Linking Performance Appraisal with Sustainable Performance Through Innovative Behaviours: Contributions to SMEs' Long-Term Viability

Orisa Chumphong[1*]

Received: 07-05-2025, Revised: 16-06-2025, Accepted: 19-06-2025

Abstract

This article aims to review the relevance of existing literature on the critical roles of performance appraisal and innovative behaviour, including its role in promoting sustainable performances. Despite increasing attention on the role of performance appraisal in organizational performance, limited research has explored how it indirectly promotes sustainable performance through innovative behaviours, particularly in the SME context of Thailand. Drawing on HR system strength (HRSS) theory, this review shows that the interplay between performance appraisal and innovative behaviour can encourage and contribute to sustainability performances, ultimately fostering their long-term viability, particularly in the context of SMEs in Thailand. Furthermore, within the framework of employee performance, this review unpacks the role of performance appraisal in stimulating innovative work behaviours to enhance the overall performance of SMEs, viewed through the lens of their long-term viability. This review also offers several useful policy implications relevant to the growth of SMEs. Hopefully, it is anticipated that this article will be beneficial to practitioners, researchers, and policymakers involved in the context of SMEs, providing a fuller understanding of these concepts within specific research fields.

Keywords: Performance appraisal; Innovative behaviour; Sustainable performance; SMEs; HR system strength theory

[1] Faculty of Humanities and Social Sciences, Thaksin University (Songkhla Campus)
*Corresponding Author E-mail: orisa.c@tsu.ac.th

Introduction

As we make our way deeper into the 21st century, global economies face unprecedented challenges marked by economic inequality, declining competitiveness, and accelerating technological disruptions (Groh et al., 2025; Mariotti, 2024) These transformative shifts, driven by global crises, digital innovation, and evolving social norms, demand that organizations not only survive but actively pursue sustainable growth through innovation (Fisk, 2010; Li & Duan, 2025; Malek et al., 2024). Consequently, fostering innovative behaviours has emerged as a critical strategy to enhance sustainable performance in contemporary business environments.

Small and medium-sized enterprises (SMEs), recognized as engines of inclusive growth, play a pivotal role in economic development, particularly in emerging economies. By generating employment, reducing poverty, and fostering community resilience, SMEs are vital to national economies. Yet, their long-term viability remains under threat due to limited resources, fluctuating markets, and difficulties in attracting and retaining talent. Addressing these issues requires more than operational efficiency, it calls for strategic integration of innovation into organizational systems. Human resource management (HRM) practices, particularly performance appraisal, have increasingly been seen as key enablers of this transformation (Biron et al., 2011; Curzi et al., 2019).

In the Thai context, SMEs are essential economic drivers but continue to face persistent challenges relating to sustainability, innovation capacity, and workforce stability or employee retention (Potipiroon & Chumphong, 2024). In such a setting, performance appraisal systems hold the potential not only to evaluate employee outcomes but also to foster behaviours aligned with long-term strategic goals including innovation and sustainability.

While existing literature has acknowledged the importance of HRM systems in shaping organizational outcomes, limited attention has been paid to the indirect mechanisms, particularly how HR practices foster innovation that then drives sustainable performance. This review article addresses this critical gap by focusing on the mediating role of innovative behaviours in the relationship between performance appraisal and sustainability.

Drawing on the HR System Strength (HRSS) theory (Bowen & Ostroff, 2004), we posit that performance appraisal operates as a signalling system within the organization. When implemented with clarity, consistency, and credibility, appraisals help establish a shared understanding of expected behaviours most notably, innovation. Such innovative behaviours, in

turn, are instrumental in achieving long-term sustainability by enabling SMEs to adapt, remain competitive, and pursue environmentally and socially responsible goals (Canet-Giner et al., 2020; Saunila, 2016).

Focusing on this indirect pathway is both theoretically and practically significant. It reflects a growing academic interest in unpacking the "black box" between HRM and firm-level outcomes, especially in the SME context (Bos-Nehles & Meijerink, 2018). Moreover, it aligns with research emphasizing that sustainable performance is rarely achieved through HR practices alone, but rather through the employee behaviours they elicit (Andreeva et al., 2017).

Despite this theoretical importance, this article review has investigated how performance appraisal practices contribute to sustainable performance via innovation, especially within SMEs. By synthesizing insights across HRM, innovation, and sustainability literature, this article aims to fill that void. It argues that performance appraisal systems, when strategically designed and perceived as fair, can serve as key levers for fostering innovative workplace cultures, thereby enhancing long-term organizational resilience.

Therefore, the core objective of this review article is to explore how performance appraisal and innovative behaviours intersect to impact SME sustainability. This framework, supported by HRSS theory, provides a foundation for understanding how SMEs can harness human capital strategically to navigate today's complex and uncertain economic environment.

Figure 1: The conceptual framework of the effect of performance appraisal and innovative behaviours on the sustainable performance of SMEs.

HR System Strength (HRSS) Theory

The conceptual framework in Figure 1 is grounded in HR System Strength (HRSS) theory (Bowen & Ostroff, 2004), which explains how human resource management (HRM) systems influence employee behaviour through the strength of the signals they send. According to

HRSS theory, a strong HR system is one that delivers messages that are distinctive (clear and salient), consistent (internally coherent), and consensual (shared and agreed upon) across organizational sectors. When these characteristics are present, employees understand which behaviours are expected, valued, and rewarded, enabling the alignment of individual actions with organizational goals.

In the SME context, performance appraisal acts as a key HRM signal. When appraisal systems are perceived as fair, developmental, and well-communicated, they send strong cues about desired employee behaviours, specifically, creativity, initiative, and adaptability. These cues influence innovative behaviours (IB) such as idea generation, experimentation, and problem-solving (Bednall et al., 2014; Janssen, 2000). In turn, these innovative behaviours contribute to sustainable performance by helping SMEs improve efficiency, develop green practices, enhance competitiveness, and adapt to dynamic environments (Aziz, 2022; Saunila, 2016).

Performance appraisal is a structured HR practice that, when applied with clarity and fairness, acts as a high-strength HR signal. These signals increase employee motivation and psychological safety, which are key enablers of innovative behaviour (Amabile et al., 1996; Bowen & Ostroff, 2004). Innovative behaviour function as a mediating mechanism that channels the influence of performance appraisal toward sustainable performance, which encompasses environmental, social, and economic outcomes (Thneibat & Sweis, 2023).

Therefore, the conceptual framework posits that performance appraisal influences sustainable performance indirectly through its effect on innovative behaviours; a pathway fully supported by HRSS theory. This integration of HRSS provides a robust explanation of how strategic HR practices shape behavioural outcomes in SMEs, ultimately enhancing long-term viability and competitiveness.

Performance Appraisal in the Context of SME Development

Foundation and Definitions

Performance appraisal (PA) is a crucial mechanism for encouraging employees' work performance and is necessary for organizational growth by evaluating human resource quality, fostering motivation and promoting creativity. Traditionally, performance appraisal can be defined as a process where employers evaluate work effectiveness, provide feedback, and

offer rewards to their employees (Fletcher, 2001). It is an important component of establishing a work performance management system that helps organizations achieve their goals by aligning them with employees' motivation through specific behavioural criteria (Latham et al., 2008). Furthermore, by identifying employees' strengths and weaknesses, PA provides valuable information for human resource decisions such as promotion, transfer, or redundancy. The primary goal of performance appraisal is to cultivate behaviours that lead to improved work performance.

Over time, research on performance appraisal has evolved from an initial focus on evaluation methods to a broader examination of the societal contexts in which it operates (Ferris et al., 1994; Fletcher, 2001; Ilgen & Feldman, 1983). Scholars advocation for robust work performance systems have emphasised the ideal of a morally grounded system supported by appropriate administrative tools for human resources management (DeLeon & Ewen, 1997).

Over the years, scholars have reported that performance appraisal is widely recognized as a long-standing and globally adopted management practices, encompassing activities such as employees scoring, performance reviews, employee assessment, and outcome evaluation (Mathis et al., 2017). As its core, appraisal refers to the evaluation of value, quality, and fairness within the context of workplace (Toppo & Prusty 2012). More specifically, PA is defined as the systematic evaluation of employees by supervisors who are familiar with their work performance (Taticchi et al., 2010). Consequently, performance appraisal has become a crucial link in the overall process of performance management as it often concludes the performance management cycle. This underscores the importance of research that highlights HRM's best practices, particularly performance management in SMEs, an area that has received limited attention from both academics and practitioners (Nzonzo & Matashu 2014).

Core Components of the Performance Appraisal Process

Likewise, a central objective of performance appraisal is to shape employees' behaviour in tasks execution. The performance appraisal process typically comprises three key components: observation, feedback, and planning ((Findley et al., 2000; Folger et al., 1992). Observation involves managers assessing their subordinates' work performance over a specific period and under various conditions (Barbieri et al., 2023; Thneibat & Sweis, 2023). Building upon observation, feedback involves managers actively listening to their subordinates and supervisors providing

consultation on aspects relevant to their employees' work performance (Ghazi et al., 2023). The final component, planning, refers to the extent to which managers and their subordinates collaborate to define and improve their goals and work performance criteria (Folger & Konovsky, 1989). Considering these interconnected components, viewing the performance appraisal process merely as a variable influencing the fairness of the appraisal process may present an incomplete perspective of its dynamic nature.

The Strategic Role of Performance Appraisal in Shaping Employee Behaviour

In the past two decades, research has shown that performance appraisal can also be conceptualized as a process of formal negotiation, often structured as an interview, between subordinates and managers. During this interaction, subordinates work performance is reviewed and communicated, with an emphasis on identifying strengths and weaknesses, as well as opportunities for improvement and skill development (Judge & Ferris, 1993; Latham & Wexley, 1977). This traditional view of PA focused on efficiency assessment to improve work evaluation. This includes the development and management of different appraisal types to minimize evaluators bias and to examine the relationship between appraisal and work performance in specific roles (Wayne & Kacmar, 1991).

Challenges and Criticisms of Performance Appraisal systems

Despite its perceived benefits, some previous studies have expressed scepticism about the efficiency of performance appraisal (Huber, 1983; Kellough & Nigro, 2002). These studies suggest that supervisors might compromise the process to avoid employee dissatisfaction or due to time constraints in providing constructive feedback. Indeed, negative appraisal outcomes can lead to emotional reactions from employees, potentially damaging their self-esteem, and ultimately undermining the accuracy of the effectiveness management system (Perry et al., 2017). Consequently, while performance appraisal outcomes are key elements in human resource management and the administration of work performance, as well as the tools employed for appraisal, its effective application may vary across different organizational contexts, particularly in business, entrepreneurship, or SMEs. Employees in SMEs tend to perceive the performance appraisal process as merely a formality due to the absence of constructive feedback and informal suggestions. In response to these perceptions, employees suggested that instead of emphasizing the implementation a 360-degree appraisal system,

managers should prioritize providing high-quality feedback focused on improving employees' work performance potential and efficiency (Na-Nan et al., 2017; Wood & Pereira 2014).

Social and Relational Dimensions of Performance Appraisal

Different perspectives on performance appraisal highlights its broader role beyond mere evaluation, emphasizing its capacity for fostering inspiration, communication, organizational citizenship, and social dynamics within the employee–organizations relationship, where supervisors hold direct authority to control (Findley et al., 2000; Murphy & Cleveland, 1995; Norris-Watts & Levy, 2004). In organizations with established performance appraisal systems, employees' perceptions of organizational practices and leadership are linked to various wider aspects of their performance, such as the reliability of top management and emotional resilience (Folger & Konovsky, 1989; Giles et al., 1997). This aspect is particularly relevant in SMEs where direct interactions between employees and supervisors dominate HR processes, highlighting the need for a socially intelligent and context-sensitive approach to appraisal.

Performance Appraisal in SME Contexts

Research specifically examining performance appraisal in SMEs, such as the study conducted by Wood and Pereira (2014) focusing on production processes, has revealed a lack of formal PA systems within these organizations. Despite this absence of formal structures, managers often provide informal feedback to employees, colleagues, and clients in Thai SMEs, which identified shortcomings such as a lack of employee participation, inefficient communication, unclear goals, and unfair assessment practices (Na-Nan et al., 2017).

Furthermore, the study by Oduro-Nyarko (2013) indicated that a significant proportion of managers (53.3 percent) did not utilize performance appraisal information for employee's promotion. However, the majority of managers reported conducting informal performance appraisals on their employees' daily work in order to encourage and support those with lower work performance to improve and develop consistently.

Thus, in this review, performance appraisal is defined as a systematic procedure used by organizations to analyse and appraise employee work performance, employers, and contributions to SMEs in Thailand. This includes evaluating work effectiveness, providing feedback, and rewarding their employees. The performance appraisal is believed to capture performance by defining individual strengths among Thailand's SMEs. These findings highlight a disconnect between the recognized importance of PA and its actual practice in SMEs, calling for more

targeted strategies that consider resource limitations, informal culture, and the centrality of personal relationships.

In essence, although performance appraisal systems are extensively researched in large organizations, their implementation in SMEs necessitates customized strategies because of the unique structural, cultural, and resource-related traits of these businesses (Kramar, 2022). According to the literature, there are a number of dimensions of performance reviews that work especially well for SMEs. Therefore, table 1 summarizes the components of performance appraisal that, according to the literature, are especially suitable for SMEs.

Table 1. Key Dimensions of Performance Appraisal for SMEs

Dimensions	Description	Importance for SMEs	Key Reference
Adaptability and Simplicity	Use of straightforward, easily modifiable appraisal systems	Help reduce administrative load and aligns with lean HR frameworks typical of SMEs	Garavan et al., 2019; Kamar, 2022
Growth-Centered Feedback	Prioritizes employee learning, development, and potential rather than Just Performance Metrics	Stimulates innovation and support capability-building	Prouska et al., 2016
Informal, Ongoing Communication	Frequent and informal performance discussions outside formal cycles	Encourage immediate improvement and responsiveness to change	Harney and Dundon, 2006
Participatory Involvement	Engage employees in goal setting and self-assessment processes	Enhance engagement, motivation, an innovation ownership	Demortier et al., 2014
Strategic Innovation	Appraisal criteria include innovation-	Ensures performance systems reinforce	Saunila, 2020

Dimensions	Description	Importance for SMEs	Key Reference
Alignment	focused behaviors (e.g., creative solution, continuous improvement)	strategic innovation goals	
Transparency and Perceived Justice:	Emphasis on fair, open and understandable evaluation process	Build employee trust and cooperation in flatter SME hierarchies	Bos-Nehles and Meijerink, 2018; Oduro, 2024

Source: Developed by authors by synthesized from relevant academic literature.

As a result, by integrating these components, SMEs can leverage performance appraisal not just as a control mechanism, but also as a strategic tool that nurtures innovation and contributes to long-term sustainability. Even so, the literature also emphasizes that performance appraisal in SMEs should be more personalized, feedback-driven, and innovation-oriented compared to those in larger firms (Gustina et al., 2025).

Innovative Behaviours

Innovative behaviour refers to an individual's capacity to generate novel ideas and translate them into practical innovations (Escribá-Carda et al., 2017). This process hinges on both the generation and development of new concepts, where shared knowledge and collaborative learning further enhance innovation potential. In increasingly volatile and competitive markets, innovation is recognized as a cornerstone of sustained competitive advantage and organizational resilience (Janssen, 2000). Within this context, employees' proactive behaviours such as ideation, improvement, and development of new products, processes, or solutions are collectively described as creative or innovative work behaviour.

In SMEs, where resources may be constrained and organizational structures more flexible, these behaviours become vital drivers of growth and adaptation. The processes and behaviours individuals engage in to generate, advocate for, and apply novel ideas whether within their roles, teams or organizations are critical to fostering innovation (Janssen, 2000). Since SMEs are still viewed as a favourable environment for innovation despite their limited

resources, this framework can be applied to them. For this reason, SMEs must foster an atmosphere that encourages exceptional employee behavior. Since employees' perceptions are the primary indicator of HR practices and culture in the absence of formality, this environment must be people-centric (Knezović & Drkić, 2021).

Ultimately, based on the literature, the identified dimensions can be structured into a pyramid chart, as illustrated in Figure 2, which conceptualizes innovation as a three-dimensional process. To enhance employee innovativeness, organizations should focus on developing skills related to work-based problem solving, specifically, problem identification, problem resolution, and the implementation of valuable solutions. It is essential for organizations to actively encourage and support such innovative behaviours. Accordingly, Table 2 summarizes these key behaviours, which form the foundation of what is commonly referred to as innovative behaviour, particularly within the context of SMEs (see Table 2).

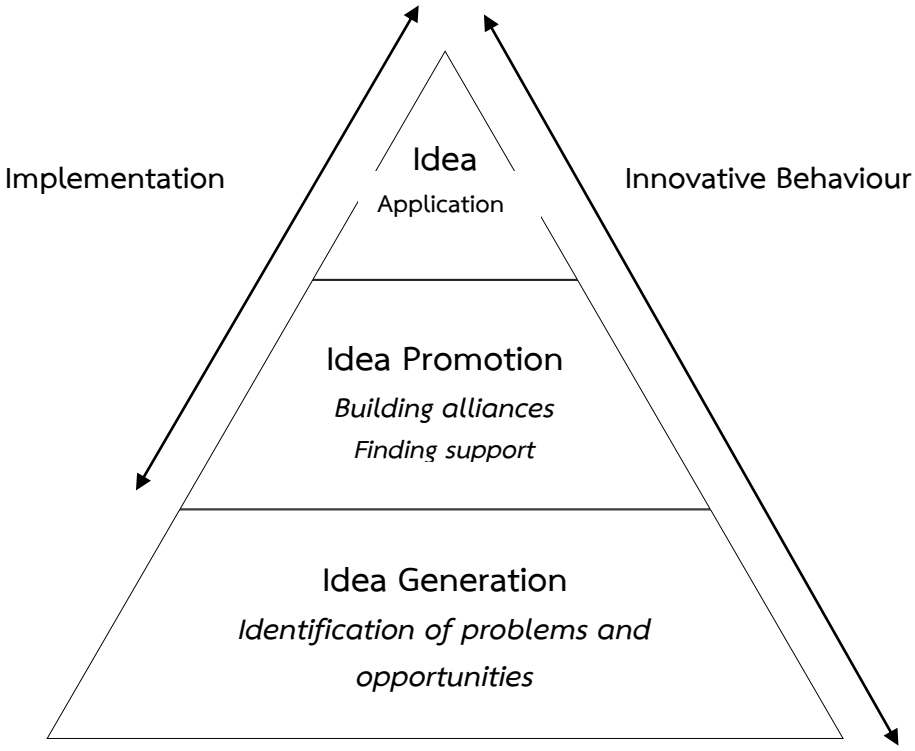

Figure 2: Innovation as a three-dimensional process

Source: Adapted from Janssen (2000); Kanter (1988); Veenendaal & Bondarouk (2015)

Table 2. Key Dimensions of Innovative Behaviour for SMEs

Dimension	Description	Key Features in SMEs	Key References
Idea Generation	The process of identifying opportunities, problems, and proposing original, valuable solutions.	Creative exploration and refinement of concepts, crucial for identifying novel approaches in Flexible SME Settings.	Janssen (2000); Mumford (2000)
Idea Promotion	Efforts to gain organizational support, resources, and stakeholder buy-in to advance new ideas.	Building alliances, maintaining persistence and optimism, critical for securing backing in resource-limited SMEs.	De Jong and Den Hartog (2010); Galbraith (1982); Janssen (2000); Kanter (1988)
Idea Application	Practical implementation of innovative ideas into daily work processes and organizational routines.	Translating concepts into tangible outcomes; essential for SMEs to operationalize innovation despite limited formal structures.	Janssen (2000); Kanter (1988); Kleysen and Street (2001)

Source: Developed by authors by synthesized from relevant academic literature.

Understanding innovative behaviour as a multi-dimensional construct allows for a richer appreciation of how individuals contribute to innovation in different ways (Scott & Bruce, 1994). Not all employees excel in every dimension; some may be strong idea generators but less adept at promoting or implementing ideas. Recognizing this diversity is essential for SME managers aiming to foster a supportive environment that encourages varied forms of innovation. Employees' capacity to contribute creatively is amplified when management supports learning, risk-taking, and developmental performance feedback. In unpredictable markets, these behaviors are essential for SMEs striving to maintain a competitive edge, robustness, and resilience. Thus, promoting innovative behavior at the individual level is increasingly seen as a key strategy for the survival and prosperity of SMEs in the long run.

Sustainable Performance

In recent years, sustainable performance has emerged as a central concept in business discourse, reflecting a shift toward evaluating not only profitability but also the environmental and social implications of organizational practices (Wagner & Schaltegger, 2003). This concept underscores the importance of minimizing negative ecological impacts while fostering long-term business success. As Romzek (2000) suggests, sustainable performance integrates strategic intent with inputs, processes, and outcomes to ensure alignment between business actions and desired long-term goals. At its core, sustainability reflects the capacity to meet present needs without compromising the ability of future generations to meet theirs (Holden et al., 2014).

Building on Elkington's (1997) Triple Bottom Line framework, sustainable performance encompasses three interrelated dimensions: economic, environmental, and social. This holistic view moves beyond traditional performance metrics to capture the broader impact of a firm's operations. For SMEs, this approach is particularly valuable, as it offers a pathway to balance growth with ethical and ecological responsibility. Sustainable practices, when embedded strategically, can also drive innovation, improve brand equity, and support value system development. The key dimensions based upon Table 2 are per Elkington (1997), presents the essential dimensions defined to operationalize systemic environmental and social sustainability performance.

Table 3. Key Dimensions of Sustainable Performance in SMEs

Dimension	Indicators	Impact and Relevance to SMEs
Economic Performance	● Financial health ● Profitability and business growth	Represents traditional success measures essential for SME survival, scalability, and long-term competitiveness.
Environmental Performance	● Resource consumption ● Pollution and emissions control ● waste management.	Reflects the SMEs' ecological footprint. Regulatory pressure and market expectations increasingly push SMEs to adopt greener operational models.

Dimension	Indicators	Impact and Relevance to SMEs
Social Performance	● Labour practice and employee's well-being, customers, and suppliers. ● Customer and supplier relations ● Ethics and community engagement.	Captures an enterprise's societal contributions. Strong social performance fosters trust, reputation, and stakeholder loyalty.

Source: Adapted from Elkington (1997) Triple Bottom Line Framework.

As a result, to build sustainable competitiveness, Thai SMEs must embed these three dimensions into their operational and strategic planning. Doing so requires shifting emphasis from short-term financial gains to long-term viability, ethical conduct, and ecological stewardship. This transformation also demands dynamic performance metrics that reflect organizational values, stakeholder engagement, and developmental goals (Das et al., 2020; Mashavira et al., 2022).

Table 4. Key Dimensions of Long-Term Corporate Development in SMEs

Dimension	Stakeholder Needs	Impact on SMEs
Changing Stakeholder Expectations	● Customers ● Investors ● Employees	SMEs that fail to meet evolving stakeholder demands risk reputational damage and the loss of competitive edge.
Regulatory Pressures	● Stricter environmental Regulations ● Heightened social compliance standard	Global regulatory trends necessitate sustainable practices for SMEs to ensure compliance and avoid legal risks.
Resource Scarcity and Cost Pressures	● Rising energy costs ● Limited access to	SMEs to become more Promotes resource efficiency; sustainability

Dimension	Stakeholder Needs	Impact on SMEs
	raw materials ● Increasing waste costs	can reduce costs, enhance operational efficiency, and support long-term viability.
Enhanced Competitiveness	● Adoption of sustainable practices ● Differentiation from competitors ● Market expansion opportunities	Sustainability can fuel innovation, help SMEs attract new customers, and enter new or emerging markets.
Long-Term Resilience	● Environmental ● Social ● Economic considerations	Embedding sustainability builds resilience, enabling SMEs to better withstand crises and external disruptions.

Source: Adapted from Elkington (1997)

Relationships between Performance Appraisal, Innovative Behaviours, and SME Performances

Several studies (e.g., Canet-Giner et al., 2020; Gustina et al., 2025; Saunila, 2016; Oly Ndubisi & Iftikhar, 2012; Wang et al., 2024) have shown that high-quality performance appraisal systems are critical in fostering positive employee outcomes, such as job satisfaction, affective commitment, and work engagement (Brown et al., 2010; Fletcher & Williams, 1996; Kharub et al., 2025). These outcomes serve as essential precursors to innovative behaviour in the SME context. When employees perceive appraisal processes as fair, transparent, and constructive, they are more likely to remain with the organization, contribute creatively, and participate in sustainability-oriented innovations. Moreover, high-quality appraisal mechanisms are linked to lower turnover intentions, a vital factor for SMEs, where retaining skilled talent directly impacts long-term competitiveness.

The interrelationship among performance appraisal, innovative behaviours, and SME performance is well articulated through the lens of HR System Strength (HRSS) theory (Bowen &

Ostroff, 2004). HRSS posits that strong HR systems, characterized by distinctiveness, consistency, and consensus, shape employee attitudes and behaviours by conveying clear organizational signals. As a core HR function, performance appraisal communicates expected contributions, particularly those tied to innovation and improvement, and reinforces the behaviours valued by the organization (Boxall & Macky, 2009). When applied within SMEs, HRSS suggests that performance appraisals not only clarify innovation expectations but also cultivate a shared understanding of strategic goals, especially when designed to be development-oriented, participative, and aligned with organizational priorities.

Thneibat and Sweis (2023) found that performance appraisal significantly influences incremental innovation in SMEs, with Innovative Work Behaviour (IWB) serving as a mediating mechanism. Similarly, Demircioglu (2021) observed that results-focused appraisal systems that emphasize employee development and autonomy can stimulate innovation in knowledge-intensive SMEs.

There is also a growing body of research confirming the positive influence of innovative behaviour on SME performance, particularly within the framework of sustainability. For example, Rehman et al. (2020) found that green innovation, when supported by internal learning mechanisms, contributes to enhanced triple bottom line performance across economic, environmental, and social dimensions. A meta-analysis by Chams and García-Blandón (2019) further reinforced this by showing that SMEs adopting innovation strategies outperform their peers in both environmental and financial outcomes, even under resource constraints.

Importantly, recent studies underscore the mediating role of innovative behaviour in linking HR practices to overall firm performance. Issau et al. (2022), for instance, demonstrated that innovation mediates the relationship between financial capability and SME sustainability in Ghana. These findings offer indirect but meaningful support for a pathway in which performance appraisal enhances innovative behaviour, which subsequently improves sustainable SME performance.

In summary, SMEs that implement high-quality, strategically aligned performance appraisal systems are more likely to cultivate innovative behaviours among employees. These behaviours, in turn, drive sustainable business performance. Rooted in HRSS theory and reinforced by empirical evidence, this conceptual relationship suggests that appraisal systems can serve as strategic levers for innovation-driven growth. Employees who perceive their evaluations as

fair, participative, and oriented toward growth are more inclined to innovate, which enhances both immediate task performance and the long-term sustainability of SMEs. These insights are consolidated in Table 4, which thematically summarizes the key literature supporting each component of this relationship. The table highlights the core mechanisms, performance appraisal, innovative behaviours, and sustainability outcomes, and the scholarly evidence underpinning how they interact to promote SMEs' long-term viability in dynamic and resource-constrained environments.

Table 5. Thematic Summary of Literature on Performance Appraisal, Innovation, and Sustainability in SMEs

Thematic Area		Key Authors
1. The Impact of Performance Appraisal on Innovative Behaviours		
Main Insights	Development-oriented, participative, and feedback-driven appraisal systems foster innovation. Fairness, clarity, and alignment with goals boost creative engagement. *Insights are drawn from empirical SME-focused studies and conceptual HRM frameworks emphasizing developmental appraisal.*	Bos-Nehles and Meijerink (2018); Canet-Giner et al. (2020); Demortier et al. (2014); Garavan et al. (2019); Prouska et al. (2016); Saunila (2016); Thneibat and Sweis (2023)
2. The Effect of Innovative Behaviours on Sustainable Performance		
Main Insights	Innovative behaviours-such as idea generation, promotion, and applications-contribute to sustainability by enabling SMEs to adapt, innovate green solutions, and build social capital. *Supported by sustainability models (e.g., triple bottom line) and empirical innovation studies in SMEs.*	Aziz et al. (2022); Baer (2012); Chams and GarcÃ-a-BlandÃn (2019); De Jong and Den Hartog (2010); Elkington (1997); Janssen (2000); Rehman et al. (2020); Scott and Bruce (1994)
3. The Integrated Impact on SMEs' Long-Term Viability		
Main Insights	The integration of fair appraisal systems and	Bowen and Ostroff

Thematic Area		Key Authors
	innovative behaviour enhances long-term competitiveness, stakeholder trust, and adaptability under sustainability pressures. *Evidence includes HRSS theory applications and meta-analytical confirmation of innovations' mediating role in SME performance.*	(2004); Boxall and Macky (2009); Das et al. (2020); Mashavira et al. (2022); Issau et al. (2022)

Source: Developed by authors by synthesized from relevant academic literature.

Discussion

This review underscores the critical role of performance appraisal (PA) systems in driving sustainable performance in small and medium-sized enterprises (SMEs) through their influence on innovative behaviours. As articulated in the conceptual framework (Figure 1), innovative behaviour functions as a key mediating mechanism, illustrating the indirect pathway through which performance appraisal impacts long-term sustainability across economic, social, and environmental dimensions. This integrative perspective directly aligns with the objective of this review: to explore how PA and innovation intersect to enhance SME sustainability, particularly through an HRM lens. The reviewed literature reveals that performance appraisal, when aligned with strategic goals, can serve as a proactive driver of innovation, rather than merely a retrospective evaluation tool. It enables SMEs to promote learning, creativity, and behaviours aligned with sustainability. This reinforces the view that appraisal systems are not isolated administrative functions, but central components of a firm's broader strategy for navigating complex and uncertain business environments.

Three main pathways through which performance appraisal fosters innovative behaviour were identified in the literature:

1. Goal Alignment and Strategic Clarity

Performance appraisal helps SMEs articulate and reinforce expectations around innovation. When innovation-related goals, such as problem-solving, continuous improvement, or sustainability targets, are embedded in the appraisal process, employees are more likely

to align their efforts accordingly. This clarity is particularly vital in resource-constrained SMEs, where strategic focus is essential (Bowen & Ostroff, 2004).

2. Feedback, Learning, and Development

Structured feedback within appraisal processes supports a culture of continuous learning. Developmental appraisals, those that emphasize growth, experimentation, and constructive feedback, stimulate the proactive behaviours associated with innovation (Amabile et al., 1996; Anderson et al., 2014). This creates a feedback loop where performance assessment also becomes a vehicle for skill-building and creative exploration.

3. Recognition, Motivation, and Reinforcement

A consistent theme across studies is the role of appraisal-linked rewards in motivating innovation. Whether through formal incentives or informal recognition, reinforcing innovative behaviours through the appraisal process helps embed these behaviours in organizational culture. This is especially relevant in SMEs, where recognition is often more personal and immediate (Canet-Giner et al., 2020; Janssen, 2000).

These findings are best interpreted through the lens of Human Resource System Strength (HRSS) theory, which stresses that strong HR systems deliver messages that are consistent, distinctive, and credible. In SMEs, where informal management practices often prevail, performance appraisal systems can act as strong HR signals that shape behavioural expectations and influence employee engagement in innovation and sustainability initiatives (Bowen & Ostroff, 2004).

By synthesizing these insights, the review makes a conceptual contribution by positioning innovative behaviour as the bridge between appraisal practices and sustainable performance. It shows that SMEs can strategically leverage their human capital through appraisal systems that not only assess performance but actively cultivate innovation as a path to sustainability.

Furthermore, this review contributes to SME-focused literature by adapting HR strategies traditionally studied in large firms to smaller, more agile contexts. Appraisal systems offer SMEs a cost-effective and high-impact means of guiding behaviour, strengthening internal capabilities, and driving sustainability from within-without requiring significant external investment.

In summary, the results reaffirm the original objective: performance appraisal indirectly enhances sustainable performance by stimulating innovative behaviours. This conceptual pathway provides SME leaders, HR practitioners, and policymakers with a clearer understanding

of how to design HR systems that reinforce innovation and sustainability. By adopting appraisal processes that are aligned with strategic objectives, SMEs can build resilient, innovative organizations capable of achieving triple-bottom-line outcomes in an increasingly dynamic environment.

Theoretical Implications

This review contributes to the advancement of theoretical understanding for scholars who are interested in exploring these relationships in order to contribute to the advancement of academic knowledge at the intersection of human resource management (HRM), innovation, and organizational behaviour, particularly in the context of small and medium-sized enterprises (SMEs). Several significant theoretical implications emerge from the findings.

1. Extension of HR System Strength (HRSS) Theory

The relationship between performance appraisal systems and employees' innovative behaviour can be meaningfully explained through the lens of HR System Strength (HRSS) theory (Bowen & Ostroff, 2004). According to this framework, a strong HR system is characterized by distinctiveness, consistency, and consensus in the messaging it conveys to employees. These attributes contribute to the development of shared perceptions among employees regarding expected behaviours and organizational priorities.

The findings of this review suggest that performance appraisal systems, when perceived as fair, structured, and supportive, function as strong HR signals that align individual employee behaviours with organizational goals related to innovation and sustainability. In SMEs, where formal structures and codified processes are often underdeveloped, the strength of HR systems plays a particularly critical role. By establishing clear evaluative criteria, structured feedback mechanisms, and reward systems, performance appraisals communicate the value of innovation, thereby encouraging employees to engage in creative problem-solving and idea generation.

Furthermore, this dynamic illustrates how HRSS theory can be extended to explain the internal generation of innovation capabilities within resource-constrained firms. Rather than relying on external inputs or formalized R&D infrastructure, SMEs can leverage strong HR signals through performance appraisal systems to foster a culture of innovation. Future research should empirically test how the strength of HR signals moderates the relationship

between HR practices and innovative outcomes, particularly within SMEs operating under varying environmental constraints.

2. Integration with Organizational Justice Theory

The findings also corroborate and enrich Organizational Justice Theory (Folger & Cropanzano, 1998), particularly the dimensions of procedural and interactional justice. Employees' perceptions of fairness in appraisal systems, both in terms of process and interpersonal treatment, are shown to directly influence their willingness to engage in proactive and innovative behaviour. This suggests that justice perceptions function as a mediating mechanism between appraisal practices and innovation outcomes.

The integration of HRSS and organizational justice theories provides a more nuanced theoretical framework for understanding how perceived fairness enhances the credibility and interpretability of HR signals, thereby amplifying their behavioural impact. Future studies may benefit from examining this intersection more explicitly, including how justice-enhancing design elements in appraisal systems reinforce HR system strength and foster innovation.

3. Contribution to the Resource-Based View (RBV)

This review also contributes to the Resource-Based View (RBV) of the firm (Barney, 1991) by conceptualizing performance appraisal systems as strategic, intangible assets that can foster innovation. The findings indicate that appraisal systems contribute to organizational performance not merely by evaluating past achievements, but by serving as a mechanism for aligning human capital with future-oriented innovation goals. In this way, appraisal systems become a valuable, rare, inimitable, and non-substitutable (VRIN) resource, central to achieving sustained competitive advantage.

In SMEs, where tangible resources such as capital and infrastructure may be limited, strategically configured HR practices such as performance appraisals represent a critical internal resource that can drive innovation from within.

4. Support for Behavioural and Motivational Theories

Additionally, the review provides theoretical support for expectancy theory (Vroom, 1964) and goal-setting theory (Locke & Latham, 2002), by showing that employees are more likely to engage in innovative behaviours when appraisal systems clearly communicate performance expectations, offer meaningful rewards, and deliver timely, constructive feedback.

These motivational mechanisms reinforce the appraisal system's role not only as a control tool but also as a developmental and innovation-enabling function within the organization.

5. Implications for Contextualizing HR Theories in SMEs

Finally, this review underscores the need to contextualize mainstream HR theories to reflect the unique operational environments of SMEs. Many extant theoretical frameworks in HRM are derived from studies in large, formalized organizations. However, this review shows that even in the absence of complex HR infrastructure, SMEs can strategically use performance appraisal systems to send strong, clear signals that promote innovation. Scholars are thus encouraged to adapt and refine HRSS and related frameworks to better capture the realities of smaller, less formalized organizational contexts.

Practical Implications

This review offers valuable implications for SME managers, business owners, and policymakers. In particular, it underscores the importance of targeted managerial training and sustained support mechanisms. Given that many SME leaders often operate without formal human resource training, especially in areas such as performance appraisal and innovation leadership, there is a pressing need to build their capabilities. By equipping managers with the necessary competencies to deliver fair, developmental appraisals and to cultivate innovation-oriented teams, organizations can enhance employee motivation, reinforce performance outcomes, and contribute to long-term sustainable growth.

Moreover, performance appraisal systems should be tailored specifically to the SME context. Unlike larger organizations, SMEs often operate with limited resources, flatter hierarchies, and more informal practices. Therefore, appraisal mechanisms need to be flexible, easy to implement, and contextually relevant, balancing structure with adaptability to meet the unique needs of small and medium enterprises.

Businesses should also embed innovation within their overall organizational strategy, rather than treating it as a separate initiative. This includes aligning performance metrics and appraisal criteria with innovation goals, fostering a culture that rewards creative thinking, and dedicating sufficient resources to support idea generation and experimentation.

The review further underscores that fairness in performance appraisals extends beyond procedural elements to include interpersonal dynamics between supervisors and employees. This

supports existing research (e.g., Folger et al., 1992; Findley et al., 2000; Giles et al., 1997) on the critical role of justice in appraisal effectiveness. A well-designed, transparent appraisal process positively influences both workplace climate and employee behaviour (Murphy & Cleveland, 1995; Tziner et al., 1998).

Finally, SME owners and managers are encouraged to view performance appraisal as a strategic tool, not just for evaluating performance, but for driving innovation, motivation, and long-term growth. Policymakers, in turn, should consider issuing SME-specific guidelines and resources to support effective appraisal practices, promote innovation, and ultimately enhance competitiveness within the sector.

Conclusions

Overall, this article is based on literature that emphasizes the critical roles that innovative behaviour and performance appraisal play in helping Thai SMEs achieve long-term viability. This review underscores the need for the appraisal frameworks that not only assess performance but also actively energise and remunerate innovation, ultimately leading to sustainable business practices. When employees believe that performance appraisal achieves its intended goals and that the appraisal process follows a clear strategic direction over time, they perceive that the assessment system is consistent and not arbitrary. To promote and boost SMEs' potential in Thailand, this article offers knowledge that can be utilised for creating key strategic plans.

The article revealed that performance appraisal stimulates innovative behaviours, leading to enhance sustainability performance across social, economic, and environmental dimensions. Furthermore, the article indicates that both performance appraisal and innovative behaviours positively impact SMEs’ long-term sustainable performance. Moreover, there is a common understanding in highlighting the role of performance appraisal in achieving SMEs' long-term viability. Consequently, the article suggests that cultivating innovative behaviours among workers is now increasingly viewed as crucial for improving organizational competitiveness.

References

Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal*, *39*(5), 1154–1184.

Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, *40*(5), 1297–1333.

Andreeva, T., Vanhala, M., Sergeeva, A., Ritala, P., & Kianto, A. (2017). When the fit between HR practices backfires: Exploring the interaction effects between rewards for and appraisal of knowledge behaviours on innovation. *Human Resource Management Journal*, *27*(2), 209–227.

Aziz, S. (2022). Individual characteristics and innovation performance in SMEs: Moderating role of psychological capital. *Journal of Advanced Research in Social Sciences and Humanities*, *7*(3), 122–135.

Baer, M. (2012). Putting creativity to work: The implementation of creative ideas in organizations. *Academy of Management Journal*, *55*(5), 1102–1119.

Barbieri, M., Micacchi, L., Vidè, F., & Valotti, G. (2023). The performance of performance appraisal systems: A theoretical framework for public organizations. *Review of Public Personnel Administration*, *43*(1), 104–129.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, *17*(1), 99–120.

Bednall, T. C., Sanders, K., & Runhaar, P. (2014). Stimulating informal learning activities through perceptions of performance appraisal quality and human resource management system strength: A two-wave study. *Academy of Management Learning & Education*, *13*(1), 45–61.

Biron, M., Farndale, E., & Paauwe, J. (2011). Performance management effectiveness: Lessons from world-leading firms. *The International Journal of Human Resource Management*, *22*(6), 1294–1311.

Bos-Nehles, A. C., & Meijerink, J. G. (2018). HRM implementation by multiple HRM actors: A social exchange perspective. *The International Journal of Human Resource Management*, *29*(22), 3068–3092.

Bowen, D. E., & Ostroff, C. (2004). Understanding HRM–firm performance linkages: The role of the "strength" of the HRM system. *Academy of Management Review*, *29*(2), 203–221.

Boxall, P., & Macky, K. (2009). Research and theory on high-performance work systems: Progressing the high-involvement stream. *Human Resource Management Journal*, *19*(1), 3–23.

Brown, M., Hyatt, D., & Benson, J. (2010). Consequences of the performance appraisal experience. *Personnel Review*, *39*(3), 375–396.

Canet-Giner, T., Redondo-Cano, A., Saorín-Iborra, C., & Escribá-Carda, N. (2020). Impact of the perception of performance appraisal practices on individual innovative behaviour. *European Journal of Management and Business Economics*, *29*(3), 277–296.

Chams, N., & García-Blandón, J. (2019). On the importance of sustainable human resource management for the adoption of sustainable development goals. *Resources, Conservation and Recycling*, *141*, 109–122.

Curzi, Y., Fabbri, T., Scapolan, A. C., & Boscolo, S. (2019). Performance appraisal and innovative behavior in the digital era. *Frontiers in Psychology*, *10*, Article 1659.

Das, M., Rangarajan, K., & Dutta, G. (2020). Corporate sustainability in SMEs: An Asian perspective. *Journal of Asia Business Studies*, *14*(1), 109–138.

De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, *19*(1), 23–36.

DeLeon, L., & Ewen, A. J. (1997). Multi-source performance appraisals: Employee perceptions of fairness. *Review of Public Personnel Administration*, *17*(1), 22–36.

Demircioglu, M. A. (2021). Sources of innovation, autonomy, and employee job satisfaction in public organizations. *Public Performance & Management Review*, *44*(1), 155–186.

Demortier, A.-L., Delobbe, N., & El Akremi, A. (2014). Opening the black box of HR practices–performance relationship: Testing a three pathways AMO model. *Academy of Management Proceedings*, *2014*(1), 14932.

Elkington, J. (1997). The triple bottom line. *Environmental Management: Readings and Cases*, *2*, 49–66.

Escribá-Carda, N., Balbastre-Benavent, F., & Canet-Giner, M. T. (2017). Employees' perceptions of high-performance work systems and innovative behaviour: The role of exploratory learning. *European Management Journal*, *35*(2), 273–281.

Ferris, G. R., Judge, T. A., Rowland, K. M., & Fitzgibbons, D. E. (1994). Subordinate influence and the performance evaluation process: Test of a model. *Organizational Behavior and Human Decision Processes*, *58*(1), 101–135.

Findley, H. M., Giles, W. F., & Mossholder, K. W. (2000). Performance appraisal process and system facets: Relationships with contextual performance. *Journal of Applied Psychology*, *85*(4), 634–644.

Fisk, P. (2010). *People planet profit: How to embrace sustainability for innovation and business growth*. Kogan Page Publishers.

Fletcher, C. (2001). Performance appraisal and management: The developing research agenda. *Journal of Occupational and Organizational Psychology*, *74*(4), 473–487.

Fletcher, C., & Williams, R. (1996). Performance management, job satisfaction and organizational commitment. *British Journal of Management*, *7*(2), 169–179.

Folger, R., & Konovsky, M. A. (1989). Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management Journal*, *32*(1), 115–130.

Folger, R., Konovsky, M. A., & Cropanzano, R. (1992). A due process metaphor for performance appraisal. *Research in Organizational Behavior*, *14*, 129–177.

Folger, R. G., & Cropanzano, R. (1998). *Organizational justice and human resource management* (Vol. 7). Sage Publications.

Galbraith, J. R. (1982). Designing the innovating organization. *Organizational Dynamics*, *10*(3), 5–25.

Garavan, T., McCarthy, A., Sheehan, M., Lai, Y., Saunders, M. N., Clarke, N., & Shanahan, V. (2019). Measuring the organizational impact of training: The need for greater methodological rigor. *Human Resource Development Quarterly*, *30*(3), 291–309.

Ghazi, K. M., El-Said, O., Salem, I. E., & Smith, M. (2023). Does performance appraisal legitimacy predict employee sabotage and innovative behaviors? The mediating role of performance appraisal satisfaction. *Tourism Management Perspectives*, *47*, 101117.

Giles, W. F., Findley, H. M., & Feild, H. S. (1997). Procedural fairness in performance appraisal: Beyond the review session. *Journal of Business and Psychology*, *11*(4), 493–506.

Groh, A. P., Guenther, C., Schweizer, D., & Vismara, S. (2025). Entrepreneurial finance in an extended period of crises. *Small Business Economics*, *64*(1), 1–14.

Gustina, A., Liu, J. S., Indartono, S., & Laili, N. N. (2025). Bridging imagination and strategy in SMEs: The role of ideas and strategy in SME performance. *The Southern African Journal of Entrepreneurship and Small Business Management*, *17*(1), Article 909.

Harney, B., & Dundon, T. (2006). Capturing complexity: Developing an integrated approach to analysing HRM in SMEs. *Human Resource Management Journal*, *16*(1), 48–73.

Holden, E., Linnerud, K., & Banister, D. (2014). Sustainable development: Our common future revisited. *Global Environmental Change*, *26*, 130–139.

Huber, V. L. (1983). An analysis of performance appraisal practices in the public sector: A review and recommendations. *Public Personnel Management*, *12*(3), 258–267.

Ilgen, D. R., & Feldman, J. M. (1983). Performance appraisal: A process focus. *Research in Organizational Behavior*, *5*, 141–197.

Issau, K., Soni, S., & Acquah, I. S. K. (2022). Ghanaian SMEs' perspective on the interrelationship between market and entrepreneurial orientations. *Revista de Gestão*, *29*(2), 139–157.

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, *73*(3), 287–302.

Judge, T. A., & Ferris, G. R. (1993). Social context of performance evaluation decisions. *Academy of Management Journal*, *36*(1), 80–105.

Kanter, R. M. (1988). Three tiers for innovation research. *Communication Research*, *15*(5), 509–523.

Kellough, J. E., & Nigro, L. G. (2002). Pay for performance in Georgia state government: Employee perspectives on Georgia Gain after 5 years. *Review of Public Personnel Administration*, *22*(2), 146–166.

Kharub, M., Mondal, S., Singh, S., & Gupta, H. (2025). Evaluation of competency dimensions for employee performance assessment: Evidence from micro, small, and medium enterprises. *International Journal of Productivity and Performance Management*, *74*(1), 107–138.

Kleysen, R. F., & Street, C. T. (2001). Toward a multi-dimensional measure of individual innovative behavior. *Journal of Intellectual Capital*, *2*(3), 284–296.

Knezović, E., & Drkić, A. (2021). Innovative work behavior in SMEs: The role of transformational leadership. *Employee Relations: The International Journal*, *43*(2), 398–415.

Kramar, R. (2022). Sustainable human resource management: Six defining characteristics. *Asia Pacific Journal of Human Resources*, *60*(1), 146–170.

Latham, G. P., Borgogni, L., & Petitta, L. (2008). Goal setting and performance management in the public sector. *International Public Management Journal*, *11*(4), 385–403.

Latham, G. P., & Wexley, K. N. (1977). Behavioral observation scales for performance appraisal purposes. *Personnel Psychology*, *30*(2), 255–268.

Li, L., & Duan, L. (2025). Human centric innovation at the heart of industry 5.0–exploring research challenges and opportunities. *International Journal of Production Research*, 1–33. https://doi.org/10.1080/00207543.2024.2446622

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, *57*(9), 705–717.

Malek, R., Yang, Q., & Dhelim, S. (2024). Toward sustainable global product development performance: Exploring the criticality of organizational factors and the moderating influence of global innovation culture. *Sustainability*, *16*(10), Article 3911.

Mariotti, S. (2024). "Open strategic autonomy" as an industrial policy compass for the EU competitiveness and growth: The good, the bad, or the ugly? *Journal of Industrial and Business Economics*, *52*, 1–26.

Mashavira, N., Guvuriro, S., & Chipunza, C. (2022). Driving SMEs' performance in South Africa: Investigating the role of performance appraisal practices and managerial competencies. *Journal of Risk and Financial Management*, *15*(7), Article 283.

Mathis, R. L., Jackson, J. H., Valentine, S. R., & Meglich, P. A. (2017). *Human resource management* (15th ed.). Cengage Learning.

Mumford, M. D. (2000). Managing creative people: Strategies and tactics for innovation. *Human Resource Management Review*, *10*(3), 313–351.

Murphy, K. R., & Cleveland, J. N. (1995). *Understanding performance appraisal: Social, organizational, and goal-based perspectives*. Sage Publications.

Na-Nan, K., Chaiprasit, K., & Pukkeeree, P. (2017). Performance management in SME high-growth sectors and high-impact sectors in Thailand: Mixed method research. *International Journal of Engineering Business Management*, *9*, 1–8.

Norris-Watts, C., & Levy, P. E. (2004). The mediating role of affective commitment in the relation of the feedback environment to work outcomes. *Journal of Vocational Behavior*, *65*(3), 351–365.

Nzonzo, J. C., & Matashu, M. (2014). An insight into the human resource management practices adopted by entrepreneurs in South Africa. *Journal of Small Business and Entrepreneurship Development*, *2*(3), 73–87.

Oduro, S. (2024). Eco-innovation and SMEs' sustainable performance: A meta-analysis. *European Journal of Innovation Management*, *27*(9), 248–279.

Oduro-Nyarko, C. (2013). Assessment of performance appraisal techniques by small and medium size hotels in Central Ayawaso Metropolitan Area. *Assessment*, *3*(12), 9–15.

Oly Ndubisi, N., & Iftikhar, K. (2012). Relationship between entrepreneurship, innovation and performance: Comparing small and medium-size enterprises. *Journal of Research in Marketing and Entrepreneurship*, *14*(2), 214–236.

Perry, J. L., Engbers, T. A., & Jun, S. Y. (2017). Back to the future? Performance-related pay, empirical research, and the perils of persistence. In *Debating public administration* (pp. 27–65). Routledge.

Potipiroon, W., & Chumphong, O. (2024). Authoritarian leadership and firm-level voluntary turnover among SMEs in Thailand: Does benevolent leadership matter? *International Journal of Emerging Markets*, *19*(10), 3182–3201.

Prouska, R., Psychogios, A. G., & Rexhepi, Y. (2016). Rewarding employees in turbulent economies for improved organisational performance: Exploring SMEs in the South-Eastern European region. *Personnel Review*, *45*(6), 1259–1280.

Rehman, S. U., Kraus, S., Shah, S. A., Khanin, D., & Mahto, R. V. (2021). Analyzing the relationship between green innovation and environmental performance in large manufacturing firms. *Technological Forecasting and Social Change*, *163*, Article 120481.

Romzek, B. S. (2000). Dynamics of public sector accountability in an era of reform. *International Review of Administrative Sciences*, *66*(1), 21–44.

Saunila, M. (2016). Performance measurement approach for innovation capability in SMEs. *International Journal of Productivity and Performance Management*, *65*(2), 162–176.

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, *37*(3), 580–607.

Taticchi, P., Tonelli, F., & Cagnazzo, L. (2010). Performance measurement and management: A literature review and a research agenda. *Measuring Business Excellence*, *14*(1), 4–18.

Thneibat, M. M., & Sweis, R. J. (2023). The impact of performance-based rewards and developmental performance appraisal on innovation: The mediating role of innovative work behaviour. *International Journal of Productivity and Performance Management*, *72*(6), 1646–1666.

Toppo, L., & Prusty, T. (2012). From performance appraisal to performance management. *IOSR Journal of Business and Management*, *3*(5), 1–6.

Tziner, A., Murphy, K. R., Cleveland, J. N., Beaudin, G., & Marchand, S. (1998). Impact of rater beliefs regarding performance appraisal and its organizational context on appraisal quality. *Journal of Business and Psychology*, *12*(4), 457–467.

Veenendaal, A., & Bondarouk, T. (2015). Perceptions of HRM and their effect on dimensions of innovative work behaviour: Evidence from a manufacturing firm. *Management Revue*, *26*(2), 138–160.

Vroom, V. H. (1964). *Work and motivation*. John Wiley & Sons.

Wagner, M., & Schaltegger, S. (2003). Introduction: How does sustainability performance relate to business competitiveness? *Greener Management International*, *44*, 5–16.

Wang, G., Mansor, Z. D., & Leong, Y. C. (2024). Unlocking digital performance: Exploring the mediating role of employee competitive attitudes, behaviors, and dynamic capabilities in Chinese SMEs under high-involvement human resource management practice. *Journal of Innovation and Entrepreneurship*, *13*(1), Article 37.

Wayne, S. J., & Kacmar, K. M. (1991). The effects of impression management on the performance appraisal process. *Organizational Behavior and Human Decision Processes*, *48*(1), 70–88.

Wood, J., & Pereira, V. (2014). A case study of performance appraisal in a SME: Moving on from the 'tick-box' generation. *HR Bulletin: Research and Practice*, *9*(1), 23–30.