

The building blocks of an effective performance management system: A comprehensive review

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Abstract

An effective performance management system (PMS) needs special recognition from researchers, specifically regarding its holistic and comprehensive approach to improving organizational effectiveness. Researchers' interest in the effectiveness of PMS is relatively high from various perspectives. This study aims to determine which antecedents drive effective PMS comprehensively. This research was conducted using a systematic literature review of research articles from 2000 to the latest in 2024. The review included 28 final articles from reputable journals. Several critical elements of effective PMS were discovered: regular feedback and effective communication, employee involvement and empowerment, fairness and objectivity, strategic alignment and integration, clear performance goals and planning, top management commitment, performance-oriented culture, integrating PMS, and rewards and recognition. By focusing on these aspects, organizations can ensure that their employees are engaged and motivated, supporting their strategic goals.

Keywords: Performance Management System Effectiveness, Systematic Literature Review, Employee Performance

Abstrak

Sistem manajemen kinerja yang efektif memerlukan perhatian khusus dari para peneliti, terutama dalam pendekatannya yang holistik dan komprehensif untuk meningkatkan efektivitas organisasi. Minat para peneliti terhadap efektivitas PMS relatif tinggi dari berbagai perspektif. Penelitian ini bertujuan untuk mengidentifikasi faktor-faktor yang secara komprehensif mendorong efektivitas PMS. Penelitian ini dilakukan dengan menggunakan tinjauan literatur sistematis terhadap artikel penelitian dari tahun 2000 hingga yang terbaru di tahun 2024. Tinjauan ini mencakup 28 artikel final dari jurnal-jurnal bereputasi. Beberapa elemen penting dari PMS yang efektif ditemukan, yaitu: umpan balik yang rutin dan komunikasi yang efektif, keterlibatan dan pemberdayaan karyawan, keadilan dan objektivitas, penyelarasan dan integrasi strategis, tujuan kinerja yang jelas dan perencanaan, komitmen manajemen puncak, budaya yang berorientasi pada kinerja, integrasi PMS, serta penghargaan dan pengakuan. Dengan berfokus pada aspek-aspek ini, organisasi dapat memastikan bahwa karyawan mereka terlibat dan termotivasi, sehingga mendukung pencapaian tujuan strategis mereka.

Kata kunci: Efektivitas Sistem Manajemen Kinerja, Tinjauan Literatur Sistematis, Kinerja Karyawan

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1. Introduction

Performance Management Systems (PMS) play a crucial role in organizations by driving organizational effectiveness and enhancing overall organizational performance (Aguinis & Pierce, 2008; Mone et al., 2011; Otley, 1999; Rao, 2007) and ensuring that resources, systems, and employees (individual) align with strategic goals and priorities (Nankervis, 2006; Nigam & Mishra, 2018). When PMS is connected with strategic goals and other HR practices, it fosters a culture that converts individual-level knowledge, skills, and talents into particular competencies required for firm-level performance improvement (Denisi & Smith, 2014). Researches that PMS serves as a strategic tool for enhancing organizational performance, encouraging a culture of continuous improvement at the individual and organizational levels (Baird et al., 2012), maximizing the contribution of employees to organizational success (Aguinis & Pierce, 2008; Mone et al., 2011; Otley, 1999), and results in higher organizational performance.

PMS provides valuable data and insights that enable informed decision-making regarding resource allocation, talent management, and organizational strategy (Mughal et al., 2014). These effective PMS offer a framework for setting clear performance expectations, providing ongoing feedback, recognizing achievements, and supporting employee development (growth opportunities) through training and development (Haines & St-Onge, 2012; Sharma et al., 2016). Organizations can improve employee morale, motivation, and commitment by effectively managing performance, leading to higher job satisfaction, retention, and engagement (Awan et al., 2020; Dewettinck & van Dijk, 2013; Gilbert et al., 2011). Moreover, PMS creates a culture of learning and development, innovation and adaptation (Biron et al., 2011), accountability, trust, and empowerment within the organization (Aguinis & Pierce, 2008; Mone et al., 2011). Additionally, with well-designed PM initiatives such as pay-for-performance, organizations can effectively identify, recognize, and reward high-performing employees, enabling organizations to identify and reward high performers, address underperformance, and allocate resources more efficiently and thereby retaining top talent and positively influencing the overall employee experience (Helm et al., 2007; Tung et al., 2011).

Studies have examined various dimensions of PMS effectiveness, from aligning organizational goals to employee engagement and performance outcomes. Studies such as Baird et al. (2012) and Teeroovengadam et al. (2019) have identified managerial involvement, performance feedback mechanisms, and organizational culture as critical determinants of PMS success. Kakkar et al. (2020) and (Sharma et al., 2022) have demonstrated that positive perceptions of PMS effectiveness are associated with higher levels of work engagement and lower turnover intentions among employees in the public sector. This highlights the importance of designing and implementing PMS that fosters a sense of clarity, consistency, and trust among employees, thereby enhancing their commitment and discretionary effort toward organizational goals. Researchers must completely engage in performance management research; developing rigorous and practical knowledge to guide performance management practices is bound to boost the field's perceived importance

in narrowing the well-documented gap between research and practice (Aguinis & Pierce, 2008). Baird (2017) suggests acquiring a deeper understanding of the factors influencing the effectiveness of PM and the relationships among them.

Furthermore, research has examined the impact of PMS on organizational performance outcomes. Kadak & Laitinen (2021) and Kang & Choi (2019) have found that organizations with strategy-focused PMS achieve higher performance levels, as these systems facilitate alignment between organizational objectives, employee behaviors, and performance evaluation criteria. The role of performance-driven cultures in enhancing the effectiveness of PMS practices suggests that organizational values, norms, and leadership behaviors shape employees' experiences with performance appraisal processes and their subsequent performance outcomes.

Although PM is widely used in research and practice, its effectiveness determinants as a whole system remain unclear (Sales, 2019); there are no attempts to map or integrate PM's entire evaluative criterion area across different research streams (Schleicher et al., 2019), and it is rarely researched, since the previous studies mainly focus on the PMS tool. For example, Brown et al. (2019) discovered that only 0.87% of all research on employee performance (only 2 out of 230 publications from 41 journals) published over 11 years discussed the effectiveness of the performance system. Researchers must completely engage in performance management research; developing rigorous and practical knowledge to guide performance management practices is bound to boost the field's perceived importance in narrowing the well-documented gap between research and practice (Aguinis & Pierce, 2008).

In addition, Baird (2017) suggests acquiring a deeper understanding of the factors influencing the effectiveness of PM and the relationships among them. Moreover, scholars used different tools to measure whether the PM is effective or not; for example, some researchers used the employee perception of perceived fairness and accuracy (Awan et al., 2020; Sharma et al., 2016, 2022), while others focused on multidimensional performance measures and organizational factors (Tung et al., 2011). In this context, there is a significant lack of comprehensive literature studies investigating the numerous aspects influencing the effectiveness of PMS. As a result, there is an urgent need to synthesize the current understanding of the causes of effective PMS. This synthesis would contribute to theory development and provide reliable suggestions for management strategies and scholars.

Considering the importance of PMS and the previously demonstrated substantial gap in the research, this research aims to (1) Gather and examine empirical literature in PMS research, focusing on identifying the primary antecedents contributing to effectiveness, (2) Develop a theoretical framework and construct a conceptual model by synthesizing findings from published research on PMS, and (4) Highlight potential opportunities for both academics and practitioners and suggest future research directions in this significant area. To meet these research objectives, we undertook a systematic literature review spanning at least twenty (20) years of PM research. The

methodology is detailed in the following section, followed by a discussion of the findings and identified research gaps.

2. Research Method

Systematic Literature Review

Literature reviews are beneficial for providing an overview of specific issues or research problems. However, systematic literature reviews (SLRs) are more rigorous than traditional ones. Researchers frequently use SLRs to address well-defined and precise research questions (Mishra et al., 2023). SLRs synthesize the available evidence, making it more accessible to decision-makers. This study assesses the current understanding of PMS effectiveness, considering the antecedents. By examining various antecedents, it seeks to identify critical drivers and explore the consistency of their impact on PMS effectiveness across different studies. Additionally, this research aims to highlight areas requiring further investigation to enhance our understanding of these effects.

Hence, the four research questions encapsulate our study objectives and conceptual limitations:

RQ1. What are the primary antecedents contributing to the effectiveness of PMS?

RQ2. What is the conceptual framework of PMS Effectiveness antecedents?

RQ3. What are the future research implications for the topic of Effective PMS?

Next, a methodical literature review process is conducted. This study utilizes the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 methodology to comprehensively review the literature on PMS in the Human Resource Management (HRM) sector. PRISMA 2020 provides a robust framework for conducting systematic reviews, ensuring transparency, reproducibility, and methodological rigor. The PRISMA framework provides a systematic approach to conducting literature reviews, enabling comprehensive and reproducible research synthesis (Page et al., 2021).

This systematic review employs the PRISMA 2020 methodology to comprehensively synthesize the literature on PMSs in the HRM sector, contributing valuable insights into their effectiveness and implications for organizational performance.

Data Collection

A systematic search was conducted across multiple electronic academic databases, including ScienceDirect, Emerald Insight, Taylor and Francis, and MDPI, to identify relevant journals and studies on the effectiveness of PMS. This journal database was chosen distinctively from the most recent literature review completed by de Araújo et al. (2024) and derived from Scopus, the Web of Science, Scielo, Spell, Periódicos Capes, and Google Scholar. In addition, these databases are vast and reputable journal databases.

We constructed our search string using keywords related to PMSs and their effectiveness, including (“PMS” and “Effectiveness”). The terms were searched for in

the titles, abstracts, or keywords of relevant articles, considering their frequent interchangeability in the literature.

Studies Criteria

After searching the database using the constructed strings, the inclusion criteria were decided in this phase:

- (1) The research results showed dynamic-unequal-empirical attention across criteria and time starting in the 2000s (Schleicher et al., 2019). It needs to review at least one decade to get more comprehensive resources to conduct the review. Hence, we use the period from 2000 until the latest publication in April 2024.
- (2) Studies focusing on PMS within the context of human resource management (HRM) will be included. This encompasses research examining various aspects of PMS implementation, effectiveness, and outcomes within organizational settings.
- (3) Studies published in English will be included, as the review's primary language will be English.

The first exclusion criteria are non-relevant topics. This includes research on PMSs in non-human resource contexts or unrelated organizational processes. Second, duplicate studies or multiple versions of the same study will be excluded to avoid redundancy and ensure the integrity of the review process.

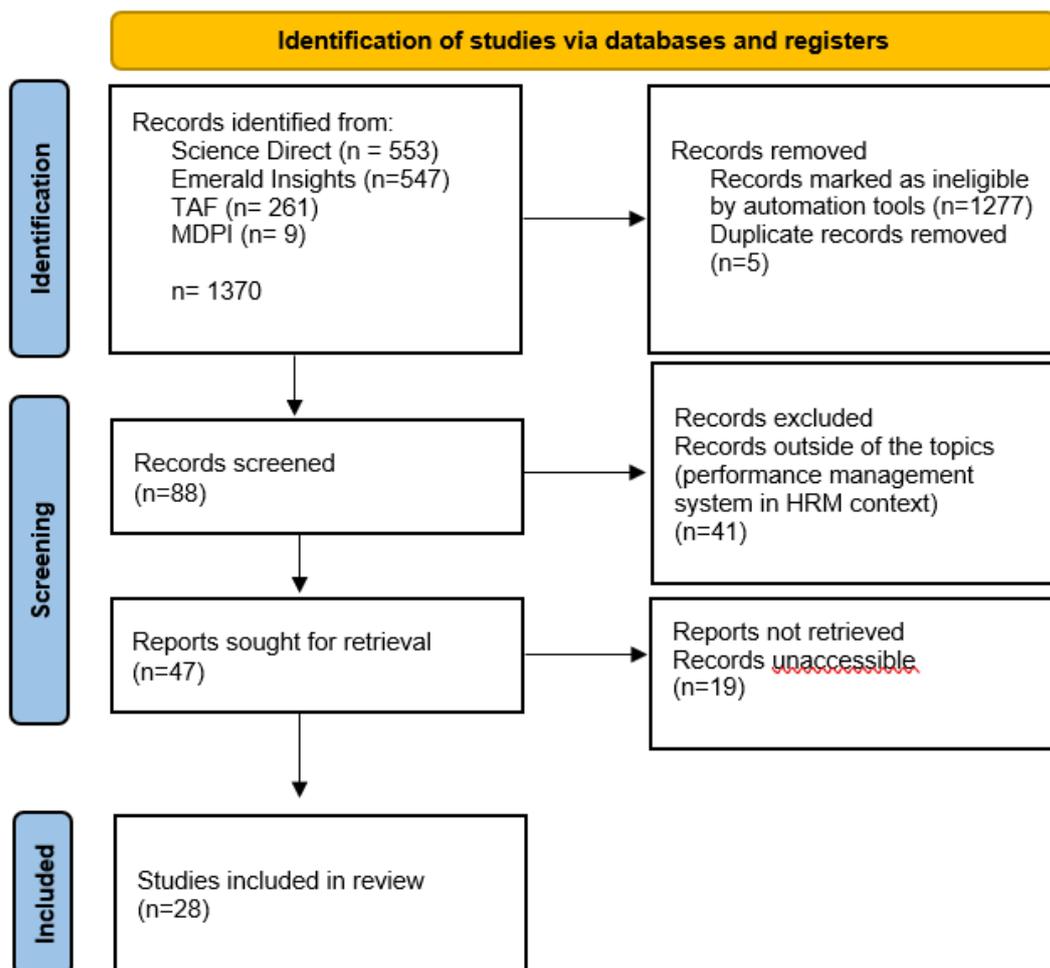


Figure 1. Research prisma flow

By applying these inclusion and exclusion criteria, the review aims to select relevant, methodologically rigorous studies that contribute to understanding the effectiveness of PMS in the HRM sector. When these term combinations were first entered into the databases, more than 4,000 results were returned. An automatic search engine filter was applied to the publication period, article type, and subject area. Records were evaluated, yielding 1370 articles.

To improve transparency and optimize the article selection process (Page et al., 2021), the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) criteria were used, as seen in Figure 1. Filtering is done automatically using the advanced search features on the journal database platform, such as applying filters for periods, publishing journals, and subjects. This filtering resulted in excluding 1277 articles. Duplication was found in 5 articles. A total of 88 journals were finally screened outside the research topic, the PMS, in the context of HRM. Articles that discuss PMSs outside the scope of employee performance are excluded, including those that discuss organizational and financial PMSs, because they are not under the objectives of this study. Forty-one articles were finally selected for inclusion in the study, but 19 could not be accessed. This led to the eventual selection of 28 articles that meet the research questions and objectives of the study.

Table 1. References Paper Journal Sources

Journal Name	Total	Quartile
The International Journal of Human Resource Management	5	Q1
Employee Relations	2	Q1
International Journal of Productivity and Performance Management	2	Q1
Measuring Business Excellence	2	Q2
Personnel Review	2	Q1
Procedia - Social and Behavioral Sciences	2	*
Accounting, Auditing & Accountability Journal	1	Q1
Administrative Sciences	1	Q2
Benchmarking: An International Journal	1	Q4
European Business Review	1	Q1
Heliyon	1	Q1
Human Resource Management Review	1	Q1
International Journal of Operations & Production Management	1	Q1
International Journal of Public Sector Management	1	Q1
Journal of Business Research	1	Q1
Management Accounting Research	1	Q1
Organizational Dynamics	1	Q1
Pacific Accounting Review	1	Q2
Policing: An International Journal	1	Q1
Grand Total	28	

This section presents collected data to provide an updated overview of the factors that have influenced research on effective performance management. Table 1 provides a concise overview of the studies analyzed, including details such as the publication journal and its rating based on the best quartile ranking, which will be valuable for the

reader. Significantly, as much as 90% of the subjects fall inside Quartile 1, which highlights the academic importance of the subject.

Initially, each study was reviewed based on the inclusion criteria. The authors compiled a document with a table containing the required information from each study. The first strategy involved reading the abstracts; if the required information was not found, the whole text was read. The authors did not solely focus on the researchers' statements within the text but also simplified the intent of the studies.

After systematizing the scientific production concerning PMS effectiveness, a theoretical model was proposed, incorporating the identified criteria from the literature. The arrangement of the model's dimensions follows the order of the proximity of the outcomes to the PMS, providing a structured framework for understanding these dynamics.

3. Results and Discussion

3.1. Results

Most studies on the effectiveness of PMSs were conducted in 2020, with a notable increase compared to previous years. Researchers' interest in this topic remains relatively consistent from year to year. Australia is the leading research location, with eight studies (28%), followed by Asia with seven studies (25%), Africa, Europe, and America with four studies each (14%), and the rest are global studies (5%). The fact that research was conducted on all continents demonstrates that the topic in question is of global interest, encompassing multiple perspectives and viewpoints.

Primary Antecedents Contributing to PMS Effectiveness

Based on this literature review, the antecedents of effective PMS are categorized into nine variables, as shown in Appendix A.

Regular Feedback and Effective Communication

Firstly, regular feedback and effective communication are essential. Continuous and constructive feedback improves employee motivation and performance. An effective PMS can provide employees with constructive feedback, positively influencing their motivation, commitment, job satisfaction, and performance (de Araújo et al., 2024; Kakkar et al., 2020; Sharma et al., 2016). Continuous feedback will likely lead to superior performance compared to those who provide feedback only through annual supervisor reviews (Dewettinck & van Dijk, 2013). Additionally, considering feedforward—anticipating and responding to future events—is crucial for PMS effectiveness (Ferreira & Otley, 2009). Haines & St-Onge (2012) suggest multisource feedback, which offers participants in the performance management process various perspectives and enhances the depth and breadth of the feedback received. Managers should give constructive feedback and assist employees in evaluating their performance to boost motivation (Baird, 2017).

Moreover, communication is a critical factor in effective PMS and a primary cause of its ineffectiveness if not managed well (Ahenkan et al., 2018). More extensive information can also be provided by effectively managing communication between

employees and managers. Clear communication helps employees understand managers' expectations and the significance of their efforts, addresses performance gaps, and promotes development (Ahenkan et al., 2018; Biron et al., 2011; Kang & Choi, 2019). Managers should establish two-way channels and relational communication that value employee input to address organizational challenges effectively (Maley & Moeller, 2014; Pop-Vasileva et al., 2011). Formal training for raters is necessary to improve their ability to assess effectively (Biron et al., 2011; Haines & St-Onge, 2012). Through effective communication, managers can ensure that employees are adequately informed of the company's core values and objectives, which should be tailored to each employee's needs. This ensures that employees are well-informed about the company's core values and objectives, tailored to their specific needs, enhancing their understanding of the mission and goal (Yu et al., 2021).

Employee Involvement and Empowerment

Employee reactions are crucial for an effective PMS. They encompass fairness, accuracy, satisfaction, utility, and affectivity, which significantly impact perceptions of the PMS. Positive employee reactions contribute to system acceptance (Akhtar & Mittal, 2015), increased organizational commitment, and job satisfaction. Fair and transparent systems that provide helpful feedback enhance motivation, commitment, and performance. Therefore, understanding and addressing employee reactions can improve PMS implementation outcomes and effectiveness (de Araújo et al., 2024).

Employee involvement is essential to ensure PMS Implementation's success (Mansor et al., 2012). Involving and empowering employees in the PMS process enhances engagement and accountability. Empowerment through training and skill development also contributes to effective performance management (Ahenkan et al., 2018; Dewettinck & van Dijk, 2013; Mansor et al., 2012). It is needed to offer training opportunities to help employees develop or refine new skills (Ahenkan et al., 2018; Siraj & Hågen, 2023; Teeroovengadum et al., 2019). Moreover, it will motivate and develop individual skills and continuous knowledge sharing (Sardi et al., 2021) and assist in achieving goals by addressing staff concerns and ensuring staff time is used efficiently (Baird, 2017; Baird et al., 2012, 2022; Yu et al., 2021). Effective PMS tailored to help individual development and learning (Wright & Cheung, 2007) enables individuals to self-regulate their actions in line with these standards and foster accountability. Employees should be empowered to independently evaluate discrepancies between results and outcome standards and determine necessary adjustments (Dewettinck & van Dijk, 2013).

In addition, Gruman & Saks (2011) argue that enhancing the performance management process by focusing on employee engagement as a key outcome and critical determinant of job performance will lead to better results. A culture of engagement is a significant contextual variable associated with the effectiveness of performance management (Haines & St-Onge, 2012). The alternative term used for employee engagement is employee participation, which is proven by Kang & Choi (2019) to influence the relevance of PMS significantly. However, informal engagement

through casual organizational communication can lead to a greater attachment to work (Sardi et al., 2021).

Fairness and Objectivity

Considering employees' perceptions of fairness and accuracy in all aspects of PMS is crucial. Most studies on the effectiveness of PMS adopt fairness as one of the main criteria (de Araújo et al., 2024) because ensuring that PMS processes are perceived as fair will enhance the system's acceptance (Kang & Choi, 2019), commitment, motivations, and overall effectiveness (Kakkar et al., 2020; Maley & Moeller, 2014; Sharma et al., 2016). Fairness in PMS can increase employee satisfaction, improve performance, and enhance organizational effectiveness (Ahenkan et al., 2018; Baird, 2017; Baird et al., 2012). This focus on fairness fosters a positive work environment and strengthens the alignment between employee goals and organizational objectives, ultimately driving success.

In particular, the objectivity of performance evaluation is essential (Wright & Cheung, 2007), as the main challenge in implementing an effective PMS is the lack of precise measuring and assessment criteria for performance evaluation (Ahenkan et al., 2018). This can be anticipated through informal performance reviews to help employees understand the expected performance appraisal criteria (Dewettinck & van Dijk, 2013). It is essential to monitor employee performance periodically, provide an accurate assessment of performance, a clear idea of what is expected of me to meet organizational goals, use performance objectives as work standards (Baird, 2017; Baird et al., 2012, 2022; Kakkar et al., 2020; Kang & Choi, 2019; Pop-Vasileva et al., 2011; Sharma et al., 2016; Tung et al., 2011; Yu et al., 2021), and ensure employee accountability (Ohemeng et al., 2018).

Strategic Alignment and Integration

The strategic alignment of a performance measurement system (PMS) is crucial for its effectiveness, as highlighted in prior research (Baird, 2017; Baird et al., 2012, 2022; Pop-Vasileva et al., 2011; Tung et al., 2011; Yu et al., 2021). When performance measures align with an organization's strategic priorities, it enhances organizational outcomes. PMS is a strategic and tactical tool that aids top management in achieving strategic business objectives. Aligning employees' goals with organizational goals reinforces behaviors that contribute to attaining these objectives (Ohemeng et al., 2018; Sharma et al., 2016). This strategic alignment ensures that all employees work towards the same objectives, enhancing the PMS's effectiveness in driving the desired results (Baird, 2017) and increasing PMS success (Kadak & Laitinen, 2021). In addition, aligning employee goals with organizational objectives fosters engagement and awareness, encouraging employees to set personal goals that support the organization's goal (Gruman & Saks, 2011).

Failure to communicate the organization's strategy and plans can lead to a lack of understanding among members about how their actions contribute to the overall goals. This disconnect can hinder alignment with the overarching strategy (Ferreira & Otley, 2009). Integrating the PMS with strategic plans, organizational culture, and structural

frameworks ensures alignment with broader organizational goals and enhances overall operational effectiveness. Haines & St-Onge (2012) mentioned that this integration will affect employees' perceptions of the effectiveness of the PMS, for example, in performance appraisals. When the performance plan is aligned with the organizational plan, it is believed to result in an objective assessment based on clear criteria and increase employee confidence in the accuracy and fairness of the assessment. Furthermore, it is recommended that organizations integrate competency development design with organizational needs, which can be achieved through PMS as a behavioral and lead to continuous improvement (Mansor et al., 2012).

Clear Performance Goals and Planning

Planning performance ensures that objectives are meaningful and achievable, forming a solid foundation for the overall performance management framework. Clear performance goals help individuals understand how to achieve positive evaluations by clarifying the criteria on which they will be assessed (Dewettinck & van Dijk, 2013). When employees clearly understand their responsibilities and how their performance contributes to organizational success, they are more likely to be motivated and engaged (Gruman & Saks, 2011).

A specific study was drawn by Teeroovengadum et al. (2019) from several empirical studies to identify clear performance goals as antecedents of the PMS. According to Siraj & Hågen (2023), performance planning is an essential key component of the feedback mechanism. Scholars also discovered that clear job responsibilities are the foundation for effective performance planning, forming the PMS's basis (Kakkar et al., 2020; Sharma et al., 2016).

Top Management Commitment

Top managers are pivotal in aligning PMS with the organization's strategic objectives. They ensure that performance goals reflect the broader mission and vision, providing a clear direction for employees (Biron et al., 2011). Their commitment is crucial for the success of a program (Ahenkan et al., 2018) to provide constructive feedback fosters a culture of continuous improvement and accountability, motivating employees to achieve set targets. It often translates into providing necessary resources, including training and development opportunities, leading to increased overall job satisfaction and reduced turnover intentions (Kakkar et al., 2020), which are critical for the effective implementation of PMS.

Moreover, practical goal setting requires the involvement of top management to ensure that objectives are realistic, measurable, and aligned with strategic priorities, which is one of the PMS effectiveness antecedents (Teeroovengadum et al., 2019). This helps cascade goals throughout the organization, making them relevant at all levels (Ohemeng et al., 2018).

Indeed, top management's support reinforces a performance-oriented culture. Their visible commitment to PMS encourages employees' involvement (Mansor et al., 2012), aligns their behavior with organizational values and goals, and ensures that the PMS evaluation is fair and accurate (Sharma et al., 2016). It focuses on results,

accountability, and continuous improvement, often involving systems like performance management and reward structures that reinforce desired behaviors and outcomes. This culture encourages motivation, skill development, and a commitment to excellence, aiming to drive business success (Lawler, 2003). This focus on results, accountability, and continuous improvement, supported by systems like performance management and reward structures, drives motivation, skill development, and commitment to excellence, ultimately aiming to enhance business success.

Performance Oriented Culture

A performance-oriented culture is a crucial focus in PMS research. Lawler (2003), Gruman & Saks (2011), and Baird et al. (2012) have all contributed significantly, with Mansor et al. (2012) developing a measurement instrument. This instrument includes encouraging employees to monitor their performance, fostering interest in meeting targets, driving strong performance, and ensuring employees understand their contributions to organizational success. This approach emphasizes the importance of aligning individual efforts with organizational goals, creating a culture of continuous improvement and accountability.

Ensuring employees understand their contributions to organizational success is vital for a performance-oriented culture. This understanding helps bridge the gap between individual efforts and collective achievements, fostering a sense of belonging (Wright & Cheung, 2007) and purpose, leading to engagement and commitment to the organization's goals.

Integrating PMS

Leveraging technology for performance tracking, feedback, and data analysis can improve the accuracy and timeliness of PMS, thereby enhancing its effectiveness (Ferreira & Otley, 2009). It is crucial to ensure every stage of PMS is integrated with other HR functions, or they risk becoming disjointed and ineffective. Silos within an organization can emerge, leading to conflicting priorities, duplicated efforts, and inefficiencies. This lack of cohesion can also misalign individual performance goals and overarching organizational objectives, hindering overall performance improvement initiatives.

Moreover, the absence of integration can significantly undermine the system's success (Ahenkan et al., 2018). Without integration, PMS may fail to capture comprehensive data and insights needed for informed decision-making, limiting its ability to drive meaningful change and achieve desired outcomes. For example, employees will perceive PMS as effective if performance reviews are directly linked to their PMS outcomes (compensation, rewards, and recognition) (Sharma et al., 2016). The PMS is advanced when it strategically integrates human resource management and another primary organizational management system (Sardi et al., 2021). They are also related to positive performance management outcomes (Haines & St-Onge, 2012).

Reward and Recognition

Rewards encompass a wide range, from expressions of approval and recognition by senior management (or lack of criticism) to financial incentives like bonuses and salary

increases, as well as opportunities for long-term progression and promotion (non-financial rewards) (Ferreira & Otley, 2009; Pop-Vasileva et al., 2011). Integrating performance measures with reward systems enables organizations to enhance transparency, fairness, and accountability within their PMS (Sharma et al., 2016). Despite this, (Lawler, 2003) points out that rewards are one of the main determinants of PMS effectiveness, yet have received relatively little attention from researchers. The absence of rewards for good performance caused ineffective PMS (Ahenkan et al., 2018).

The PMS aligns with organizational strategic objectives by emphasizing employee concerns and identifying and rewarding good performance (Baird, 2017; Baird et al., 2012, 2022; Mansor et al., 2012; Pop-Vasileva et al., 2011; Tung et al., 2011; Yu et al., 2021). This integration encourages PMS effectiveness (Baird et al., 2012), ensures continuous improvement, and supports achieving strategic objectives by incentivizing behaviors that drive long-term value creation. Recent research by Siraj & Hågen (2023) demonstrates that rewards significantly enhance employee motivation and performance. Researchers such as Baird (2017) and Baird et al. (2012) identified multidimensional performance measures and their link to rewards as crucial factors for effective PMS. Furthermore, associating these performance indicators with rewards strengthens the desired behaviors and outcomes, encouraging employees to prioritize activities that contribute to individual and organizational success.

The Conceptual Framework of PMS Effectiveness Multi-Perspectives Antecedents

The results of our systematic literature review of 28 selected studies are represented in a conceptual model in Figure 2 and the details are in Appendix B. These studies were methodically examined to identify the antecedents of effective PMS. All distinguishable factors were classified into the proposed model. As depicted in the model, the antecedents of effective PMS were categorized into nine distinct categories.

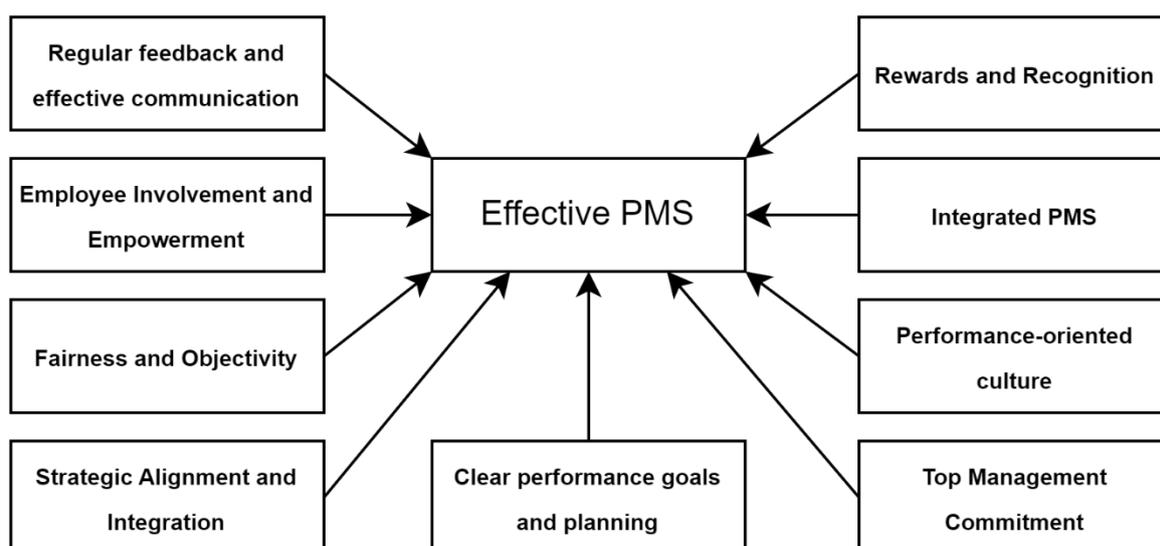


Figure 2. Antecedents of Effective PMS

3.2. Discussion

This paper follows PRISMA, a systematic approach to conducting literature reviews that enables comprehensive and reproducible research synthesis (Page et al., 2021). A comprehensive analysis was conducted on 28 articles published in 19 reputable journals in the human resources management field between 2020 and 2024.

This research makes every effort to select the most appropriate strategy for reviewing articles and provides insight for researchers and practitioners in the field of PMS. Through this research, various standards used by previous researchers were synthesized and classified into nine leading indicators. This research indicates that studies on the effectiveness of PMS are conducted evenly across continents, with most studies conducted in Australia and Asia. Most studies used quantitative methods with different measurement instruments. This research clarifies the indicators that determine the effectiveness of PMS in organizations, particularly in the context of human resources. Several researchers have proposed PMS effectiveness measurement instruments, including those conducted by (Akhtar & Mittal, 2015; Baird et al., 2012; Decramer et al., 2013; Kang & Choi, 2019; Lawler, 2003; Neher & Maley, 2020; Pop-Vasileva et al., 2011; Sharma et al., 2016; Teeroovengadum et al., 2019; Wright & Cheung, 2007), and then the results of this study were then modified by researchers such as (Baird, 2017; Baird et al., 2022; Kakkar et al., 2020; Tung et al., 2011; Yu et al., 2021).

Furthermore, this study introduces and categorizes the antecedents of PMS effectiveness. It distills and combines similar indicators and organizes them into nine categories. This addresses the concerns expressed by previous researchers that although PMs are widely used in research and practice, the determinants of their effectiveness as a whole system remain unclear (Sales, 2019); there is no attempt to map or integrate all areas of PM evaluative criteria across different research streams (Schleicher et al., 2019), and they are under-researched.

This research consolidates a large body of knowledge on PMS into a multidimensional framework that synthesizes existing literature and provides a better understanding of PMS. The proposed model links nine categories of antecedents. PMS researchers (Akhtar & Mittal, 2015; Baird, 2017; Baird et al., 2012, 2022; Decramer et al., 2013; Gruman & Saks, 2011; Lawler, 2003; Pop-Vasileva et al., 2011; Sharma et al., 2016; Tung et al., 2011; Yu et al., 2021) and others have been working for some time on model development, but to date, none have provided a complete picture of what critical issues can make PMS implemented by organizations effectively. The model formulated in the study is more comprehensive as it is derived from a systematic review and covers every critical dimension of PMS. The model offers a good starting point for future empirical research in measuring PMS effectiveness in a comprehensive and multi-perspective manner.

First, regular feedback and effective communication are crucial components of a successful PMS. They enhance employee motivation, commitment, and performance. Managers should provide continuous, constructive feedback and foster open, two-way

communication to ensure employees understand expectations and organizational goals. This approach improves performance and aligns individual efforts with the company's mission. Unfortunately, the feedback quality of raters is frequently debated. For example, research conducted by Smither et al. (2005) revealed that Improvement in performance after receiving multisource feedback is generally slight and depends on factors such as positive feedback orientation, perceived need for change, and positive reaction to the feedback. In addition, the issue of consistency and bias is also an essential topic in the performance feedback system (Elder et al., 2005), so indirectly, training for raters is also needed to realize effective feedback and communication in an effective performance management system.

Second, employee empowerment is critical to the PMS's effectiveness. Positive reactions, such as perceived fairness and utility, enhance acceptance and organizational commitment while involving employees in the PMS process boosts engagement and accountability. Empowerment through training and skill development further supports motivation and performance, creating a culture of engagement vital for PMS' effectiveness. However, employee empowerment faces challenges that must be addressed in depth, such as ensuring equality and fairness. Empowering employees requires decision-makers to maintain objectivity. Organizations should establish clear guidelines on how empowerment is implemented to provide employees with a defined path, helping to shape their behavior and attitudes within the organization.

Third, considering employees' perceptions of fairness and accuracy in all aspects of PMS is crucial. Fairness in the system enhances acceptance, commitment, motivation, and overall effectiveness, leading to increased satisfaction and improved performance. Ensuring objectivity and precise periodic assessments in performance evaluations help align employee goals with organizational objectives, fostering a positive work environment and driving success. Realizing employees' perceived fairness and accuracy is challenging, mainly to ensure objectivity and consistency by everyone involved. Employees' perspectives on PMS effectiveness are crucial, as employee performance significantly influences organizational performance.

Next, PMS's strategic alignment and integration are crucial for its effectiveness. When performance measures align with an organization's strategic priorities, they enhance outcomes and aid top management in achieving business objectives. This alignment ensures that all employees work towards common goals, reinforcing behaviors that contribute to these objectives and fostering engagement and awareness. Integrating the PMS with strategic plans, organizational culture, and structural frameworks enhances operational effectiveness and increases employee confidence in the system's fairness and accuracy. Furthermore, integrating competency development with organizational needs through the PMS is a tool for behavioral change and continuous improvement. Integration should consider various aspects, including employee development plans. For example, in aligning organizational strategy and performance integration, it is necessary to consider employee career

development plans. Ensuring that employee career development is not neglected is crucial because it focuses on the organizational goals.

Fifth, Clear job responsibilities and performance planning also enable managers to provide constructive feedback and support development opportunities, enhancing employee performance and job satisfaction. These elements create a structured and effective PMS that drives individual and organizational growth while maintaining alignment with strategic priorities.

Sixth, top management commitment impacts the provision of constructive feedback, fostering a culture of continuous improvement and accountability. This motivates employees to achieve set targets and often translates into providing necessary resources, including training and development opportunities. Such commitment leads to increased job satisfaction and reduced turnover intentions, which are critical for the effective implementation of PMS. Thus, the involvement of top management is essential in cultivating a robust performance management culture that aligns with strategic objectives and supports organizational growth.

Moreover, top management's support reinforces a performance-oriented culture. This culture incorporates aspects like motivating employees to track their performance, promoting a commitment to achieving goals, facilitating high performance, and ensuring employees grasp their role in the organization's success. This culture can only be realized if all parties involved, both top management and employees, realize their respective roles in PMS. A further crucial discussion is how top management and employees fill their respective roles without conflicting interests. Thus, the organizational culture is performance-oriented, not interest-oriented.

The next aspect is integration. It is not merely desirable but essential for ensuring that PMS functions as a cohesive and powerful tool in enhancing organizational performance and competitiveness. This holistic integration fosters a cohesive approach where PMS becomes a dynamic tool for driving performance improvements and achieving sustainable competitive advantage in the long term. Silos within the PMS will lead to sectoral egos, hindering PMS's data-driven decision-making. Integrating all aspects of PMS is not easy because most organizations still focus on appraisal or evaluation and ignore other aspects such as planning, feedback, feedforward, development plan, cascading, and others.

The last aspect is reward and recognition. This aspect determines how much the organization values its employees and rewards outstanding ones. Reward and recognition will ultimately affect employee retention and motivation, improving performance. The problem is, do the rewards and recognition provided by PMS match or even exceed employees' expectations? The challenge for organizations is to provide financial and non-financial rewards that employees expect and become a reason to develop and be motivated.

4. Conclusion

According to the systematic literature review, it is clear that an effective PMS is essential for improving overall organizational effectiveness. A comprehensive framework is developed in this work by integrating the indicators and factors influencing PMS effectiveness from various perspectives in a completely holistic approach. This holistic approach provides a broader and deeper insight into the antecedents contributing to implementing PMS to its full extent, resulting in its effectiveness. Several key elements were uncovered: regular feedback and effective communication, employee involvement and empowerment, fairness and objectivity, strategic alignment and integration, clear performance goals and planning, top management commitment, performance-oriented culture, integrating PMS, and rewards and recognition. By focusing on these aspects, organizations can ensure that their employees are engaged and motivated, supporting their strategic goals.

However, some aspects should be considered for future research. Firstly, there is a pressing need to develop more comprehensive metrics that accurately measure the impact of PMS on various aspects of organizational performance and employee engagement. These metrics should be multidimensional, capturing quantitative and qualitative data to provide a holistic view of PMS effectiveness (Gruman & Saks, 2011).

Furthermore, future research must be conducted on how technology advances in PMS and its potential to improve system effectiveness. With technology developments such as advanced digital analytics tools, organizations should take advantage of the opportunity to track performance more accurately and holistically, real-time feedback, and data-driven decision-making, thus improving PMS's overall efficiency and accuracy (Ferreira & Otley, 2009). Examining how emerging technologies like artificial intelligence and machine learning can be incorporated into PMS to foster continuous improvement and innovation would be particularly valuable. This will potentially simplify the PMS process to be more effective and efficient, requiring leaders to adjust their leadership style.

Third, research on how PMS can be used comprehensively as a strategic tool to achieve organizational goals is also a hot issue that should be researched in the future. This can be done by measuring the quality of decisions made by leaders regarding the performance of employees, as well as how it affects employee wellbeing and organizational performance. Understanding the mechanisms through which PMS can be used as a strategic tool to optimize productivity is also essential. This includes exploring how PMS frameworks can be designed to support performance evaluation, employee development, and motivation, ultimately leading to sustained organizational success (Sharma et al., 2016).

Future research should prioritize a multifaceted examination of PMS, integrating insights from advanced technological applications and strategic alignment perspectives to develop robust and comprehensive systems. Incorporating advanced technology, customized approaches for varied organizational settings, and focusing on employees' psychological well-being will advance PMS effectiveness. With sustained

research and practical application, organizations can fully leverage their performance management systems, resulting in increased productivity, innovation, and overall organizational excellence. By doing so, organizations can better harness the potential of PMS to enhance performance, foster employee engagement, and achieve their strategic objectives.

The conclusion must be present throughout the study findings. The conclusion must be simple and concise, with sentences that are easy for the reader to understand. Accompanied with new understanding/perspective/insight refers to the research results obtained.

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Appendix A: The Main Antecedents of Effective PMS

No	Antecedents	Authors
1	Regular feedback and effective communication	(Ahenkan et al., 2018; Baird, 2017; Baird et al., 2012, 2022; de Araújo et al., 2024; Decramer et al., 2013; Dewettinck & van Dijk, 2013; Ferreira & Otley, 2009; Haines & St-Onge, 2012; Kakkar et al., 2020; Kang & Choi, 2019; Lawler, 2003; Maley & Moeller, 2014; Ohemeng et al., 2018; Pop-Vasileva et al., 2011; Sardi et al., 2021; Sharma et al., 2016; Siraj & Hågen, 2023; Teeroovengadum et al., 2019; Tung et al., 2011; Wright & Cheung, 2007; Yu et al., 2021)
2	Employee Involvement and Empowerment	(Ahenkan et al., 2018; Akhtar & Mittal, 2015; Baird, 2017; Baird et al., 2012, 2022; de Araújo et al., 2024; Dewettinck & van Dijk, 2013; Gruman & Saks, 2011; Haines & St-Onge, 2012; Kang & Choi, 2019; Lawler, 2003; Mansor et al., 2012; Pop-Vasileva et al., 2011; Sardi et al., 2021; Siraj & Hågen, 2023; Suhardi, 2015; Teeroovengadum et al., 2019; Tung et al., 2011; Wright & Cheung, 2007; Yu et al., 2021)
3	Fairness and Objectivity	(Ahenkan et al., 2018; Baird, 2017; Baird et al., 2012, 2022; de Araújo et al., 2024; Ferreira & Otley, 2009; Kadak & Laitinen, 2021; Kakkar et al., 2020; Kang & Choi, 2019; Maley & Moeller, 2014; Ohemeng et al., 2018; Pop-Vasileva et al., 2011; Sharma et al., 2016; Tung et al., 2011; Wright & Cheung, 2007; Yu et al., 2021)
4	Strategic Alignment and Integration	(Ahenkan et al., 2018; Akhtar & Mittal, 2015; Baird, 2017; Baird et al., 2012, 2022; Biron et al., 2011; Ferreira & Otley, 2009; Haines & St-Onge, 2012; Kadak & Laitinen, 2021; Lawler, 2003; Ohemeng et al., 2018; Pop-Vasileva et al., 2011; Wright & Cheung, 2007; Yu et al., 2021)
5	Clear performance goals and planning	(Ahenkan et al., 2018; Ferreira & Otley, 2009; Kadak & Laitinen, 2021; Kakkar et al., 2020; Kang & Choi, 2019; Sharma et al., 2016; Siraj & Hågen, 2023; Teeroovengadum et al., 2019; Wright & Cheung, 2007)
6	Top Management Commitment	(Ahenkan et al., 2018; Biron et al., 2011; Kakkar et al., 2020; Lawler, 2003; Mansor et al., 2012; Ohemeng et al., 2018; Sharma et al., 2016; Teeroovengadum et al., 2019)
7	Performance-oriented culture	(Baird, 2017; Baird et al., 2012, 2022; de Araújo et al., 2024; Decramer et al., 2013; Dewettinck & van Dijk, 2013; Kang & Choi, 2019; Lawler, 2003; Mansor et al., 2012; Ohemeng et al., 2018; Suhardi, 2015; Tung et al., 2011; Yu et al., 2021)
8	Integrated PMS	(Ahenkan et al., 2018; Akhtar & Mittal, 2015; de Araújo et al., 2024; Ferreira & Otley, 2009; Haines & St-Onge, 2012; Kadak & Laitinen, 2021; Kakkar et al., 2020; Sardi et al., 2021; Sharma et al., 2016)
9	Rewards and Recognition	(Ahenkan et al., 2018; Baird, 2017; Baird et al., 2012, 2022; Dewettinck & van Dijk, 2013; Pop-Vasileva et al., 2011; Siraj & Hågen, 2023; Tung et al., 2011; Yu et al., 2021)

Sources: researchers work

Appendix B: Details of PMS Effectiveness Antecedents:

PMS Effectiveness Antecedents		
<p>Regular feedback and effective communication</p> <ul style="list-style-type: none"> • Performance feedback • Good/effective/clear Communication • Coaching • Performance Dialogue • Communication improvement • Discussion on performance indicators • Periodic evaluation • Continuous knowledge sharing • Insight • Multisource feedback • Accurate feedback • Performance evaluation process • Interactive feedback 	<p>Employee Involvement and Empowerment</p> <ul style="list-style-type: none"> • Involvement and participation • PMS Training • Developing individual skills and knowledge • Ensuring staff commitment to organizational objectives • Addressing the concerns of staff • Identifying talented and poor performance • Improvement area for employee • Learning and growth • Self-performance management • Tailored to help individual development and learn • Sense of ownership • Employee recognition • Motivating • Encompassing the immediate reactions of participants 	<p>Fairness and Objectivity</p> <ul style="list-style-type: none"> • Transparent measuring and evaluation criteria for PM Assessment • Accurate and Fair Assessment • Clear improvement area analysis • Objectivity in performance review • Performance Monitoring
<p>Strategic Alignment and Integration</p> <ul style="list-style-type: none"> • Linking individual performance to unit performance • Agility • Strategic Alignment • Cascading • Linked to business strategy • Strategic and tactical tool usage 	<p>Clear performance goals and planning</p> <ul style="list-style-type: none"> • Clear job responsibilities (defined through performance planning) • Clear expectations during performance planning • Use performance objectives as work standards • Well Prepared • Clear performance goals • Clear performance target 	<p>Top Management Commitment</p> <ul style="list-style-type: none"> • Top Management involvement • Management Commitment • Top Manager's Commitment • Management Support
<p>Performance-oriented culture</p> <ul style="list-style-type: none"> • Performance-oriented culture • Employee Accountability • Encouraging employees to monitor their performance • Fostering interest in meeting targets • Driving strong performance, • Ensuring employees understand their contributions to organizational success • Self -performance Management • Employees understanding of PMS 	<p>Integrated PMS</p> <ul style="list-style-type: none"> • Integrated all of PMS aspects • Integration system • Integrated HR system with another management system 	<p>Rewards and Recognition</p> <ul style="list-style-type: none"> • rewards and punishments • reward and recognition • development plan