



The Impact of Human Resource Management Practices on Employee Motivation and Performance in Small Knowledge-based Enterprises: A Thematic Analysis and Fuzzy-set Qualitative Comparative Analysis (fsQCA)

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ABSTRACT

Purpose - The purpose of this study was to use D Accounting Firm as a case study to examine the impact of human resource management practices on employee motivation and performance in small knowledge-based enterprises

Aims(s) - This study analyzed cases to explore how human resource management practices could improve employee motivation and performance in small knowledge-based enterprises.

Design/methodology/approach - This study took all 23 employees of D Accounting Firm in Nanning City, Guangxi, China as the research subjects, using questionnaires and interviews. Qualitative data were analyzed through thematic analysis, and quantitative data were analyzed using descriptive analysis and Fuzzy-Set Qualitative Comparative Analysis (fsQCA).

Findings - The study found that optimizing performance appraisal, strengthening employee training and development, adjusting compensation, and improving the work environment could enhance employee motivation and performance at D Accounting Firm. Performance appraisal emerged as the key factor. Suggestions were provided to establish high-motivation and high-performance HR practices based on the firm's current situation.

Limitations of the study - A limitation of this study is that it did not fully consider the impact of factors such as culture, employee characteristics, and enterprise size in different small knowledge-based enterprises. These differences may lead to varying results in practical applications.

Originality/value - This paper offers new insights and suggestions on the complex dynamics among various HRM practices and their impact on employee motivation and performance in small knowledge-based enterprises.

KEY WORDS

Employee motivation, employee performance, human resource management

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1 INTRODUCTION

As typical knowledge-based enterprises, professional service companies such as accounting and consulting firms relied heavily on professional talent as their key resource (Morris & Empson, 1998). Accounting firms, for example, demonstrated that since such companies were focused on providing services, the development of human capital was crucial for achieving long-term competitive advantages and improving performance (Cocariu, 2023). At the same time, human resource management practices held significant importance for fostering human capital. Some studies revealed that in the dynamic management of small and medium-sized enterprises, despite facing challenges such as limited resources and obstacles in talent acquisition, opportunities for development also existed.

Specifically, the implementation of appropriate human resource management practices—such as performance optimization, capacity enhancement, and the establishment of a compatible work culture—provided these companies with opportunities to attract talent and strengthen their future competitiveness (Koppa et al., 2023).

However, small accounting firms faced a series of practical challenges in human resource management. In China, accounting firms grappled with issues such as high talent mobility and elevated attrition rates. Effectively cultivating and retaining talent became a critical concern within the industry (Wu Qian & Chen Songsheng, 2024). Influenced by factors such as compensation gaps, work pressure, and the talent absorption effects of other industries, these firms experienced significant workforce instability. From the perspective of the full life cycle theory, scholars discovered that many firms implemented inadequate measures for talent training and retention, leading to severe talent loss (Shi et al., 2023).

Furthermore, some studies identified a lack of long-term talent reserve planning in accounting firms, which resulted in an unbalanced personnel structure and an aging trend among middle and senior management. The absence of effective risk awareness initiatives and cultural identity development within companies further exacerbated the problem. Additionally, inadequate implementation of performance appraisals significantly dampened employee motivation (Liu, 2024).

This study selected D Accounting Firm as a case study. D Accounting Firm, one of the earliest accounting firms established in Guangxi, focused primarily on auditing, verification, and evaluation services. Compared to other regions, Guangxi remained economically underdeveloped, with its accounting industry dominated by small enterprises (Tan & Wu, 2023). In recent years, due to a small operational platform, high work intensity, limited benefits, and weak talent attraction, the turnover rate of employees in Guangxi's accounting firms exceeded 30% annually. This turnover rate adversely affected service quality and increased operational risks (Wang, 2019).

D Accounting Firm has operated in Guangxi for over 20 years and currently employs 23 staff members. The majority of employees fall into two age groups: 20-29 years old (30.43%) and over 50 years old (43.48%). Studies have suggested that while younger employees exhibit better physical fitness, they often lack sufficient work experience. Conversely, employees over 50 years old may face declining physical fitness, and their entrenched work habits could hinder adaptability and personal growth (Zhang, 2016). This imbalance in the workforce structure highlights potential risks. Moreover, among employees holding CPA certifications and senior or intermediate accounting qualifications, the majority are over 50 years old (26.08%), while mid-level key talents aged 30-50 account for only 13.05%. This indicates insufficient talent reserves for mid-level accountants and signals a long-term risk of talent aging.

According to D Accounting Firm's management, the business volume and complexity of work have increased in recent years, but revenue from individual services has declined. Many employees reported that their compensation no longer aligned with their efforts, resulting in diminished motivation, declining performance, and severe talent loss.

Human Resource Management (HRM) practices play a crucial role in enhancing employee motivation and performance, acting as a key driver of organizational success. Numerous studies have highlighted that effective HRM practices, such as training and development, performance management, and compensation systems, can significantly increase employee engagement, improve productivity, and foster organizational commitment (Kakkar et al., 2020; Abdullahi et al., 2022; Urme, 2023). These practices not only motivate employees at an individual level but also create a high-performance culture that benefits the organization as a whole (Joo et al., 2023; Lu, 2023). Despite this understanding, many organizations, particularly small and medium-sized enterprises (SMEs), face challenges in implementing HRM practices that effectively enhance employee motivation and performance (Olekanma et al., 2024). Limited resources, inadequate training programs, and misalignment between organizational goals and employee expectations often hinder the effectiveness of HRM strategies in such organizations (Quader, 2024).

While existing research has established the positive impact of HRM practices on organizational outcomes, several theoretical gaps remain. Most studies focus on the direct relationship between HRM practices and organizational-level outcomes, such as profitability and growth, while neglecting the nuances of how these practices influence individual-level motivation and performance (Maher et al., 2020; Zhang et al., 2022). Additionally, the role of contextual factors, such as industry characteristics, economic development, and cultural dynamics, in shaping the effectiveness of HRM practices is often overlooked (Fan et al., 2023; Jaradat et al., 2024). This is especially relevant for economically underdeveloped regions or industries with unique challenges, such as accounting and consulting firms. Furthermore, there is limited exploration of the dynamic processes through which HRM practices, such as performance appraisals and team-building initiatives, affect motivation and performance over time.

To address these gaps, this study aims to answer the following research question: How do HRM practices influence employee motivation and performance in small knowledge-based enterprises? Specifically, this research examines HRM practices in small accounting firms, exploring how these practices can be adapted to overcome resource constraints, enhance employee motivation, and improve performance. D Accounting Firm serves as a representative case of small accounting firms in economically underdeveloped regions. By analyzing its human resource management practices, this study seeks to propose effective improvement strategies and provide valuable insights for both similar organizations and academic research. Additionally, the findings aim to inform policymakers on ways to enhance the operational environment for small accounting firms and support the industry's growth.

2 LITERATURE REVIEW

2.1 RESOURCE-BASED VIEW AND HRM PRACTICES

The resource-based view (RBV) posited that the sustainable competitive advantage of an enterprise originated from its possession of resources and capabilities that were valuable, scarce, difficult to imitate, and irreplaceable. These unique advantages were considered the foundation of an enterprise's success in market competition (Barney, 1991). This theory highlighted the strategic importance of internal resources, emphasizing that their efficient management could determine an organization's long-term market position (Amaya et al., 2024).

In knowledge-based industries, such as accounting and auditing, human resources are regarded as the most critical assets due to their indispensable role in creating, applying, and disseminating specialized knowledge essential for organizational success. Unlike labor-intensive industries, where productivity is often tied to physical output, knowledge-based firms rely heavily on employees' intellectual capital, problem-solving abilities, and professional expertise. As such, strategic human resource management (SHRM) plays a fundamental role in driving both individual and organizational performance, ensuring that firms can effectively adapt to evolving regulatory frameworks, technological advancements, and market dynamics.

Research has demonstrated that HRM practices strategically aligned with organizational objectives not only enhance individual productivity but also strengthen a firm's overall capacity to remain agile in dynamic environments (Ghlichlee et al., 2024). In particular, skills development initiatives such as continuous professional education, certifications, and mentorship programs are critical for keeping employees up to date with industry standards and best practices. These programs not only enhance employees' technical competencies but also foster a culture of continuous learning, which is vital for ensuring long-term business sustainability. Furthermore, fostering innovative behaviors among employees is a key determinant of success in knowledge-intensive industries. Encouraging knowledge-sharing mechanisms, cross-functional collaboration, and creative problem-solving empowers employees to contribute novel ideas, improving both service quality and operational efficiency. Studies have indicated that firms that implement HR strategies aimed at developing human capital and fostering workplace innovation experience higher

levels of employee engagement, job satisfaction, and competitive differentiation within their respective industries (Larik et al., 2024).

Collins (2022) elaborated that competitive advantage could only be achieved when organizations effectively managed and strategically deployed employee resources. This aligned with the concept of dynamic management capabilities, which emphasized the importance of adaptability and responsiveness in workforce management to address evolving market demands. Further studies demonstrated that proactive human resource strategies, such as targeted training and strategic workforce planning, were instrumental in maintaining a competitive edge, especially in fast-evolving industries like accounting (Ononiwu et al., 2024).

Moreover, the alignment between RBV and human resource management was evident in the way firms invested in their workforce as a means to enhance organizational resilience. For example, organizations that prioritized employee skill enhancement, fostered a culture of continuous learning, and ensured alignment of employee objectives with organizational goals reported higher levels of innovation and market competitiveness (Akdere & Egan, 2020; Bilderback, 2024). These findings further validated the RBV perspective by demonstrating that human capital was not only a resource but also a strategic lever for achieving long-term organizational success.

The effective management of human resources, particularly in knowledge-based industries, is essential for enhancing employee motivation and performance. By aligning HR practices with organizational goals and focusing on continuous skill development, firms can foster a motivated workforce that drives innovation and adaptability, ultimately sustaining competitive advantages in dynamic markets. This strategic approach to human capital not only boosts individual performance but also contributes to the overall success and resilience of the organization.

2.2 HRM PRACTICES AND THEIR IMPACT

Early studies revealed that enterprises gained and sustained competitive advantages through effective HRM practices, such as staffing, compensation, and training, which were strategically aligned with organizational goals (Schuler & MacMillan, 1984). More recently, researchers demonstrated that such practices played an essential role in small and medium-sized enterprises (SMEs), enhancing their ability to identify, cultivate, and retain talent, overcome unique challenges, and foster growth, innovation, and long-term success in dynamic environments (Rajni, 2021; Koppa et al., 2023). Jindal et al. (2024) argued that effective HRM practices, particularly in SMEs, significantly improved employee motivation and performance, achieving competitive advantages through targeted initiatives. High-performance work systems (HPWS) were identified as a strategic HRM approach that effectively motivated employees and enhanced performance (Dorta-Afonso et al., 2021). Researchers emphasized that HPWS integrated practices like selection, training, evaluation, and incentive systems to create environments conducive to improving overall employee capabilities and motivation (Yin, 2023). Other studies confirmed that HR practices under HPWS, such as performance appraisal, compensation, and participatory decision-making, positively influenced employee motivation and performance (Awan et al., 2021).

Research has consistently identified compensation as a fundamental factor influencing employee performance. A well-structured compensation system not only ensures financial stability for employees but also fosters motivation, job satisfaction, and long-term commitment. In SMEs, where resources may be limited, tailored compensation models are essential to retain talent and drive productivity. Studies highlight that performance-based incentives, profit-sharing schemes, and non-monetary rewards such as recognition and career progression opportunities significantly enhance organizational performance (Tabita, 2023; Dong, 2022). By aligning compensation with employee expectations and organizational goals, SMEs can create a more engaged and motivated workforce.

In addition to compensation, performance appraisal systems play a crucial role in managing and improving employee contributions. A well-designed appraisal system provides a structured framework for

evaluating employee performance, identifying skill gaps, and encouraging continuous professional development. Effective appraisal mechanisms foster transparency and fairness, ensuring that employees receive constructive feedback and recognition for their efforts. Research indicates that customized performance appraisal systems in SMEs not only enhance accountability but also stimulate innovation by encouraging employees to adopt creative problem-solving approaches (Huang et al., 2024; Su, 2024).

Moreover, training and development programs are pivotal for attracting, retaining, and upskilling employees. Given the rapid changes in market demands and technological advancements, SMEs must prioritize ongoing learning initiatives to maintain a competitive edge. Training programs improve employees' technical skills, leadership abilities, and adaptability, thereby contributing to enhanced performance and overall organizational profitability. Studies have shown that investment in employee development leads to increased job satisfaction, reduced turnover, and higher productivity, making it a critical component of HRM strategies in SMEs (Kmecova & Gavura, 2024).

To conceptualize the relationship between HRM practices and organizational success, scholars have widely applied the Ability, Motivation, Opportunity (AMO) theory. According to this framework, HRM practices should be designed to enhance employees' abilities through training and skill development, motivation through fair compensation and performance management, and opportunity through a positive work environment and career growth prospects. Empirical evidence supports that training and development programs significantly enhance employees' knowledge, motivation, and performance, aligning with the AMO perspective (Tunio et al., 2024; Yang, 2023).

Furthermore, the work environment is a crucial determinant of employee engagement and retention, particularly in SMEs operating in highly competitive markets. A supportive workplace culture that promotes open communication, teamwork, and well-being fosters higher levels of job satisfaction and commitment. Employees who perceive their work environment as inclusive and empowering are more likely to remain engaged and contribute meaningfully to organizational success. Studies have found that SMEs that prioritize a positive work environment experience lower turnover rate, improved employee morale, and enhanced overall business performance (Achmad et al., 2024; Putri et al., 2023). By integrating these HRM strategies—compensation, performance appraisal, training and development, and a supportive work environment—SMEs can optimize employee performance and build a sustainable competitive advantage.

HRM practices, such as compensation, performance appraisal, training & development, and work environment, play a pivotal role in motivating employees and enhancing their performance in small knowledge-based enterprises. By fostering environments that promote employee capabilities and engagement, these practices help SMEs navigate challenges, improve productivity, and sustain competitive advantages in dynamic markets.

2.3 RESEARCH FRAMEWORK

The literature demonstrated that HRM practices, particularly through HPWS, could improve employee motivation and performance. By coordinating factors such as compensation, performance appraisal, training, and a supportive work environment, SMEs like small accounting firms could enhance employee contributions and sustain competitive advantages (Rubio-Andrés et al., 2022; Weigel & Hiebl, 2023). This led to the hypothesis that a comprehensive HPWS approach significantly improves employees' work motivation and performance (Imran & Atiya, 2020; Edgar et al., 2021; Keramatiyazdi et al., 2023).

Therefore, the working hypotheses are as follows.

Firstly, the current human resource management practices at D Accounting Firm in Guangxi, China, do not effectively address employee needs and expectations, leading to low levels of employee motivation and performance.

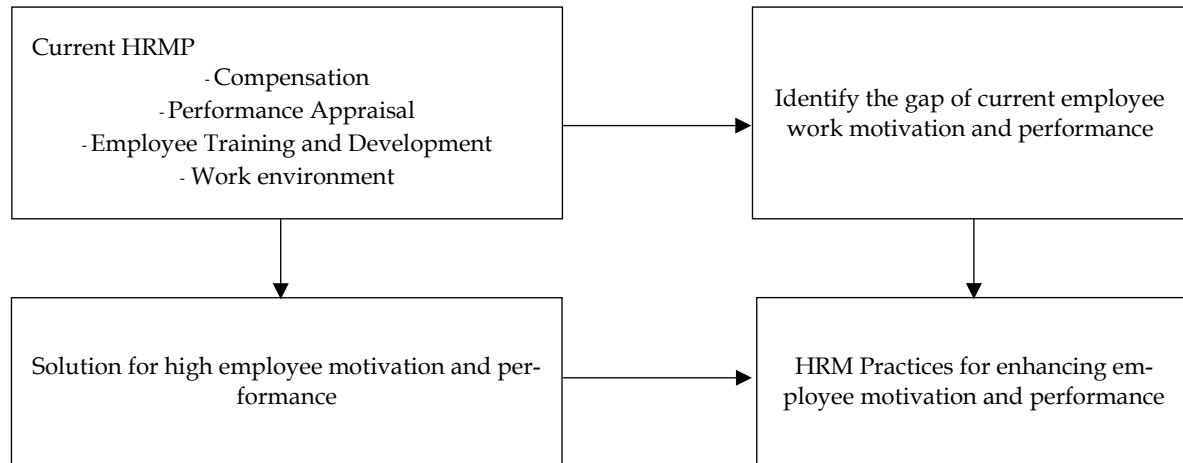
Secondly, there are gaps and problems in the HRM practices at D Accounting Firm in Guangxi, China, particularly in the areas of compensation, performance appraisal, employee training and development, and work environment which negatively impact employee motivation and performance.

Thirdly, a combination of compensation, performance appraisal, employee training and development, and work environment leads to high employee motivation and performance at D Accounting Firm.

Forth, Proposed HRM practices, based on identified gaps and challenges, would be enhance employee motivation and performance at D Accounting Firm in Guangxi, China.

This study was conducted according to the research framework shown below.

Fig 1. Research framework



First, starting from the current situation of human resource management, this study conducts qualitative and quantitative analysis on the current situation of human resource management, including compensation, performance appraisal, employee training and development, and work environment. Next, a questionnaire survey is used to identify the gap between current employee motivation and work performance. On this basis, based on interviews and fuzzy set qualitative comparative analysis (fsQCA), measures to improve employee motivation and performance are proposed for the current situation of human resource management practices, in order to achieve the purpose of enhancing employee motivation and performance.

3 METHODOLOGY

3.1 DESIGN

The research design of this study integrates mixed methods to thoroughly explore and analyze the impact of human resource management practices on employee motivation and performance. By combining quantitative and qualitative approaches, the study ensures a comprehensive understanding of the complex interplay between management practices and their outcomes.

The qualitative component of the study leverages thematic analysis of interviews with 12 key employees at D Accounting Firm, revealing in-depth insights into underlying dynamics, recurring themes, and contextual factors that influence employee motivation and performance (Lester et al., 2020). Complementing this, a systematic review of existing literature provides a robust theoretical foundation and practical recommendations, enhancing the study's ability to address organizational challenges with evidence-based strategies (Asman & Rony, 2023; Syam, 2024).

The quantitative approach involves administering a structured questionnaire to all 23 employees of the firm. Descriptive statistical analysis is used to examine the human resource management practices, while fuzzy-set qualitative comparative analysis (fsQCA) is employed to identify multiple configurations of factors leading to high employee motivation and performance (Liu et al., 2023). The fsQCA method offers a nuanced exploration of causal relationships, uncovering alternative paths and combinatory effects that traditional statistical methods might overlook.

Integrating the findings from both qualitative and quantitative analyses, this mixed-methods research design facilitates a holistic assessment of human resource management practices. It ensures actionable insights by identifying targeted improvement strategies for enhancing employee motivation and performance. Moreover, the study offers valuable guidance for small accounting firms in developing effective human resource management practices, contributing both to organizational development and the broader discourse in human resource management research

3.2 RESPONDENTS

The respondents for this study included all 23 employees of Accounting Firm D. The study was conducted from July 1 to September 1, 2024. Table 1 presents the characteristics of the respondents.

Table 1. Basic information of respondents

Items		Frequency	Percent (%)
Gender	Male	16	69.57
	Female	7	30.43
Age	20-29 years old	7	30.43
	30-39 years old	2	8.69
	40-49 years old	4	17.39
	Over 50 years old	10	43.48
Years of Employment	1-5 years	8	34.78
	5-10 years	1	4.35
	over 10 years	14	60.87
Education	Junior	3	13.04
	College	19	82.61
	Master	1	4.35

3.3 MEASUREMENTS

This study measures key variables related to human resource management and their impact on employee motivation and performance. Compensation is defined as employee remuneration, including wages, bonuses, and benefits. It is assessed through satisfaction with compensation, its link to performance, and motivation derived from compensation improvements (Lim & Ahmad, 2021; Zainon et al., 2020). Performance appraisal refers to evaluating employees' contributions to organizational goals, measured by objectivity, its relation to compensation, and its effect on work motivation (Hee & Jing, 2018; Zainon et al., 2020).

Employee training and development involves enhancing skills and career advancement, measured by the relevance of training programs and their impact on performance and development (Hee & Jing, 2018; Meira et al., 2023). The work environment includes physical and social aspects that affect performance, assessed through work facilities, security, comfort, and communication channels (Iqbal et al., 2024; Sugiarti, 2022).

Employee motivation is a psychological process measured by enthusiasm for tasks, job security, initiative, commitment to excellence, and effort to meet organizational goals (Sayed et al., 2021; Paais & Patiruhu, 2020). Employee performance refers to task execution and result quality, measured by goal achievement, responsibility fulfillment, timeliness, and accuracy (Manzoor et al., 2021; Hee & Jing, 2018). These variables provide insights into HR practices in small knowledge-based enterprises.

3.4 DATA COLLECTION AND ANALYSIS

The data collection and analysis for this study employs a mixed research method, integrating both qualitative and quantitative approaches to provide a comprehensive understanding of human resource

management practices at D Accounting Firm. This approach allows the study to capture both the numerical and detailed, nuanced aspects of the data, offering a holistic view of how these practices influence employee motivation and performance (Tulu & Gulilat, 2020).

In the qualitative phase, 12 key employees from various levels of the organization were interviewed. The interviews were transcribed and analyzed using thematic analysis, where recurring themes were identified and categorized (Lester et al., 2020). This process helps uncover underlying dynamics and detailed insights into how human resource management practices shape employee motivation and performance within the organization. Additionally, literature review methods provided strong theoretical foundations, helping to contextualize the findings and propose practical recommendations (Asman & Rony, 2023).

For the quantitative phase, a survey was conducted among all 23 employees at D Accounting Firm. The collected data were analyzed using statistical software to perform descriptive statistics, which involved calculating the mean and frequency of responses to assess employees' views on various human resource management practices. The Likert scale was employed to measure employee opinions, with results categorized according to the following interpretations (Table 2):

Table 2. Interpretation of Likert scale results

Mean Score Range	Interpretation
1.00 - 1.80	Very Low, Strongly Negative
1.81 - 2.60	Low, Negative
2.61 - 3.40	Moderate, Neutral
3.41 - 4.20	High, Positive
4.21 - 5.00	Very High, Strongly Positive

source: Sözen & Güven, 2019, p. 3

Furthermore, fuzzy-set qualitative comparative analysis (fsQCA) was used to examine the relationships between different human resource management practices and their impact on employee motivation and performance (Liu et al., 2023). FsQCA helps identify multiple configurations or paths leading to high motivation and performance, considering various combinations of factors that might influence the outcomes. This method enhances the specificity and breadth of the research findings by revealing complex relationships that are not easily captured by traditional statistical methods.

The qualitative insights from the interviews, combined with the quantitative results from the surveys and fsQCA analysis, provide a comprehensive understanding of the current state of human resource management practices at D Accounting Firm. By integrating these findings, the study offers valuable recommendations for improving employee motivation and performance through optimized HR practices.

4 RESULTS

4.1 CURRENT HUMAN RESOURCE MANAGEMENT PRACTICES

At present, the salary structure of D Accounting Firm is mainly composed of basic salary, business commission, prepaid salary and related insurance and welfare. Except for the basic salary of 1,000 yuan for administrative office employees, the basic salary of other employees is 400-1,800 yuan, which is determined according to the employee's professional certificate and position. Business commission refers to the distribution of business income according to the coefficient determined by the employee's personal coefficient based on length of service, qualification, position, attendance, work attitude and business quality. The prepaid salary system refers to the payment of a certain amount of project commission in advance every month based on the minimum income and living standard of employees in previous years. Regarding insurance and welfare, the company's contribution base for grassroots employees is the minimum contribution limit of the city. Only some long-term employees and managers who hold CPA certificates pay insurance premiums at 70% or 120% of the average salary of the previous year. In addition, the company

also provides holiday benefits of approximately 2,200 yuan per year. If on business trips, the firm provides employees with a daily travel allowance of 55 yuan.

In terms of performance appraisal, at the end of each year, the company evaluates employees based on factors such as their accounting and auditing experience, attendance, work attitude, business quality, professional qualifications, certificates obtained, and the number of CPA examination subjects passed. Based on these appraisals, the company determines the employee's project commission coefficient and the amount of basic salary for the next year.

In terms of employee training and development, D Accounting Firm has always encouraged employees to pursue continuous learning and focused on cultivating a culture of continuous education. The company adopts a practice-based education model, and department leaders or other managers provide personal guidance in actual work activities.

In terms of work environment, D Accounting Firm provides safe and reliable office conditions, equipped with necessary work equipment and audit software, which helps to reduce employees' workload. In addition, the company attaches great importance to creating a friendly working atmosphere and encourages direct communication between employees and management to ensure that problems are solved in a timely manner. The company also organizes various activities such as travel, dinners, sports, etc. to strengthen communication and cohesion among employees.

In this context, this study first conducted a descriptive analysis of each factor through a questionnaire, as shown in Table 3.

Table 3. Descriptive analysis of current situation of HRM practices

Items	μ	σ	Interpret
Compensation			
I am satisfied with my current compensation	2.8182	0.90692	Moderate
The compensation given by my employer will help improve my performance	2.8182	1.05272	Moderate
When my compensation improves, it really motivates me to work harder	4.3182	0.47673	Very high
I am satisfied with the bonus structure offered by the company	2.8182	0.85280	Moderate
The medical benefits provided by the organization meet my needs	2.7273	0.76730	Moderate
I feel adequately rewarded for my efforts through the compensation package	2.7273	1.03196	Moderate
Total	3.0379	0.75054	Moderate
Performance appraisal			
Performance appraisal is based on objective and quantifiable results.	3.0000	0.75593	Moderate
The performance appraisal process is related to the compensation plan.	3.7273	0.63109	High
Performance appraisal helps me identify my strengths and weaknesses.	2.7727	0.92231	Moderate
Performance appraisal affects my work motivation.	3.5455	0.59580	High
Performance is evaluated objectively during the appraisal process.	2.7727	1.06600	Moderate
Total	3.1636	0.64921	Moderate
Training & Development			
The training programs offered by the company enhance my knowledge in relevant areas.	3.2273	0.92231	Moderate
The company encourages a culture of continuous learning among employees.	2.9091	0.97145	Moderate
I have opportunities to discuss my training and development requirements with my employer.	3.0909	1.06499	Moderate
Training helps me improve performance.	3.0909	1.06499	Moderate
The job offered by the company will be helpful for my future career development.	3.8182	0.58849	High
I feel supported by the company in my personal and professional development.	2.8182	1.00647	Moderate
Total	3.1591	0.78760	Moderate
Work Environment			
The work facilities provided by the company are sufficient to support my work.	3.1818	0.79501	Moderate
The security system in my workplace makes me to work comfortably.	3.2727	0.76730	Moderate

The workspace has been designed to be quite comfortable.	2.0909	1.19160	Low
The company has established smooth communication channels internally.	3.2273	0.81251	Moderate
The company atmosphere makes us feel comfortable in our work.	2.8182	1.05272	Moderate
Total	2.9182	0.81803	Moderate

Employees reported a moderate level of satisfaction with their compensation package, although improvements in compensation were highly motivating. Performance appraisal was seen as moderately objective, with a high correlation to the compensation plan and positive effects on motivation. Training and development were moderately effective in enhancing knowledge and performance, with employees appreciating the opportunities for career development. Work environment factors, such as work facilities and security, were moderately adequate, but workspace comfort and internal communication channels were rated lower. Overall, employees showed moderate satisfaction with HRM practices, with areas for improvement identified in workspace comfort and the objectivity of performance appraisals.

Based on the above data, this study combines interviews to more comprehensively present the current situation of human resource management practices in D Accounting Firm, as shown in Table 4 for details.

Table 4. The current status of human resource management practice in D accounting firm

Theme	Current Situation
Compensation	- Most employees are acceptable to the current salary, but employees interviewed reflected that the low basic salary, lack of differentiation and low social security are areas that can be improved. The high score of "salary increase can motivate employees" also illustrates this point. - In the data, there are large differences in "employees' perception of the rewards for their efforts" and "the impact of current compensation on improving employee performance." This may be because some employees reported in the interviews that their income is too dependent on project commissions, and the commission distribution of non-CPA employees is lower, resulting in an imbalance between effort and reward. According to the leadership, it is precisely for this reason that many talents have left the firm in recent years. - Projects are often assigned subjectively by department managers, and employees question the fairness of the assignment. Especially when they are assigned difficult and low-paying tasks, they often feel dissatisfied, which leads to a decrease in work motivation and ultimately affects work efficiency. - Employers provide holiday allowances, gifts and travel subsidies to make employees feel cared for, which helps improve employee satisfaction.
Performance Appraisal	- Employees' satisfaction with the overall performance appraisal system is at a medium level. They received high scores in terms of the correlation between performance and pay and the impact of performance appraisal on motivation, indicating that performance and pay are closely linked, so performance appraisal has an important impact on employee motivation. - According to employees, the evaluation indicators such as work attitude and work quality are too subjective and are only subjectively evaluated by department leaders. There is a lack of objective basis, which makes it difficult for employees to be convinced. The satisfaction with "objectivity and quantification of performance evaluation indicators" and "objectivity of the evaluation process" is at a medium level, which also shows that there is room for improvement in this regard. - The appraisal system focuses on employees with CPA certificates and ignores experienced, hard-working employees who do not have certificates. This makes them feel that their efforts are not properly rewarded. "Performance appraisal identifies employees' strengths and weaknesses." Being at a medium level also shows that improvements in this area can be strengthened, which can enhance the role of performance appraisal. - In addition, some employees reported that the strict attendance system affected their already meager basic salary, which frustrated employees and led to a decline in morale and satisfaction.
Employee Training and Development	- Employee satisfaction is moderate when it comes to training and development. Specifically, employees are satisfied with the improved knowledge and resume value they receive in their current positions.

	- Employees generally recognize the importance of training to improve productivity and express their expectations for further training. However, according to interview information, the current lack of systematic and regular professional training in the firm has increased the work pressure of employees, especially new employees who need longer time to familiarize themselves with and adapt to their work. - Combining data and interviews, employees currently rely mainly on work practice and self-study to improve themselves. Although leadership encourages a culture of continuous learning, employees still expect the firm to support their future development through more specific measures. This will better help align employee goals with company goals and achieve improved overall performance.
Work Environment	- Regarding the current working environment, employee satisfaction is at a medium level, indicating that most employees believe that the working facilities are acceptable. - However, employees rated "space comfort" low. Through interviews, we found that this was mainly due to the chaotic office file management and the ergonomics of the office furniture, which had a negative impact on work efficiency. - There is also room for improvement in the "comfort of the working atmosphere". According to employees, the firm lacks culture and value building, and colleagues lack team awareness and cooperation spirit, which causes them to pay more attention to personal interests and affects work efficiency.

The human resource management practices at D Accounting Firm present several challenges affecting employee motivation and performance. While most employees find their salaries acceptable, issues such as low base pay, high reliance on commissions, and subjective project assignments create dissatisfaction and high turnover. The performance appraisal system, though linked to pay, is criticized for its subjectivity and bias toward CPA-certified employees, leaving other hardworking staff feeling undervalued. Training and development opportunities are limited, with employees relying on self-study due to a lack of structured programs. The work environment is moderately satisfactory, but poor office organization, uncomfortable furniture, and a lack of teamwork culture hinder efficiency. Addressing these issues could enhance motivation, job satisfaction, and overall performance.

4.2 THE GAP OF EMPLOYEE MOTIVATION AND PERFORMANCE

In this section, we mainly use descriptive analysis to show the current employee motivation and performance of D Accounting Firm, see Table 5 for details.

Table 5. Descriptive analysis of employee motivation and performance

Items	μ	σ	Interpret
I am fully motivated to participate in work.	2.9091	0.92113	Moderate
I do this job because it provides me with a sense of long-term security.	3.3636	0.84771	Moderate
I am driven to take initiative in my job tasks.	2.7273	1.07711	Moderate
I am committed to achieving excellence in my work tasks.	2.6818	0.99457	Moderate
I am motivated to put in extra effort to accomplish organizational goals.	2.3182	1.21052	Low
Total of Employee Motivation	2.8000	0.92788	Moderate
I consistently achieve the goals set for my role.	3.0909	0.92113	Moderate
I effectively fulfill my responsibilities at work.	3.6818	0.64633	High
I have abilities to complete tasks within the specified time.	3.1364	1.03719	Moderate
I can complete the work accurately.	3.1364	0.88884	Moderate
I produce high-quality results in my work tasks.	2.8182	1.09702	Moderate
I complete my work tasks efficiently.	2.5909	1.29685	Low
Total of Employee Performance	3.0758	0.90812	Moderate

The data in Table 5 show that the current work motivation of employees is at a medium level, and most employees have a good recognition of the long-term security brought by their work. According to the interviews, this is because the company has never defaulted on the salary of employees in many years of operation. However, the scores for employee work initiative, extra efforts for the organization, and pursuit of excellence are all at a medium level, which means that employees are more focused on completing basic tasks and meeting basic requirements, and lack the motivation to spontaneously find opportunities or solve problems. The firm may need to take measures to further improve employee motivation and engagement.

Regarding employee performance, most employees' performance is concentrated at a medium level and are widely recognized for fulfilling their job responsibilities. However, there are large differences in the ability to achieve work goals, complete tasks, and work quality and efficiency, which may be due to differences in experience level, knowledge base, and work habits. This may mean that targeted guidance, support, or improvement measures are needed to improve performance.

4.3 SOLUTION FOR HIGH EMPLOYEE MOTIVATION AND PERFORMANCE

First, based on the interviews, corresponding suggestions were made on the current human resource management practices of D Accounting Firm that affect employee motivation and performance, as shown in the figure below.

Table 6. Suggestions from interviews

Theme	Suggestion
Compensation and Benefits Improvement	- Adjust basic salary levels based on performance and experience while reflecting differentiation. - Establish clear criteria for project allocation. - Increases the contribution base for social insurance and benefits for employees as their service age increases.
Performance Appraisal and Employee Engagement Improvement	- Involve employees in the formulation of evaluation criteria. - Optimize evaluation indicators and use quantifiable and objective indicators. - Evaluation indicators should take into account the complexity of the work. - Evaluation indicators are combined with actual work performance and contribution. - Introducing an attendance reward system. - Provide a platform for employee feedback and conduct regular employee satisfaction surveys.
Employee Development and Career Advancement	- Develop a systematic training plan to help employees continuously update their knowledge, which not only helps employees grow but also effectively improves work efficiency - Discuss career development plans with employees and provide plans and pathways for their long-term development in the firm
Workplace Environment and Organizational Culture	- Try digital file management. - Use ergonomic office equipment. - Strengthen corporate culture construction and enhance employees' sense of belonging and identity to the company to stimulate employees' internal motivation and further improve their work performance.

And then, the data collected from the employees of D accounting firm were analyzed in four steps through fuzzy set qualitative comparative analysis (fsQCA) to explore strategies that can effectively improve the motivation and performance of employees in D accounting firm

4.3.1 DATA CALIBRATION

To initiate the data calibration process, raw scores need to be converted to fuzzy set membership scores ranging from 0 to 1. This conversion uses direct calibration, where a full membership fuzzy score is 0.95, indicating the highest level of membership in the set. The crossover point's fuzzy score is 0.5, indicating equal likelihood of membership or non-membership. A complete non-membership fuzzy score is 0.05, indicating the lowest level of membership.

For this analysis, anchors are derived from a 5-point scale: scores of 4.5 correspond to full membership, 3.0 to the crossover point, and 1.5 to full non-membership. Using these anchors, calculate the fuzzy membership scores for each variable systematically, which will enable a more nuanced understanding of the data. The following sample illustrates the calibrated data, showing how the raw scores have been converted into fuzzy membership scores for further analysis.

Table 7. Calibrated Fuzzy Membership Scores

Case	Compensation	Performance Appraisal	Training and Development	Work Environment	Employee Motivation	Employee Performance
1	0.14	0.24	0.21	0.18	0.05	0.16
2	0.18	0.62	0.17	0.24	0.08	0.13
...	...	...	...	...	...	...
22	0.95	0.95	0.95	0.95	0.95	0.95

4.3.2 TRUTH TABLE CONSTRUCTION

In the second step of the analysis, a truth table is constructed to capture all logically possible combinations of the causal conditions and their associated outcomes. With four causal conditions in our study, this results in 24=16 distinct combinations. Each combination represents a different scenario where the conditions can either be present (1) or absent (0).

Table 8. Truth table of causal conditions and outcomes

Compensation	Performance Appraisal	Training and Development	Work Environment	Employee Motivation	Employee Performance	Consistency
1	1	1	1	1	1	0.95
1	1	1	0	1	1	0.92
1	1	0	1	0	1	0.88
1	0	1	1	1	0	0.85
0	1	1	1	0	0	0.78
...	...	...	...	...	...	...

The truth table systematically records various combinations of conditions along with the number of cases exhibiting each combination, the outcomes for Employee Motivation and Employee Performance, and the consistency of these outcomes with the specified conditions. For example, in the combination where all four conditions are present (1,1,1,1), we observe a high consistency score of 0.95, indicating a strong alignment between these conditions and the desired outcomes. In contrast, combinations with fewer conditions, such as (0,1,1,1), show lower consistency values (0.78), reflecting a weaker association with the outcomes. This structured presentation of data facilitates an in-depth analysis of how different configurations of causal conditions influence the outcomes, providing a clearer understanding of the relationships within the dataset.

4.3.3 ANALYSIS OF NECESSARY CONDITIONS

In the third step of the analysis, evaluate the necessity of each causal condition by examining both their consistency and coverage scores.

Table 9. Analysis of necessity of each variable of motivation and performance

Condition	Consistency (Motivation)	Coverage (Motivation)	Consistency (Performance)	Coverage (Performance)
Compensation	0.85	0.78	0.88	0.80
Performance Appraisal	0.92	0.83	0.90	0.81
Training and Development	0.88	0.82	0.89	0.82
Work Environment	0.83	0.79	0.85	0.80

A condition is deemed necessary if its consistency score exceeds 0.9. The results of this necessity analysis indicate the following. Compensation shows relative consistency in employee motivation and employee performance, but falls short of the threshold to be considered a necessary condition. The consistency values of performance appraisal on employee motivation and employee performance were close to or above the 0.9 threshold for both outcomes and were therefore considered strong candidates for being a necessary condition. Training and development showed high consistency in employee motivation and employee performance, but it was slightly below the 0.9 standard, indicating that training and development, while important, are not strictly necessary. Although the work environment contributes to employee motivation and employee performance, it is not consistent enough to be considered a necessary condition. Overall, performance appraisal emerges as a necessary condition for both Employee Motivation and Employee Performance, given its consistency scores are either above or very close to the 0.9 threshold.

4.3.4 ANALYSIS OF SUFFICIENT CONDITIONS

In the fourth step of our analysis, we focus on identifying sufficient conditions by examining combinations of causal conditions that consistently lead to the desired outcomes. We use the truth table to evaluate these combinations, applying a consistency threshold of 0.8 and a frequency threshold of 1 to determine sufficiency.

Table 10. Sufficient conditions for employee motivation and performance

Outcome	Combination of Conditions	Consistency	Coverage	Explanation
Employee Motivation	Compensation * Performance Appraisal * Training and Development * Work Environment	0.95	0.45	All four conditions present lead to high employee motivation.
	Compensation * Performance Appraisal * Training and Development * ~Work Environment	0.92	0.30	High employee motivation achieved even without work environment.
Employee Performance	Compensation * Performance Appraisal * Training and Development * Work Environment	0.93	0.48	All four conditions present lead to high Employee Performance.

	~Compensation * Performance Appraisal * Training and Development * Work Environment	0.88	0.25	High employee performance achieved without compensation.
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For employee motivation, the analysis identifies two sufficient combinations of conditions. The first combination, which includes Compensation, Performance Appraisal, Training and Development, and Work Environment, demonstrates a high consistency score of 0.95 and a coverage score of 0.45. This indicates that when all four conditions are present, they consistently lead to high Employee Motivation. The second combination, Compensation, Performance Appraisal, Training and Development, and the absence of Work Environment (~Work Environment), has a consistency score of 0.92 and a coverage score of 0.30. This combination also leads to high Employee Motivation, although it excludes the Work Environment condition.

For employee performance, the analysis reveals two sufficient combinations as well. The first combination, which includes Compensation, Performance Appraisal, Training and Development, and Work Environment, shows a consistency score of 0.93 and a coverage score of 0.48. This combination consistently results in high Employee Performance, similar to its effect on Employee Motivation. The second combination, which excludes Compensation (~Compensation) but includes Performance Appraisal, Training and Development, and Work Environment, has a consistency score of 0.88 and a coverage score of 0.25. This combination also leads to high Employee Performance, despite the absence of Compensation.

4.3.5 INTERPRET THE RESULTS

Interpret the results to gain insight into the effectiveness of various HR practices and their impact on employee motivation and performance.

The analysis reveals that performance appraisal is a necessary condition for both employee motivation and employee performance. This indicates that a well-established performance appraisal system is essential for enhancing both outcomes, underscoring its importance in the HR strategy.

For employee motivation, the results show that a combination of high levels of compensation, performance appraisal, and training and development is sufficient to achieve high motivation, regardless of the work environment. In contrast, achieving high employee performance requires the presence of all four practices. Notably, there is also a viable path for employee performance where high levels of performance appraisal, training and development, and work environment can offset lower levels of compensation, highlighting the flexibility in how these conditions can interact.

The analysis identifies some gaps. The work environment has a relatively low impact on employee motivation, suggesting it may be an area needing improvement to better support motivation. Additionally, while compensation is significant, it is not the most critical factor for employee performance, indicating that non-monetary factors play a crucial role. The absence of paths with low performance appraisal or training and development further highlights the critical importance of these elements, suggesting they should not be neglected in HR practices.

Based on these findings, several recommendations can be made. First, enhancing the performance appraisal system should be a priority, as it is necessary for both employee motivation and performance. Second, investing in training and development programs is advisable, given their presence in all sufficient conditions for both outcomes. Although the work environment may not directly boost motivation, it remains important for performance and should be improved. Finally, while high levels of compensation are important, a balanced approach is recommended, acknowledging that other factors also significantly contribute to employee performance.

4.3.6 SOLUTIONS FOR HIGH EMPLOYEE MOTIVATION

Solutions for high employee motivation as show in Table 11. Complex solutions demonstrate that high levels of compensation, performance appraisal, and training & development consistently lead to elevated employee motivation. While the work environment is relevant, it plays a less critical role compared to the other factors. The high consistency scores highlight the reliability of these combinations in fostering motivation, although the coverage scores suggest that these solutions account for only part of the instances of high motivation, indicating that additional factors may also be influential.

Table 11. Solutions for high employee motivation

Solution Type	Causal Configurations	Consistency	Coverage
Complex	1. C * PA * TD * WE	0.95	0.45
	2. C * PA * TD * ~WE	0.92	0.30
Parsimonious	PA * TD	0.89	0.75
Intermediate	1. C * PA * TD	0.91	0.65
	2. PA * TD * WE	0.90	0.60

The parsimonious solution focuses on a more straightforward combination of performance appraisal and training & development, which effectively explains a significant proportion of high motivation cases. While this approach is simpler, it has slightly lower consistency compared to more complex solutions, suggesting that it is effective but may not be universally applicable to all cases.

Intermediate solutions offer a balanced approach by incorporating both performance appraisal and training & development while also acknowledging the role of either high compensation or a favorable work environment in enhancing motivation. The high consistency and coverage scores of these solutions reflect their effectiveness and ability to explain a broad range of high motivation cases.

4.3.7 SOLUTIONS FOR HIGH EMPLOYEE PERFORMANCE

Solutions for high employee performance as show in Table 12.

Table 12. Solutions for high employee performance

Solution Type	Causal Configurations	Consistency	Coverage
Complex	1. C * PA * TD * WE	0.93	0.48
	2. ~C * PA * TD * WE	0.88	0.25
Parsimonious	PA * WE	0.87	0.72
Intermediate	1. PA * TD * WE	0.89	0.68
	2. C * PA * WE	0.88	0.62

The analysis identified three types of solutions for achieving high employee performance.

First, complex solutions highlight the significance of performance appraisal, training and development, and work environment as essential factors for high performance. While compensation does not play a crucial role in altering the outcome, its inclusion or exclusion does not significantly affect the results. The high consistency scores indicate that these combinations reliably lead to high performance, and the coverage scores suggest that they explain a substantial proportion of high performance cases.

Second, the parsimonious solution is the most efficient, where the combination of performance appraisal and work environment alone is sufficient for achieving high employee performance. This solution explains a significant proportion of high performance cases and demonstrates high consistency, underscoring its effectiveness in driving performance.

Finally, intermediate solutions reinforce the consistent importance of performance appraisal and work environment for high performance. When these factors are combined with high training and development or compensation, they also lead to high performance. The high consistency and coverage scores in these solutions further validate their effectiveness in contributing to employee performance.

4.3.8 KEY INSIGHTS FROM SOLUTIONS

Compensation plays a significant role in driving employee motivation, reflecting its importance in motivating employees to perform well. However, its impact on overall performance is less pronounced compared to other factors. This suggests that while competitive compensation is essential for enhancing motivation, it alone may not be sufficient to drive high performance. Other HR practices, such as performance appraisal and training & development, also contribute to improving performance.

Performance appraisal emerges as a consistently critical factor for both employee motivation and performance. Regular and effective performance appraisals provide employees with valuable feedback, recognition, and a sense of accomplishment, which boosts motivation. Additionally, well-conducted appraisals align employees' efforts with organizational goals, enhancing overall performance. This dual role highlights the necessity of integrating robust appraisal systems into HR strategies to achieve both motivated employees and high performance.

Training & development is crucial for maintaining high employee motivation and plays an important role in enhancing performance. Providing employees with opportunities for growth and skill development not only keeps them motivated but also equips them with the necessary skills to perform better in their roles. This practice is particularly effective in maintaining employee engagement and ensuring that employees are well-prepared to meet the demands of their roles, contributing to improved performance outcomes.

The work environment is more influential in determining employee performance than motivation. A positive and supportive work environment can significantly enhance employees' ability to perform their duties effectively, leading to higher performance levels. While it is relevant for motivation, its impact is not as strong as that of other factors like Compensation and Performance Appraisal. Ensuring a conducive work environment is crucial for maximizing performance but should be complemented by other practices to fully support employee motivation.

These insights reveal the intricate dynamics between various HR practices and their differing effects on motivation and performance. Compensation and performance appraisal are foundational elements that directly influence both aspects, while training & development and work environment play supportive roles. Understanding these relationships allows organizations to design comprehensive HR strategies that address both motivational and performance needs effectively.

5 DISCUSSION

This study set out to answer the research question: How do HRM practices influence employee motivation and performance in small knowledge-based enterprises? using D Accounting Firm in Guangxi, China as a case study. The findings highlight that four core HRM practices – compensation, performance appraisal, employee training and development, and the work environment – are closely interrelated and collectively shape employee motivation and performance, although their individual impact varies. This research affirms that HRM practices significantly influence employee motivation and performance in small knowledge-based enterprises. While compensation and the work environment provide important foundational support, performance appraisal and training and development play more direct and powerful roles in driving motivation and productivity. To maximize employee outcomes, it is essential for organizations like D Accounting Firm to adopt an integrated HRM approach that is both strategic and responsive to employee needs.

The first hypothesis, which proposed that the current HRM practices at D Accounting Firm fail to meet employee needs and expectations, resulting in low motivation and performance, is supported by the findings. The study revealed that the firm's HRM systems, particularly in compensation, performance appraisal, and training, lack consistency and strategic focus. This misalignment contributes to employee dissatisfaction, diminished engagement, and underperformance.

The second hypothesis, suggesting that specific shortcomings in compensation, performance appraisal, training and development, and the work environment negatively affect motivation and performance, is also supported. Both survey data and interview responses indicated that employees perceive weaknesses in these areas. For example, performance evaluations were seen as overly subjective, opportunities for skill development were limited, and the work environment was neither physically comfortable nor culturally supportive—all of which undermine employee morale and effectiveness.

The third hypothesis, which argued that a combined application of these four HRM practices leads to improved motivation and performance, is partially supported. The data indicate that when these practices are thoughtfully implemented and tailored to employee needs, they can have a significant positive impact. Among all practices, performance appraisal and training and development stood out as the most influential. These findings are consistent with the work of Sun (2022), who emphasized the role of transparent appraisal systems in enhancing employee focus and productivity. Likewise, Nyoman (2024) and Supraja and Sambaiah (2024) found that well-designed training initiatives and career development plans not only boost motivation and commitment but also help reduce turnover rates.

The fourth hypothesis, which proposed that the implementation of revised HRM strategies based on the identified gaps would lead to better motivation and performance, is strongly supported. The study offers actionable recommendations, including the establishment of clear performance metrics, increased transparency in compensation policies, investment in structured development programs, and the creation of a more conducive physical and cultural work environment. These suggestions are not only aligned with employee feedback but are also reinforced by existing literature (e.g., Singhvi et al., 2018; Rahman et al., 2024; Li, 2023).

Performance appraisal emerged as a critical factor, aligning with the findings of Sun (2022), who highlighted its importance in improving employee motivation and performance in small knowledge-based enterprises. By establishing key performance indicators, companies can objectively assess employees' contributions, ensuring a fair value distribution system that motivates employees to perform better while aligning their efforts with organizational goals. Similar research by Šišinački et al. (2017) supports the notion that minimizing the subjectivity of performance evaluations and regularly revising them based on stakeholder feedback is vital for enhancing their effectiveness. This approach ensures that the appraisal system remains aligned with the organization's culture and values.

Employee training and development was also identified as a key factor in driving motivation and performance. Nyoman (2024) found that effective training and structured career development not only increase employee motivation and commitment but also reduce turnover, which ultimately enhances performance. Additional studies, such as those by Supraja and Sambaiah (2024), emphasized that systematically identifying training needs and engaging in career development discussions can boost employee motivation and performance. This approach benefits both the employees—by improving their skills—and the organization—by reducing turnover and increasing financial returns, creating a mutually beneficial situation.

Compensation strategies also played a significant role in motivating employees. Research by Singhvi et al. (2018) and Hapsari (2023) indicated that appropriate compensation strategies positively influence employee motivation and retention. Fair compensation enhances motivation, increases job satisfaction, and, ultimately, boosts performance (Ananda, 2023). These findings suggest that while compensation is a foundational element, it should be integrated with other HR practices to maximize its impact on performance.

Lastly, the work environment, though secondary to other factors, was found to significantly influence employee performance. Rahman et al. (2024) found that a comfortable and conducive physical work environment, including office furniture and minimizing distractions, directly improves employee performance. Research by Li (2023) also stressed the importance of cultivating a supportive corporate culture to

enhance team cohesion and collaboration, which further boosts overall efficiency. In small and medium-sized enterprises, creating an appropriate work environment is crucial for optimizing performance, alongside other HR practices.

Overall, these findings reveal the interconnectedness of various HR practices and their cumulative impact on employee motivation and performance. Compensation, performance appraisal, training and development, and work environment all play significant roles, with performance appraisal and training & development being particularly crucial for driving motivation and performance in small knowledge-based enterprises.

6 CONCLUSION

This research finds that for small knowledge-based enterprises such as D Accounting Firm, compensation, performance appraisal, and training and development are the most important factors driving employee motivation. While the work environment can also play a role, its impact is relatively smaller. Among these, the most direct and effective solution is to optimize performance appraisal and combine it with improvements in employee training and development. To further enhance motivation, optimizing compensation or the work environment would also be beneficial. Regarding employee performance, the most direct approach is to optimize the two key factors: performance appraisal and the work environment. Additionally, improving employee training and development, along with compensation, can also positively affect employee performance.

Specifically, based on the current situation at D Accounting Firm, the company can improve employee motivation and performance through the following measures. First, performance appraisal plays a central role in enhancing both motivation and performance. The firm should consider involving employees in the formulation of evaluation criteria, comprehensively assessing the complexity of work and actual contributions, optimizing the use of quantifiable and objective evaluation indicators, and introducing a reward system alongside attendance incentives. Additionally, providing a feedback platform and conducting regular satisfaction surveys will help engage employees. Second, employee training and development not only maintain motivation but also improve skills, which in turn enhances performance. The firm should consider developing systematic training plans and encouraging discussions with employees about personal career development, aiming to achieve a win-win situation for both the company and its employees. Furthermore, competitive compensation has a significant impact on employee motivation, which is essential for optimizing talent reserves and personnel structure. The firm may consider adjusting base salary levels and social security benefits based on performance, experience, and contributions, ensuring differentiation. At the same time, it is crucial to establish fair project allocation standards to protect the motivation of experienced employees. Finally, while the work environment has a smaller impact on motivation, it directly influences performance. Therefore, the firm should focus on strengthening the corporate culture to improve employees' sense of professional belonging and identity. Additionally, attention should be given to the physical office environment, such as using ergonomic equipment to create a more comfortable workplace, which can improve overall team performance.

In summary, D Accounting Firm has established high-performance and high-motivation human resource management practices by optimizing performance appraisal, enhancing employee training and development, adjusting compensation, and improving the work environment. These measures provide valuable solutions for the current situation and have significant guiding implications for human resource management practices in small knowledge-based enterprises. However, the implementation effects of these measures may vary depending on factors such as corporate culture and employee characteristics. Therefore, a limitation of this study is that it does not fully account for differences in various organizational contexts. Future research is recommended to explore the applicability and effectiveness of these measures in enterprises of different types and sizes and to investigate how these measures can be refined and implemented to achieve the best outcomes.

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