etc., while indirect costs include the salary paid by the company for employees who do not perform their duties due to participation in training [48]. The most common indirect cost in daily management is the salary cost generated by off-the-job training. Thirdly, development costs include pre-job, on-the-job, and off-the-job training costs. According to the aforementioned, Shenzhen Jidi Technology Co., Ltd. should increase investment in on-the-job and off-the-job training costs in the future and improve the implementation effect of pre-job, on-the-job, and off-the-job training.

2.Strengthen the management of training nodes

The effectiveness of investment in development costs comes from strengthening each node of training management, which mainly includes five aspects: analyzing training needs, determining training objectives, developing training plans, implementing training activities, and evaluating and feedbacking training effects.

Shenzhen Jidi Technology Co., Ltd. can refer to the "OTP" model proposed by W. Mcgehee and P.W. Thayer to conduct training needs analysis, analyzing and exploring training needs from three aspects: organizational development level, work task level, and employee quality level (See Table 3.6 for details). Based on the training needs analysis, various parties need to cooperate fully to accomplish the following tasks: firstly, establish job descriptions for each position in the company and clarify the professional skills required for each position; secondly, collect pre-job and on-the-job training needs for each business line to provide a basis for arranging the frequency and importance of subsequent training content; thirdly, the company's management should focus on the overall development of the company and sort out training needs that are conducive to talent team training and company business development.

The setting of training objectives should be consistent with the purpose and actual situation of Shenzhen Jidi Technology Co., Ltd. Reference can be made to the following

four types of training objectives for setting: first, skill cultivation, referring to the degree to which employees' knowledge and skills meet the training standards; second, attitude change, referring to the degree to which employees' work attitudes change through training; third, work performance, referring to the specific work performance and behavior exhibited by employees after training; fourth, organizational objectives, referring to the degree to which training should contribute to achieving departmental or corporate performance objectives. After determining the overall objectives, specific objectives should also be set for each training.

Table 3.6. Analyzes training needs

Level of	Specific contents	Training needs
Organization Analysis	Starting from the company's strategic objectives, we analyze the current needs for human resources and the environment, identify the problems existing in the enterprise and the potential needs for organizational development, and ensure that the enterprise's training content is suitable for the enterprise's objectives and requirements.	By analyzing the talent demand in the context of the three-year reform action of state-owned enterprises and the company's future development, it is found that Shenzhen Jiedi Technology Co., Ltd. has high requirements for human resource professionals in the future. Therefore, relevant training in human resource management should be conducted to improve the ability and quality of employees on the job. To enhance the management of human resource costs, business training in this area should be strengthened, especially training on cost control.
Organization Analysis	With the goal of helping employees be competent in their jobs, we conduct needs analysis by identifying core tasks and the knowledge required to complete them.	For example, among the management personnel, grass-roots employees can carry out training related to their positions, while middle and senior management can participate in leadership training.
Organization Analysis	By comparing the actual work performance level of employees with the required performance evaluation quality standards, we can identify the gap between the two and provide a basis for training needs.	State-owned enterprises attach great importance to writing skills, and for functional positions, they can carry out official document writing training.

Source: collated according to the data and this study.

After determining the objectives, Shenzhen Jidi Technology Co., Ltd. should combine human resource planning to develop annual, quarterly, or monthly training plans and determine the corresponding training time, location, lecturer, participants, budget,

etc., to form a complete training plan. In addition, according to interviews, it is understood that the human resources department of Shenzhen Jiedi Technology Co., Ltd. currently has weak professional strength, insufficient manpower, and few personnel proficient in various modules. Therefore, it is recommended to seek external help and hire a third-party training company to conduct planning and organization. With the cooperation of internal and external personnel, on the one hand, the company's current training situation can be comprehensively sorted out through professional forces to formulate corresponding plans; on the other hand, in-service human resource personnel can also improve their abilities through participation in the process, which is conducive to the company's talent cultivation and the actual implementation of training work [57].

To better implement the training plan, Shenzhen Jiedi Technology Co., Ltd. can comprehensively adopt new employee training, on-the-job training, and off-the-job training. The first is new employee training, which includes enterprise overview, systems, basic business knowledge of departments, employee career planning, and other contents. Shenzhen Jiedi Technology Co., Ltd. should systematically organize and carry out standardized training, which is conducive to new employees adapting to the job as soon as possible. The second is on-the-job training, which is a short-term and frequent training and is the focus of basic management skills development activities [36]. Shenzhen Jiedi Technology Co., Ltd. can combine practical situations and adopt methods such as internal employee lectures and inviting external mentors to carry out on-the-job training. At the same time, it can continue to adopt the "mentoring" form to improve the training effect. The third is off-the-job training, which is a longer-term training mainly for urgently needed personnel or management training in the company. Shenzhen Jiedi Technology Co., Ltd. should increase off-the-job training for future high-level technical and management talents, and the training can be implemented by entrusting a third-party institution based on practical situations.

The first is the evaluation of training effectiveness. It generally includes two aspects: the evaluation of the training objects before and after the training, as well as the evaluation of the training itself. Shenzhen Jiedi Technology Co., Ltd. can refer to the four-level framework system proposed by the famous American scholar Kirkpatrick and its

evaluation methods to measure the training effectiveness. The second is feedback on training effectiveness. Through filling out feedback questionnaires by trainees, we can understand their feelings during the training process, help trainers update and optimize training methods and contents in time through feedback, and form a closed-loop management of "input-output-feedback".

Strengthening training node management is an important means to improve training efficiency and effectiveness. It involves multiple links such as the formulation, execution, monitoring, evaluation, and adjustment of training plans. Summarized as Table 3.7.

Table 3.7. Strengthen the management of training nodes

(1) Analyze training needs.
(2) Determine training objectives.
(3) Develop training plans.
(4) Implementing training activities.
(5) Evaluation and feedback of training results.

Source: collated according to the data and this study.

Among the human resource costs, salary costs account for the highest proportion, so the input-output effect largely determines the efficiency of human resource usage. Shenzhen Jiedi Technology Co., Ltd. has conducted quite a lot of training on the salary system in the past two years. According to the questionnaire survey mentioned earlier, employees have a clear understanding of the salary system and salary composition. However, due to the limitations of the original salary system, employees generally believe that the current salary system lacks incentive, and the investment in usage costs has not achieved the desired effect in promoting employees' work motivation. Shenzhen Jiedi Technology Co., Ltd. should combine the requirements of the superior state-owned asset department with the actual situation of the enterprise itself. On the one hand, it should optimize the salary mechanism; on the other hand, it should improve the scientific nature of performance management, thereby enhancing the effectiveness of performance-based salary costs and ultimately achieving the goal of improving the return on investment in usage costs.

1. Formulate a total wage plan based on the "one enterprise, one policy" principle.

Total wage control links employee compensation with business operations, with the aim of controlling human resource costs. In the new era, total wage control has given enterprises greater autonomy, thus making it more controllable and flexible. Shenzhen Jiedi Technology Co., Ltd. should conform to the reform trend of the superior state-owned asset department, fully utilize the reform of total wage control in state-owned enterprises, follow the principle of "one enterprise, one policy", give full play to subjective initiative, scientifically formulate a total wage control plan for Shenzhen Jiedi Technology Co., Ltd., strengthen the linkage between salary and benefits, break the shackles of position-based salary, actively utilize the disposable wage quota of the enterprise, reward hardworking and punish lazy employees, establish a mechanism for adjusting the last-place employees and withdrawing those who are not competent, break the situation of "equal pay for equal work regardless of the amount of work done", and stimulate employees' enthusiasm, initiative, and creativity.

2. Adopt a performance-based compensation system

Currently, Shenzhen Jiedi Technology Co., Ltd. adopts a mixed compensation system of "fixed salary + performance-based salary". According to the compensation plan provided by Shenzhen Jiedi Technology Co., Ltd., the proportion of basic salary to annual performance-based salary for its senior, middle, and junior levels is 65:35, 75:30, and 80:20 respectively. The proportion of basic (fixed) salary is larger than the performance-based salary, so its incentive effect is limited. Performance-based salary, as a reward for employees' overtime work or performance, plays a crucial role in improving the quality and efficiency of employees' work. However, due to the small proportion of performance-based salary in Shenzhen Jiedi Technology Co., Ltd., it has not truly played an incentive role. After implementing the "one enterprise, one policy" total wage control in Shenzhen Jiedi Technology Co., Ltd., its management has more control and flexible use space over the total wage. Therefore, it should fully utilize and adopt a performance-based compensation system, increase the proportion of performance-based salary, and make the overall proportion of performance-based salary for employees greater than the fixed salary. This is conducive to improving employees' work enthusiasm and enhancing human

resource efficiency.

3. Adopt a contingency incentive model

When selecting incentive methods, Shenzhen Jiedi Technology Co., Ltd. should choose a contingency incentive model based on the characteristics of the incentive targets and the changes in the environment. By selecting different methods to incentivize the owners of human capital in a targeted manner, effective incentives can be achieved. Shenzhen Jiedi Technology Co., Ltd. can divide the existing company positions into four types of human capital and adopt different incentive methods accordingly. The first type is low-position and low-contribution personnel, mainly engaged in low-tech and highly repetitive work, such as landscaping workers and security guards. Since this type of human capital owners is highly replaceable and has high personnel turnover, short-term incentive methods are suitable to reflect their labor value. The second type is high-position and low-contribution personnel, such as middle and senior management personnel in the personnel and administrative departments. The third type is low-position and high-contribution personnel, such as sales personnel, technical personnel for management and maintenance, and landscape designers. The owners of human capital in the second and third types have low mobility and have the ability and willingness to invest in themselves. Therefore, in addition to short-term incentives, medium-term rewards can also be adopted, such as team incentives, to stimulate them to give full play to their subjective initiative and create more value. The fourth type is high-position and high-contribution personnel, mainly senior management and technical personnel. This type of personnel is less replaceable, and their marginal contributions generally show an increasing trend. It is necessary to continuously increase investment in human capital, and it is suitable to adopt long-term incentive methods to highly integrate their personal contributions with company benefits.

4. Optimize performance management

Currently, the focus of performance management optimization in Shenzhen Jiedi Technology Co., Ltd. is on establishing a performance indicator system. The department and position performance indicator system of Shenzhen Jiedi Technology Co., Ltd. needs to be dynamically adjusted according to the company's strategic objectives, development

stage, and business characteristics, and formulated specifically based on the characteristics of departments and positions. Shenzhen Jiedi Technology Co., Ltd. can optimize the company's key indicator system by following the process of "determining key success areas," "key performance factors," "key performance indicators," and "constructing an organizational KPI library," combined with the current situation of Shenzhen Jiedi Technology Co., Ltd.

Reforming the compensation incentive mechanism to improve both usage costs and benefits is a systematic project involving multiple factors. The following is a summary of key steps and strategies, presented as Table 3.8:

Table 3.8. We will reform the compensation incentive mechanism and increase the cost and return on use

1. Formulate a total wage plan based on the "one enterprise, one policy" principle.
2. Adopt a performance-based compensation system
3. Adopt a contingency incentive model
4. Optimize performance management

Source: organized by this study.

In the process of searching for alternative costs and considering the rational adoption of human resource outsourcing, Shenzhen Jiedi Technology Co., Ltd. can follow the following steps and strategies:

Clarify the concept of alternative costs: Alternative costs refer to the related expenses paid for finding equivalent resources to replace a certain type of resource due to its scarcity. This includes losses from terminating contracts, costs of discovering alternative resources, and surpluses exceeding fixed compensation. Shenzhen Jiedi Technology Co., Ltd. should clarify the types of resources it needs to replace and estimate the alternative costs of these resources.

Assess the potential of human resource outsourcing: Human resource outsourcing is a management strategy that involves outsourcing human resource management functions to professional third-party organizations, aiming to reduce costs, improve efficiency, and make the operation of outsourced functions more professional. The company should assess its current human resource allocation and needs to determine

which functions or tasks can achieve cost savings and efficiency improvements through outsourcing.

Compare the cost-effectiveness of alternative costs and human resource outsourcing: After clarifying the alternative costs and the potential of human resource outsourcing, the company should compare the cost-effectiveness of both. This includes calculating the specific amount of alternative costs and evaluating the potential cost savings and efficiency improvements brought by human resource outsourcing. Through comparative analysis, the company can determine whether adopting human resource outsourcing is a reasonable alternative.

Select the appropriate human resource outsourcing service provider: If it is decided to adopt human resource outsourcing, the company should choose a suitable service provider for cooperation. This requires considering factors such as the service provider's professional capabilities, service quality, and pricing, while ensuring that the service provider can meet the company's specific needs.

Develop implementation plans and management strategies: After selecting the service provider, the company should develop detailed implementation plans and management strategies. This includes determining the specific scope, timeline, and communication mechanisms of the outsourcing, and ensuring that both parties can cooperate smoothly to achieve the expected goals.

It is worth noting that human resource outsourcing is not suitable for all situations, and the company should make decisions based on its actual needs and circumstances. At the same time, the company should also pay attention to the risks and challenges that may arise from human resource outsourcing, such as data security and employee morale issues, and formulate corresponding countermeasures.

In summary, when searching for alternative costs and considering the adoption of human resource outsourcing, Shenzhen Jiedi Technology Co., Ltd. should clarify the concept of alternative costs, assess the potential of human resource outsourcing, compare cost-effectiveness, select the appropriate service provider, and develop implementation plans and management strategies. Through these steps and strategies, the company can better achieve the goals of cost savings and efficiency improvement.

The key points of controlling human resource costs should focus on optimizing low-efficiency costs. Specifically, Shenzhen Jiedi Technology Co., Ltd. faces a significant issue of extremely high overtime expenses, reaching 8.12 million yuan in 2023. Therefore, in addition to the aforementioned approach of increasing manpower through human resource outsourcing, the company also needs to strictly manage overtime work, reduce low-efficiency cost expenditures, and improve the efficiency of overtime pay.

1. Establish and implement overtime management policies. Shenzhen Jiedi Technology Co., Ltd. should formulate overtime policies based on standard working hours, and establish rules and regulations to standardize and clarify them, ensuring a balance between the company's interests and employees' interests. When formulating these rules and regulations, they should be discussed at an employee representative congress, and announced or informed to employees.

2. Pay overtime wages in accordance with the law. Employees who are arranged to work overtime on standard workdays should be paid a remuneration not lower than 150% of their salary; employees who are arranged to work overtime on rest days and cannot be arranged for compensatory time off should be paid a remuneration not lower than 200% of their salary; and employees who are arranged to work overtime on statutory holidays should be paid a remuneration not lower than 300% of their salary.

3. Strictly enforce overtime duration. When arranging employees to work overtime, Shenzhen Jiedi Technology Co., Ltd. should protect employees' right to rest and comply with the conditions stipulated in the Labor Law of the People's Republic of China, while strictly adhering to overtime duration regulations.

4. Manage overtime records and vouchers properly. Shenzhen Jiedi Technology Co., Ltd. should have standardized records and vouchers that reflect overtime hours and wages for the month. Employees should sign and confirm these vouchers, and the company should keep the voucher materials properly.

Reforming the compensation incentive mechanism to enhance cost-effectiveness and increase revenue involves a comprehensive and systematic approach that encompasses various factors. Below is a summary of key steps and strategies, labeled as Table 3.9., for optimizing inefficient costs and strictly managing overtime work.

Table 3.9. Optimize inefficient costs and strictly manage overtime

1. Establish and implement overtime management policies.
2. Pay overtime wages in accordance with the law.
3. Strictly enforce overtime duration.
4. Manage overtime records and vouchers properly

Source: organized by this study.

To enhance human resource cost control and improve input-output efficiency, organizations must embark on a comprehensive strategy that addresses both the short-term optimization of existing costs and the long-term development of a more efficient and productive workforce. Here are some key strategies in table 3.10:

Table 3.3.5 We will strengthen cost control of human resources and improve the efficiency of input and output

(1) Increase investment in development costs to enhance the value of human capital
(2) We will reform the compensation incentive mechanism and increase the cost and return on use
(3) Find alternative costs, reasonable use of manpower outsourcing
(4) Optimize inefficient costs and strictly manage overtime

Source: organized by this study.

CONCLUSION

Human resource cost management is an effective means for enterprises to improve the efficiency of employee management, optimize cost expenditures, and enhance corporate competitiveness. This article analyzes and studies the current situation of human resource cost management in Shenzhen Jedi Technology Co., Ltd., and draws the following conclusions:

In terms of discovering problems, from the perspective of cost data, through analyzing the five aspects of human resource cost composition, it is found that Shenzhen Jedi Technology Co., Ltd. has insufficient investment in development and training, prominent overtime costs, a high proportion of fixed salaries, and continuously rising security costs. Through the analysis of total indicators, it is found that Shenzhen Jedi Technology Co., Ltd. has insufficient investment in per capita human resource costs and its per capita salary does not have sufficient market competitiveness. Through the analysis of benefit indicators, it is found that the labor distribution rate and personnel cost rate are high, the proportion of human resource costs continues to grow, the profit rate of human resource costs decreases, and the input-output ratio decreases. Through the analysis of elastic control, it is found that the human resource costs of Shenzhen Jedi Technology Co., Ltd. have been out of control for two years. Combined with questionnaire surveys and interviews, it is concluded that Shenzhen Jedi Technology Co., Ltd. mainly has four major problems: insufficient management attention, low effectiveness of development cost investment, low return on the use of cost investment, and poor effectiveness of security cost investment. In terms of management, Shenzhen Jedi Technology Co., Ltd. has not effectively managed human resource costs, lacks the links of human resource cost accounting, analysis, budgeting, and control, and has not analyzed and solved problems from the perspective of fundamental human resource cost management construction. In terms of development costs, there are problems of insufficient investment, lack of pre-job training, and poor job training effectiveness. In terms of use costs, there are problems of unattractive salary levels, high fixed salary ratios with insufficient incentives, performance-based compensation failing to play an important role, and large overtime

costs with limited effects. In terms of security costs, there is a problem of continuously rising costs but not much effect on improving employees' work enthusiasm.

In terms of cause analysis, the first reason is insufficient attention at the management level, which is mainly due to subjective reasons such as insufficient attention, lack of reform motivation, backward concepts, and lack of professional talent, as well as objective reasons such as the nature of state-owned enterprises and the current status of Shenzhen Jedi Technology Co., Ltd. The second reason is the lax control over key points of development costs, mainly due to the lack of a systematic training system in planning, the lack of classified and layered training in content, and the lack of tracking closed-loop management in output. The third reason is the inflexible incentive mechanism for usage costs, mainly due to insufficient targeting of compensation schemes, insufficient incentive in the compensation system, insufficient control over total salary, and insufficient scientific performance management. The fourth reason is insufficient promotion and implementation of security costs, mainly due to a lack of relevant promotional training, resulting in low employee perception.

In terms of countermeasures, the first is to strengthen management awareness by emphasizing the need for high attention and full mobilization, transforming concepts and enhancing understanding, and strengthening learning and skills. The second is to strengthen accounting and analysis by establishing accounting reports and indicator systems to improve data accuracy and analysis effectiveness. The third is to strengthen budget management and increase overall control efforts in four aspects: organizational guarantees, budget preparation, budget execution, and budget evaluation. The fourth is to strengthen the control of key links and propose specific countermeasures in terms of increasing investment in development costs, reforming compensation incentive mechanisms, finding alternative costs, and optimizing inefficient costs.

However, there are also certain defects in the research: (1) There may be deviations in the human resource cost data of Shenzhen Jedi Technology Co., Ltd. Since Shenzhen Jedi Technology Co., Ltd. has not systematically collected and organized human resource cost data before, there may be subjective deviations in data statistics during this categorization process. Human resource costs reflect the entire process of human resource

management, in which there are many situations that are difficult to quantify, so there may be some deviations.

There is limited understanding of human resource management and human resource cost management in Shenzhen Jedi Technology Co., Ltd. Although interviews were conducted with relevant personnel of the enterprise, the content understood may not be comprehensive, so there may be some deviations in the qualitative and quantitative analysis.

The comparison dimension may not be scientific enough. Although the analysis process is conducted through two dimensions of historical data comparison and industry level comparison, in the horizontal comparison dimension, only the data of the province and city where Shenzhen Jedi Technology Co., Ltd. is located in 2021 and 2020 are referenced. This information is mainly data of large industries, without data of individual industries. Therefore, there may be a situation where the comparison data is single and not scientific enough.

Therefore, this article provides some ideas and methods for the analysis and countermeasures of human resource cost management in Shenzhen Jedi Technology Co., Ltd., but it is not necessarily comprehensive.

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APPENDIXES

Appendix A

Interview outline of human resource cost management in Shenzhen Jidi Technology Co., LTD

1. Acquisition Cost Aspects

What recruitment channels does the company currently have? Are there any differences in recruitment channels for management personnel and frontline employees? Are there any outsourcing practices for frontline employees? Are executive search services used for senior management positions?

2. Development Cost Aspects

Do employees receive pre-job training, and what are the general contents? What are the usual content areas for employee job training, and are there different focuses for different types of employees? Are there any off-the-job training programs, and if so, what are the main areas covered?

3. Usage Cost Aspects

Please introduce the current compensation and performance evaluation systems in terms of maintenance costs. Have there been any adjustments in recent years, and what are the content and background of these adjustments? Compared to the guiding documents of the superior state-owned asset supervision department, are there any personalized aspects in the company? Why have overtime pay been particularly prominent in the past three years? In terms of reward costs, are there any additional rewards or recognition expenses set up for employees or management with outstanding contributions?

4. Safeguard Cost Aspects

Besides the statutory benefits, what other welfare benefits does the company provide? Why have the investment in safeguard costs been continuously increasing in the past three years, and what are the specific areas and reasons? Do employees clearly understand and recognize the human resource cost investments made by the company?

5. Turnover Cost Aspects

What are the usual procedures for employee turnover, and what are the main reasons for resignation? What are the main uses of turnover costs?

6. Overall Situation

How do you view the management of human resource costs? What is the current status of human resource cost management in the company, and why do you think so? In the future development plan, what aspects will the company focus on in terms of human resource cost investment?

Appendix B

Questionnaire survey on human resource cost management of Shenzhen Jidi Technology Co., LTD

Dear colleagues,

To further understand the management of human resource costs in our company, a questionnaire survey is now being conducted. This survey is anonymous, and we appreciate your support and cooperation!

1. What is your position level? ()

A. Management personnel B. Frontline personnel

2. Have you ever participated in the company's pre-job training? ()

A. Yes B. No

3. Which aspects of job training have you participated in the company? ()

You may choose one or multiple options.

A. Safety production B. Party building

C. Job-related training (such as mechanical operation training, management skills training, etc.)

D. Have not participated

4. Are you satisfied with the company's training work? ()

A. Very satisfied B. Relatively satisfied

C. Generally satisfied D. Not satisfied

5. Do you have a clear understanding of the company's compensation system and your own salary composition? ()

A. Very clear B. Relatively clear

C. Generally clear D. Not clear

6. How do you evaluate the current overall salary level? ()

A. Very satisfied B. Relatively satisfied

C. Generally satisfied D. Not satisfied

7. Do you think the company's compensation system has an incentive effect? ()

A. Very useful B. Relatively useful

C. Generally useful D. No effect

8. Are you aware of the five social insurances and one housing fund as well as the company's welfare benefits? ()

A. Very aware B. Relatively aware

C. Generally aware D. Not aware

9. Are you satisfied with the results of performance appraisals? ()

A. Very satisfied B. Relatively satisfied

C. Generally satisfied D. Not satisfied

10. How do you evaluate the company's performance appraisal work? ()

A. Very effective B. Somewhat effective

C. Generally effective D. Ineffective

Appendix C

Dear Sir/Madam,

This questionnaire is part of an academic research on performance management conducted by Shenzhen Jiedi Technology Co., Ltd. It consists of 18 multiple-choice questions. Your participation in this survey will be kept anonymous and confidential, solely for research purposes. Your responses will not be used for any other purposes.

There are no right or wrong answers to any of the questions, and we kindly ask you to answer based on your genuine thoughts and feelings. Your support and cooperation in this research are greatly appreciated.

Thank you very much for your time and contribution.

1. Gender:

a Male b Female

2. Education Level:

a Bachelor's degree or above b Junior College
c High School d Middle School e Other

3. Job Level:

a Grassroots Employee b Management Staff

4. Age:

a Below 25 years old b 26-30 years old
c 31-40 years old d Above 40 years old

5. Political Affiliation:

a Communist Party Member b Communist Youth League Member
c General Public d Other

6. The closeness of the company's performance management to its strategic objectives:

a Very closely related b Relatively closely related
c Moderately related d Not closely related e Very not closely related

7. Does the company attach importance to performance appraisal?

a Very important b Relatively important
c Moderately important d Not important e Very unimportant

8. Do the currently implemented performance appraisal measures effectively improve work performance?

a Very effective b Relatively effective
c Moderately effective d Basically ineffective e Very ineffective

9. The main purpose of implementing performance appraisal in the company?

- a Very clear b Relatively clear
- c Moderately clear d Not very clear e Very unclear

10. Your attitude towards the company's current performance appraisal measures?

- a Very supportive and approving b Basically approving
- c Not very approving d Opposed e Strongly opposed

11. Do the existing performance appraisal indicators of the company align with your position?

- a Very aligned b Relatively aligned
- c Moderately aligned d Not very aligned e Very unaligned

12. Do the existing performance appraisal indicators of Shenzhen Jiedi Technology Co., Ltd. reflect your true work situation?

- a Strongly agree b Relatively agree
- c Moderately agree d Disagree e Strongly disagree

13. Are the performance appraisal results you receive accurate?

- a Very accurate b Relatively accurate
- c Inaccurate d Relatively inaccurate e Very inaccurate

14. Does the performance appraisal system implemented by the company motivate you to work more actively?

- a Strongly agree b Agree
- c Uncertain d Disagree e Strongly disagree

15. Can you receive performance feedback from your supervisor?

- a Always b Often
- c Occasionally d Rarely e Never

16. Are the results of performance evaluations linked to compensation, promotion, training arrangements, etc.?

- a Strongly agree b Relatively agree
- c Moderately agree d Disagree e Strongly disagree

17. Have you been involved in the entire process of formulating the company's performance management and appraisal system?

- a Strongly agree b Agree
- c Uncertain d Disagree e Strongly disagree

18. Have you discussed performance improvement directions with your supervisor?

- a Always b Often c Occasionally d Rarely e Never