Balancing Ethics and Performance: Tensions and Dilemmas of Performance Management System Providers when Facing Ethical Considerations

Author: Babak Fathi
University of Twente
P.O. Box 217, 7500AE Enschede
The Netherlands

ABSTRACT,

Performance management systems (PMS) offer many benefits but also present ethical challenges, such as bias and negative effects on employee satisfaction. The current study explores these ethical considerations in PMS development and the tensions associated with them, contributing to more ethically responsible PMS design. This study used a literature review, the value sensitive design (VSD) framework, semi-structured interviews, and thematic analysis to identify key ethical considerations in PMS development. Stakeholders, including PMS CEOs, PMS developers, a PMS business developer, a PMS HCM strategic director, human resource managers, and an experienced employee, were interviewed to shed light on tensions and dilemmas related to ethical considerations. The findings highlight key ethical considerations, including minimizing bias, ensuring transparency, respecting privacy, accommodating individual roles and enabling customization, complying with law, including diversity, emphasizing human elements, promoting dialogue, and empowering employees. However, the study also uncovers dilemmas such as balancing standardization and customization, fairness and cultural diversity, employee development and organizational norms, transparency and privacy, reducing or justifying bias, and maintaining ethical standards without compromising practical needs. This study offers PMS developers insights into striking a balance between ethical integrity and practical effectiveness of PMSs.

Graduation Committee members: dr. S.D. Schafheitle

Keywords

Dilemmas, Ethical Considerations, Ethical Technology, Ethics, Performance Management Systems, Technology, Tensions



1. INTRODUCTION

Performance management systems (PMS) on one hand serve as important tools for assessing and improving employee performance. Some argue that, electronic performance management within organizations can lead to several benefits, including increased productivity, improved employee performance, and increased accountability in the professional environment (Ravid et al., 2020). On the other hand, there are findings that PMS can have negative outcomes such as employee demotivation, decreased job satisfaction, and increased turnover (Aguinis, 2009; Schleicher et al., 2018). The findings of Auginis, (2009) found that the implementation of PMS can be challenging due to various limitations, including the risk of bias. Leicht-Deobald et. al., (2022) identified as well that algorithm-based decision-making can include biases, such as racial and gender biases

Given the growing concern about the ethical implications in the field of PMSs, this research identifies the key ethical considerations that providers must address during the PMS design process and to explore the tensions and dilemmas that arise from these considerations in order to highlight the importance of ethical concerns in the design of PMSs. It has been highlighted that, ethical principles such as fairness, are crucial for the socio-emotional needs of employees (Fieseler et al., 2019). McKinsey quarterly reports have highlighted that an effective PMS can be achieved by implementing fairness, which involves transparently linking employee goals to business priorities while maintaining flexibility, investing in managers' coaching skills, and rewarding outstanding performance in specific roles (Hancock et al., 2018).

Due to the limited consideration of ethical values in PMS, there could be a potential negative impact on employees and organizations (Aguinis, 2009). By identifying the key ethical considerations that providers of PMS need to address during the design process, and what tensions and dilemmas arise from these considerations, this research contributes to a better understanding of the interplay between technology and ethics (Friedman et al., 2008). Not only does this research fill a gap in the literature, but also provide insights for PMS providers and organizations to create more ethically responsible PMS that considers the needs and values of different stakeholders, such as employees and HR managers (Schafheitle et al., 2020). Moreover, this research contributes to the understanding of incorporating ethical considerations in PMS design, leading to improved employee experience and organizational outcomes (Kerssens-van Drongelen & Fisscher, 2003). Additionally, a foundation for further research on ethics in PMS design and other technology systems are provided, to help to promote ethical technology development (Ravid et al., 2020).

2. LITERATURE REVIEW

2.1 Theoretical Framework

The Value Sensitive Design (VSD) framework is a tool for the design process of information systems. Not only can it identify the values of the stakeholders affected by the PMS, but it can also understand the impact of different design decisions of these stakeholders. In addition, it provides a process to resolve value conflicts between different stakeholders and shows how dilemmas arising from these ethical considerations can be managed. Beyond simply meeting technical objectives, the VSD framework promotes the incorporation of values into PMS design, thereby protecting the interests of all stakeholders involved. Given the iterative nature of the design process, the framework allows on-going feedback from various stakeholders. As a result, it ensures that their values are consistently supported

and considered, as well as allowing them to adapt to changing ethical considerations and dilemmas over time (Friedman et al., 2013).

Friedman et. al., (2013) suggest three main components which create the framework of VSD. The first component is the conceptual investigation, this is done by identifying stakeholders and their values, for the design of an information system. By mapping out the values of different stakeholders such as employees, HR managers, and PMS providers, it would be possible to identify values that matter to each stakeholder. This identification can be used in order to compare the aligned and divergent perspectives, which can cause potential areas of conflict (Friedman et al., 2013). The second component is focusing on empirical investigations, which are about studying how stakeholders understand and experience values in the context of technology use. This component is used in the methodological approach of this research as well, in order to collect empirical data on the prioritization of ethical values over others. Further, the component helps to explore why PMS providers value what they are valuing. The last component is the technical investigation, which is about developing and evaluating the technology to ensure it supports the identified values. Of course, not all values can be maximized at the same time, and trade-offs must be made during the design process, but this component helps to identify why certain values are prioritized over another in the technology itself, which helps to highlight tensions and dilemmas that arise during the PMS design.

Based on this, the VSD framework is used to answer the research question mentioned later in this paper. It can be used as a methodological approach to address key ethical considerations in the design of PMSs and the resulting tensions and dilemmas to understand ethics, technology, and design in an organizational context. The conceptual investigations help identify relevant stakeholder values. The empirical investigations provide insight into how stakeholders experience and understand these values. Finally, the technical investigations ensure that the PMS supports the identified values while identifying potential conflicts or tensions.

Table 1: Overview of Value Sensitive Design Components and their Role in Ethical Considerations of Performance Management Systems Design

CONCEPTUAL INVESTIGATIONS	Identifies ethical values of different stakeholders
EMPIRICAL INVESTIGATIONS	Identifies stakeholders understanding and experience in PMS
TECHNICAL INVESTIGATION	Identifies how technology can be created to align with ethical values

2.2 Challenges and Conflicts in Incorporating Ethical Considerations

Scholars have identified ethical issues related to algorithmic decision-making, which is also relevant to performance management systems. It has been shown that algorithms can perpetuate existing biases and social inequalities, if these algorithms are based on biased data or if they are designed without considering these issues (Mittelstadt et al., 2016; Leicht-Deobald et al., 2022). Ethical concerns related to autonomy can result in drawbacks such as employee resistance towards

monitoring systems (Ravid et al., 2020). Furthermore, low levels of transparency in algorithms make it difficult for different stakeholders to understand how the algorithms work (Schafheitle et al., 2020). Leicht-Deobald et. al., (2022) have further highlighted issues regarding privacy, accountability, transparency, power, and social control as challenges of algorithm-based decision-making.

The incorporation of ethical considerations into the design process of PMS may lead to conflicts, primarily due to differing stakeholder values. These conflicts can give rise to ethical dilemmas that complicate the design process (Van de Poel, 2014). By using the VSD framework, it is possible to identify the various stakeholder values, explore ways to resolve value conflicts, and highlight strategies that can mitigate these conflicts within the design of PMS.

2.3 Importance of Ethical Considerations in HRM

It has been found that organizations with a strong commitment to integrity are better positioned to succeed in the long term, which can be reached through incorporating ethical considerations (Paine, 1994; Buckley et al., 2001). Not only can ethical considerations help organizations to build a culture of integrity, but also does it ensure that employees' actions are aligned with the organization's values (Paine, 1994). Leicht-Deobald et al., (2022) pointed out the importance of personal integrity in algorithm-based decision-making. They identified that it is crucial to understand the ethical implications, such as the risk of creating blind trust in automated processes and rules, which could push human perception into the background. In addition, the corporate social responsibility (CSR) pyramid, which is divided into four levels, namely economic, legal, ethical, and philanthropic responsibility, emphasizes that responsibility builds on legal responsibility, which highlights that organizations are expected to follow ethical standards beyond legal requirements in order to maintain the trust of their employees (Carroll, 1991). Furthermore, environmental, social, and governance (ESG) factors are becoming increasingly important to organizations, with the social factor emphasizing the importance of treating employees fairly through efforts such as diversity, equity, and inclusion, which in turn supports the importance of ethical considerations in human resource management (Hunt, 2022).

3. RESEARCH QUESTION AND OBJECTIVES

Based on the findings of the literature review, this research answers the following question:

"What are the key ethical considerations that providers of Performance Management Systems need to address during the design process, and what tensions and dilemmas arise from these considerations?"

In order to answer the research question, the following two subquestions need to be addressed:

- What are ethical considerations that providers of PMS need to address during the design process?
- 2. What tensions and dilemmas arise from these considerations?

By addressing the ethical considerations in PMS design, ethical values such as fairness can be ensured. That will help to understand ethical issues and how providers can address them in the design of their PMS, considering not only organizational

outcomes but also the potential impact on individual employees (Friedman et al., 2013). Once the ethical considerations are identified, it is important to understand the tensions and dilemmas that arise. These tensions and dilemmas can be related to addressing inherent biases in performance evaluations while providing meaningful and constructive feedback to employees (Leicht-Deobald et. al., 2022). Exploring the tensions and dilemmas can help to design ethically sound PMS and it might point toward potential strategies for resolution (Kerssens-van Drongelen & Fisscher, 2003).

Answering the research question is essential in order to achieve the following objectives of this research:

- To identify key ethical considerations that providers of PMS need to address during the design process.
- 2. To investigate the tensions and dilemmas that arise from addressing ethical considerations in PMS design.

4. METHODOLOGIES

4.1 Research Design

In order to be able to answer the research question, the methodological approach in this research covers a literature review and semi-structured interviews. Conducting the literature review allows this research to build a foundational understanding of ethical considerations in PMS design. Interviews generally require a smaller sample size due to the depth of information, enabling this research to gain insights (Williams, 2007).

Thematic analysis is used in this study in order to identify patterns and themes in qualitative data, which is suitable for exploring ethical considerations in PMS design (Braun & Clarke, 2006). Triangulation enhances the validity of the findings in this study and helps to confirm the findings based on multiple data sources (Creswell & Miller, 2000).

4.2 Subject Selection

The purposive sampling method allows the selection of participants with experience and knowledge with regard to PMS, which increases the relevance and quality of the data collected (Etikan et al., 2016).

The semi-structured interviews involve engaging with a diverse range of participants, including PMS CEOs, PMS developers, a PMS business developer, a PMS HCM strategic director, a employee utilizing PMS, and HR managers utilizing PMS.

By selecting such a diverse group of participants from multiple companies, it allows this study to explore specific ethical considerations to each stakeholder group, which is also important regarding the VSD framework, highlighting all the stakeholders which are affected by the PMS design. This helps to identify what is important to each stakeholder and provides a more comprehensive view of the ethical considerations that must be taken into account when designing PMS. In addition, the different stakeholder perspectives shed light on areas where tensions and dilemmas arise when trying to incorporate ethical considerations into the PMS.

4.3 Criteria for Subject Selection

Each of the stakeholders to be interviewed must meet certain criteria to ensure that the interviews provide insightful data for the research. The data obtained from these interviews is then transcribed.

4.3.1 PMS CEO

The CEO should be able to speak English fluently. The CEO should be experienced in the PMS industry and have a deep understanding of ethical issues. The CEO should have experience

and strategies for dealing with ethical dilemmas that arise during PMS design. The CEO should have thoughts on how technology and ethics interact in the PMS design. The CEO should be directly involved in the design and development. The CEO should be willing to discuss ethical issues openly.

4.3.2 PMS Developer

The developer should be able to speak English fluently. The developer should have experience in PMS development and have a deep understanding of the practical challenges that arise during the development process, such as different ethical expectations of different stakeholders. The developer should be aware of the legal compliance in software development and how it influences ethical considerations. The developer should be experienced with bias and have strategies for dealing with bias in software development.

4.3.3 PMS Business Developer

The business developer should be able to speak English fluently. The business developer should be understanding ethics, including its role in the usage of PMS. The business developer should be aware of ethical considerations and client care. The business developer should be experienced with bias and have strategies for dealing with bias in PMS.

4.3.4 PMS HCM Strategic Director

The HCM strategic director should be able to speak English fluently. The HCM strategic director should be understanding ethics and its implications for the design of PMS. The HCM strategic director should have experience with approaching bias and a strategy for mitigating bias. The HCM strategic director should have an approach for dealing with potential value differences among stakeholders.

4.3.5 HR Manager Utilizing PMS

The HR manager should be able to speak English or German fluently. The HR manager should be understanding ethics and its application in HR management. The HR managers should be experienced with practical HR management tasks. The HR managers should have a desire to be involved in the design process of PMS. The HR manager should be able to identify potential bias in performance management and have strategies to mitigate it.

4.3.6 Employee Utilizing PMS

The employee should be able to speak English or German fluently. The employee should be understanding ethics. The employee should be experienced utilizing PMS. The employee should be experienced with a method for resolving conflicts.

4.4 Data Collection

The study uses semi-structured interviews, which are useful for gathering important data from participants' responses and to shed light on their experiences, perspectives, and beliefs (Peters & Halcomb, 2015). This method is particularly important for the VSD framework because it engages participants' conceptual, empirical, and technical insights. Therefore, the research is able to explore each participant's concept of ethics and their individual experiences with ethical considerations as well as at a technical level. The interview uses open-ended and tailored questions to allow for an in-depth exploration of participants' perspectives and experiences. This approach ensures a comprehensive understanding of ethical considerations in PMS design. With participant consent, these interviews are recorded and transcribed, as either audio or video.

Table 2: Number of Interviews and Characteristics

PMS CEO	2 subjects interviewed
	Both subjects have
	experience in the PMS
	industry and a deep
	understanding of ethics
	8
PMS Developer	2 subjects interviewed
	Both subjects have
	experience in PMS
	development and the
	practical challenges that
	arise
PMS Business Developer	1 subject interviewed
	The subject is aware of
	client care and ethical
	consideration
PMS HCM Strategic Director	1 subject interviewed
	The subject understands
	ethical considerations and
	the implications for PMS
	the implications for Twis
HR Manager	2 subjects interviewed
	Doth subjects are
	Both subjects are experienced with practical
	HR management tasks
Employee	1 subject interviewed
	The subject is experienced
	with utilizing PMS

To recruit interviewees who met the selection criteria for the study, several PMS vendor websites were searched and emails were sent to potential participants. These emails included information about the purpose of the study and how each interview would contribute to the further development of an effective PMS. In addition, another researcher provided an interview with a company that uses PMS, while the supervisor of this study arranged for the involvement of a PMS developer. These contributions provide invaluable insight for this paper.

4.5 Data Analysis

Data from the interviews are transcribed to enhance their usability for this research. Because the semi-structured interviews generate a fair amount of data, deductive coding is used to identify emergent themes from the participants' responses, which is divdied into conceptual investigations, empirical investigations, and technical investigations according to the VSD framework (Friedman et al., 2013). These themes are categorized to represent various ethical considerations and the tensions and dilemmas that arise from them. The different perspectives of the respondents are then discussed to illustrate

the evolution of the tensions and dilemmas that arise from these ethical considerations.

5. RESULTS

In the results section, the paper is going into more detail about what findings have been made regarding the conceptual, empirical, and technical investigations of the interviewees when it comes to ethical considerations in PMS design and which possible tensions and dilemmas arise.

5.1 Conceptual Investigations

In the initial interviews with the PMS CEOs, CEO A expressed the belief that his role was to provide a framework for the performance evaluation, not the content. This suggests that CEO A does not feel responsible for the specifics of the questions or measures used in the evaluation. In contrast, CEO B distinguishes between personal ethics and organizational values, describing ethics as more subjective. Both CEOs emphasized the need for an objective framework to minimize bias. It has been shown that ethical considerations such as the objectivity of appraisals positively influence employee performance motivation (Kisang & Kirai, 2016). CEO A referred to a research study on racial and gender bias in earnings and emphasized the importance of addressing such issues. This was also highlighted in a study that found that white men earn more than other groups (Woolston, 2020). CEO A's approach in mitigating bias is to split the role of judge, coach, and coordinator, whereas CEO B approaches reducing bias, by observing patterns over multiple cycles. In addition, CEO A suggested that client companies using their PMS should focus on employee empowerment. CEO B, in contrast, suggested that organizational values should be incorporated into PMS design, implying a greater focus on company culture. Both CEOs emphasized transparency and honesty in feedback mechanisms as critical ethical considerations. According to CEO A, the main dilemma is balancing privacy and transparency, and in controlling and trusting employees.

As for PMS developers, Developer A emphasized the importance of fairness and transparency in developing a product that inspires user trust. The developer quoted: "Without transparency, you cannot gain the trust of the users of the product". Emphasizing the importance of a transparent rating system. This is also underscored by research that has found that transparency contributes to stakeholder confidence (Bamber, 2015). Developer A acknowledged the challenges of having different ethical expectations across industries and proposed customizable software tailored to specific customer requirements as a solution. These differences across industries can be explained by the institutional logic that guides individuals and organizations in their decision-making processes based on practices and beliefs in institutions (Thornton et al. 2008). Comparatively, Developer B viewed ethics as subjective and individualistic, and suggested that legal boundaries set by the state should define ethical considerations. The above boundaries are also consistent with the corporate social responsibility (CSR) pyramid, in which legal responsibility is the second level, followed by ethical responsibility (Carroll, 1991). In Developer B's view, compliance with laws, rather than subjective interpretations of morality, is the only ethical consideration in product development.

The business developer emphasized that, ethics put the best interest of all above self-interest. She emphasized that PMS design must protect anonymity, prevent retaliation, and preserve users' rights. She also pointed out that clients can use

standardized templates or customize the PMS according to their values

The HCM strategic director emphasized the importance of ethics and integrity. He pointed to the use of AI in their software to facilitate objective and unbiased decisions (Kisang & Kirai, 2016). Still, he acknowledged tensions that could arise from differing ethical interpretations among stakeholders, leading to dilemmas in PMS design.

Both HR managers emphasized fairness, unbiased judgment, and objectivity as core values for PMS (Kisang & Kirai, 2016). In addition, research has shown that procedural fairness can improve the effectiveness of HR evaluation practices, underscoring the importance of fairness in PMS (Cropanzano & Wright, 2003). They expressed a desire to be involved in the PMS design process because of their understanding of end-user needs. Stakeholder involvement in the design process of new technologies is highlighted in the research and underscores the value of involving stakeholders such as human resource managers (LaMonica et al., 2019)

Finally, the employee emphasized respect, fairness, and avoidance of discrimination as key ethical considerations (Cropanzano & Wright, 2003).

5.2 Empirical Investigations

In the interviews with the CEOs, it became clear that the involvement of external parties in the PMS development process is essential. CEO A stated that his company works with psychologists and incorporates customer feedback into the process (LaMonica et al., 2019). CEO B emphasized that companies usually distinguish between performance and values in performance management. CEO A also pointed out that conflicts among employees can be resolved through dialogue. Interestingly, CEO B noted that many companies do not give much importance to values in their appraisals. To address the problem of bias, CEO A suggested that training could help identify and overcome bias. CEO B, however, argued for a more evidence-based approach to assessments that would reduce subjectivity and thus increase fairness, which is significant (Cropanzano & Wright, 2003). This approach is also suggested by research, in which quantitative data as well as qualitative data is used to address issues such as bias (Lohman, 2021).

In discussions with developers, Developer A noted that his company does 80% of PMS development work internally, occasionally bringing in consultants to assist. To avoid conflict, they rely on a highly customizable product that can be adapted to meet customer needs. Despite an internal UX guideline to address gender and racial bias, Developer A acknowledged that eliminating bias is a difficult task, especially when it comes to meeting diverse customer needs. Developer B, on the contrary, stated that customers are the only relevant partners in the development process. Resolving conflicts, Developer B said, should be done within the legal framework, and personal beliefs should not influence the workplace. He also acknowledged that complete elimination of bias is impossible and emphasized: "The biases of one are the features for someone else". This was highlighted in research as the "imperfect human nature" which makes bias intentional or unintentional and conscious or subconscious (Moustafa, 2015). Developer B believes that decisions should be made with the interests of the company and the customer in mind.

The PMS business developer emphasized the involvement of psychologists in the creation of the question bank and the close collaboration with human resources managers in the development of PMS (LaMonica et al., 2019). Their PMS allows clients to customize the system to meet their needs. In the interest of fairness and non-discrimination (Cropanzano & Wright, 2003), the PMS has a feature that detects unconscious bias in comments and flags words that indicate racial, gender, or age bias. However, the business developer also pointed to the challenges created by cultural differences in ratings, citing: "People in Canada rate people higher than their counterparts in New York". This underscores the tension between creating a universally applicable system and addressing cultural differences. To ensure transparency and mindful feedback, part of their strategy is to justify extreme ratings to reduce subjectivity (Lohman, 2021).

The HCM strategy director mentioned that all design and development of the software is done internally. When necessary, the company even brings in other companies to keep this process completely in-house. However, this approach raises ethical concerns about diversity in the development process (LaMonica et al., 2019). The director advocated for fact-based decisionmaking to avoid bias and suggested that a diverse committee reviews the software development rules to ensure a fair and ethical outcome. He acknowledged that bias could occur in human judgment (Moustafa, 2015), but suggested that certain biases might be justified, citing: "At the end of the day, I'm fine with the fact that I would hire a young person, instead of someone of 60, is it ethical? We could debate in today's world, no it is not ethical. But if you want to build a long relationship with an employee, you can better hire someone that is 30 then 60". This is also highlighted in research in which concluded that subjective factors play an important role in the recruiting process (Tom, 1971).

HR managers emphasized the importance of seeking data from firms such as Gartner or Mercer to understand what other companies are doing. HR Manager A suggested resolving conflicts through communication and mediation, while HR Manager B emphasized the importance of training and education in understanding different values. To reduce bias, HR Manager A suggested a 360-degree feedback approach, and HR Manager B recommended self-awareness training to help employees and managers recognize and reduce unconscious bias.

Finally, the employee pointed out the need for a PMS that takes into account different roles and responsibilities, mentioning direct labor (factory workers) and indirect labor (sales and marketing workers) as examples. In his opinion, a universal PMS may not be ethical because it does not address specific roles. He pointed out that design decisions are made in the U.S. because that is where the business headquarters are located. Additionally, he suggests resolving value-based conflicts and reducing bias through open communication. This has also been highlighted in research where employees are encouraged and supported through open dialogue with colleagues and supervisors (Hall et al., 2013)

5.3 Technical Investigations

It is not the role of software to eliminate bias, but to shed light on it and stimulate dialogue on this topic within any organization, according to CEO A. This underscores the ethical principles of transparency and open communication (Hall et al., 2013). In addition, the way data is interpreted may vary depending on individual perspectives, underscoring the importance of objectivity, which is crucial for employee motivation (Kisang & Kirai, 2016).

Developer A explained the challenges of integrating ethics into programming, attributing them to the complex definitions of ethics and the different parameters associated with them. This developer acknowledged the need to balance ethical standards and client needs, a process that can create tension when these elements do not align. Developer B, on the contrary, emphasized that the subjective nature of ethics excludes the development of a universal ethical framework. He noted the importance of complying with legal requirements and maintaining an open corporate culture.

The business developer expressed skepticism about whether it is possible to fully encode ethics into a program. She adds that the human element is always necessary due to the situational nature of ethics. In addition, the business developer believes that companies that operate under good ethical principles are more likely to succeed.

According to the HCM strategic director, programming a strictly fact-based system can indirectly create an ethical system. The challenge, however, is to ensure that bias does not enter the system, underscoring the tension between defining what is relevant to the algorithm, and the need for a fair algorithm and the human tendency toward bias (Moustafa, 2015).

Both HR managers expressed skepticism about programming ethics into a system. HR Manager A mentioned the challenge of defining ethics and applying them in a technological context, i.e., ensuring that the system takes into account respect for others as well as cultural and behavioral issues. HR Manager B suggests that programming ethics might have limited impact when people are operating the program. Further on, HR Manager B expresses that technology helps businesses, but that ethical standards are important when innovating technology, indicating a tension between using technology and ensuring ethical practices.

The employee mentions the importance of interpersonal interactions in understanding individual behaviors and responses. Pointing this out, research suggests that building trust at the interpersonal level can be used as a strategy to motivate employees (Singh & Srivastava, 2009). Face-to-face interpersonal communication is essential to understanding a person's emotions and effectively assessing employees (Hall et al., 2013). The employee adds that technology can not interfere with ethical considerations such as trust.

6. DISCUSSION

In this section of the paper, the findings from the results section are discussed. The key ethical considerations by the different stakeholders are explained and interpreted as well as the arising tensions and dilemmas.

6.1 Ethical Considerations while Designing PMS

The ethical considerations, which emerged from the findings during the interviews, highlight that minimization of bias is one addressed by almost all stakeholders. Emphasizing the need for objectivity and fairness in the system design of PMS (Kisang & Kirai, 2016; Cropanzano & Wright, 2003). So that individuals or groups are not being advantaged or disadvantaged based on characteristics such as gender, race, or age, stakeholders stressed the importance of objective, evidence-based decision making that is guided by relevant performance factors rather than personal preferences, and the use of technology to identify potential biases in order to minimize bias. Research has highlighted the risk of own-race bias, a situation where

employees experience better outcomes if they share the same race as their supervisor (Giuliano et al., 2009).

Transparency which means to provide clear, understandable information about how the performance management system works, including how data is collected and used, and how decisions are made is another ethical consideration which needs to be addressed by the PMS providers, ensuring that the clients completely understand what the software is doing and creating more trust in the system (Schafheitle et al., 2020: Bamber, 2015).

While transparency is important, respecting privacy rights of individuals is crucial as well. This can include providing anonymous feedback options to protect individuals' identities and prevent potential retaliation, ensuring that any data which is collected and stored is used in a way that respects privacy laws.

The PMS should be tailored to the unique needs and expectations of different roles, meaning that performance indicators for factory workers should be different from those for a salesperson. This approach ensures fairness by evaluating each individuals' performance based on what is expected in their specific role (Cropanzano & Wright, 2003). The mentioned ethical consideration goes hand in hand with customizability. This refers to the ability to modify the PMS to align with the values, ethical needs, and operational needs of different organizations or countries (Thornton et al., 2008). A customizable system can be adapted to account for cultural differences, legal requirements, or other factors that vary between different contexts.

Following legal and regulatory requirements is critical to avoiding legal penalties. This can include data privacy laws, employment laws and any other laws that apply to the collection, storage, and use of employee performance data.

Involving multiple perspectives of a diverse range of stakeholders in the design of PMS, including HR professionals, and psychologists is another ethical consideration (LaMonica et al., 2019). This ensures that the system is designed with a comprehensive understanding of user needs and organizational dynamics, which can improve the adoption and the effectiveness of the system.

While technology can streamline the performance assessment process, it does not fully capture human behavior and interpersonal interactions. Therefore, the human element, including face-to-face communication and empathy are addressed as an essential ethical consideration of PMS (Singh & Srivastava, 2009).

Dialogue is important in resolving conflicts and ethical considerations. Open communication can help to clarify expectations, address misunderstandings, and build mutual understanding, which is crucial for effective performance management (Hall et al., 2013).

Empowering employees can enhance the employee engagement and promote a culture of continuous learning and self-improvement. Furthermore, does this ethical consideration build on managers trusting employees and believing in their ability and integrity.

6.2 Tensions and Dilemmas Arising from Ethical Considerations

It was highlighted that there is a tension between standardization and customization. An objective framework implies a standardized PMS that applies to all customers, regardless of their role or personal beliefs. Customized performance criteria better fit the role of the individual or the values of the organization. This creates a tension between striving for universal fairness and accommodating individual and organizational differences.

In addition, while a universally applicable system allows for consistency and equality, it may not account for cultural differences such as different values or communication styles (Thornton, et al., 2009). A culturally sensitive system can account for these differences but could lead to inconsistencies in evaluation across cultures. Global organizations need to ensure that their PMS can be adapted to different cultural contexts while maintaining a consistent approach to performance management. This highlights the dilemma between fairness and equality versus respect for cultural diversity in PMS design.

Focusing on employee empowerment is a bottom-up approach, where the system encourages and supports employees to reach their potential. However, emphasizing company values is a top-down approach, where the system reflects and promotes the company culture. This creates a tension that leads to a dilemma when it comes to balancing the growth and autonomy of the individual employee (trust in employees) with meeting organizational norms and values (control of employees).

Transparency in PMS means that the criteria, procedures, and results of performance evaluation are openly communicated. This can strengthen trust in the system and promote a culture of open communication (Hall et al., 2013). However, too much transparency can risk employee privacy if sensitive feedback or performance data is made openly available. Anonymity allows employees to provide feedback without fear of retaliation, but it can also lead to unconstructive criticism. PMS developers must carefully balance the right amount of transparency and anonymity to ensure both open communication and respect for individual privacy.

Internal development ensures that the PMS is consistent with the provider's values, but diversity of input may be lacking. External consultations provide different perspectives that may be less consistent with the organization. An emphasis on the tension between developing a PMS that is consistent with the PMS provider's values and incorporating diverse viewpoints.

Reducing bias is generally seen as positive, but there are cases where what might be seen as bias could be seen as justifiable preference, such as preferring younger employees for roles that require a long-term commitment. This raises the ethical question of what constitutes a "justifiable" bias. A tension arises between reducing bias and justifying bias.

Integrating ethics into software is a logical approach to fairness, but due to the subjective and situational nature of ethics, this may be impossible. Emphasizing the human element in ethical decision-making. Performance evaluation is about understanding individual behaviors and emotions, which is best achieved through face-to-face conversations. However, PMSs are becoming increasingly technology-driven, which means less emphasis is put into the human element, which can lead to less nuanced assessments regardless of technological advancements.

Although companies are focused on profit, it is important to maintain ethical standards when using technology for business needs. The ethical standards such as fairness, objectivity and transparency should be incorporated into the design of PMS. The practical requirements such as efficiency, ease of use, and adaptability to different organizations and cultures must also be considered. The dilemma is to ensure that the PMS meets ethical standards without compromising its practical needs.

7. CONCLUSION

The first objective of this paper was to identify the key ethical considerations that PMS vendors must address during the design process. The study revealed several key ethical considerations that are essential to PMS design. These include minimizing bias, ensuring transparency, maintaining privacy rights, tailoring the system to the specific needs of the role, complying with laws and regulations, incorporating diverse perspectives, keeping the human element in assessments, promoting open communication, and empowering employees.

The second objective of this study was to explore the tensions and dilemmas that arise when considering ethical considerations during the PMS design process. The research highlighted tensions between standardization and customization in the design of PMSs, balancing universal applicability with customization to individual roles and organizational values. So did the dilemma of balancing fairness and equality with respect for cultural diversity in PMS design, especially in global organizations. Another dilemma arose between fostering a culture of empowerment and reinforcing company values. Transparency and anonymity present another point of tension: While transparency promotes trust and open communication, anonymity protects privacy and encourages honest feedback. Another tension is the challenge of incorporating diverse perspectives while maintaining consistency with the PMS provider's values. In addition, the study identified a paradox between reducing and justifying bias. The integration of ethics software presents a dilemma due to the subjectivity and situational nature of ethics and the increasing importance of technology in PMS. The final tension discovered was the challenge of meeting ethical standards without compromising the practical requirements of the PMS.

The findings of this study provide a guide for PMS designers by identifying the key ethical considerations that must be addressed during the PMS design process and highlighting the tensions and dilemmas that arise from these considerations. This research helps PMS providers navigate the complex ethical landscape during the design process to create an ethically sound and practically effective PMS utilized by organizations and employees.

8. RECOMMENDATIONS FOR FUTURE RESEARCH

Further research could address how the tensions and dilemmas affect real-world PMS design scenarios and how to work around them for the best results. Future research can shed light on the tension between reducing and justifying bias by identifying situations in which bias may be justified. These could include specific types of roles, industries, or countries. Transparency and anonymity can also be further explored to measure the impact of different levels of transparency and anonymity in the PMS on variables such as trust in the system, the quality of feedback, and the overall effectiveness of the PMS. Another area of research is the balance between empowerment and organizational values, where researchers can manage the dilemma of promoting individual growth and autonomy while maintaining alignment with organizational norms and values. In addition, researchers can compare PMS practices in different cultural contexts using Hofstede's cultural dimensions model as a framework. This approach allows for a comprehensive comparison and contrast of PMS in different cultures. Future research can address balancing ethical considerations with practical needs in PMS models. By

testing these models in different organizational contexts, their effectiveness can be evaluated. This contributes to a PMS design that meets both ethical demands and practical needs.

9. RECOMMENDATIONS FOR PRACTICE

The recommendations for future research are also relevant to PMS developers and designers. To begin with, there should be efforts to reduce bias in the development process, with regular audits serving as a helpful tool to identify and mitigate such biases. In addition, developers should strive for a balance between transparency and anonymity, creating an environment that supports trust and open communication while protecting individual privacy and encouraging honest feedback. Involving employees in the development process can help build employee empowerment while ensuring that the system aligns with the company's broader values. This approach also underscores the importance of including multiple perspectives in the design process, as it increases the range of potential issues that are considered. It is critical that developers strive to create a PMS that respects cultural diversity while maintaining equity and fairness. Finally, in striving to meet ethical standards, developers must not lose sight of the practical needs of the system and ensure that their PMS is as effective and user-friendly as it is ethical.

10. LIMITATIONS

This research is limited to the difficulty to generalize the findings, since the findings are only applicable to the companies from which the qualitative data is collected. The research focused on a multinational company, from which an employee and HR managers were interviewed, two PMS CEOs, two PMS product developers, a PMS business developer, and a PMS HCM strategic director, from which the insights were provided. Other industries, sectors, and organizations are not included, which makes it limited to the mentioned. Moreover, there is a social desirability bias, which means that the respondents of the interviews provide answers that they perceive to be socially desirable rather than their true beliefs or experiences (Grimm, 2010). By anonymizing the respondents, this risk can be minimized, emphasizing the importance of honest responses (Ried et al., 2022).

11. REFERENCES

Aguinis, H. (2009). Performance management

Bamber, M. (2015). The impact on stakeholder confidence of increased transparency in the examination assessment process. Assessment & Evaluation in Higher Education.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77-101.

Buckley, M., Beu, D., Frink, D., Howard, J., Berkson, H., Mobbs, T., & Ferris, G. (2001). Ethical issues in human resources systems

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. Theory into Practice, 39(3), 124-130.

Cropanzano, R., & Wright, T. (2003). Procedural justice and organizational staffing: a tale of two paradigms. *Human Resource Management Review*.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling

Friedman, B., Kahn Jr, P. H., & Borning, A. (2013). Value sensitive design and information systems

Fieseler, C., Bucher, E., & Hoffmann, C. P. (2019). Unfairness by design? The perceived fairness of digital labor on crowdworking platforms

Giuliano, L., Levine, D., & Leonard, J. (2009). Racial Bias in the Manager-Employee Relationship: An Analysis of Quits, Dismissals, and Promotions at a Large Retail Firm. *Journal of Human Resources*.

Grimm, P. (2010). Social desirability bias. Wiley international encyclopedia of marketing.

Hall, D., Shucksmith, J., & Russell, S. (2013). Building a compassionate community: developing an informed and caring workplace in response to employee bereavement. *Bereavement Care*.

Hancock, B., Hioe, E., Schaninger, B., & Chowdhury, S. (2018). The fairness factor in performance management. *McKinsey Quarterly*.

Hunt, D. V. (2022). Emphasizing the *S* in ESG. https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/emphasizing-the-s-in-esg

Kerssens-van Drongelen, I. C., & Fisscher, O. A. (2003). Ethical dilemmas in performance measurement

Kisang, F., & Kirai, M. (2016). EFFECTS OF PERFORMANCE APPRAISAL ON EMPLOYEE MOTIVATION IN COMMERCIAL BANKS: A CASE OF EQUITY BANK, KENYA. Strategic Journal of Business & Change Management.

LaMonica, H., Davenport, T., Burns, J., Cross, S., Hodson, S., Veitch, J., & Hickie, I. (2019). Technology-Enabled Mental Health Service Reform for Open Arms – Veterans and Families Counselling: Participatory Design Study. *JMIR Formative Research*.

Leicht-Deobald, U., Busch, T., Schank, C., Weibel, A., Schafheitle, S., Wildhaber, I., & Kasper, G. (2022). The challenges of algorithm-based HR decision-making for personal integrity

Lohman, L. (2021). Evaluation of university teaching as sound performance appraisal. *Studies in Educational Evaluation*.

Moustafa, K. (2015). Is there bias in editorial choice? Yes. *Scientometrics*.

Mittelstadt, B. D., Allo, P., Taddeo, M., Wachter, S., & Floridi, L. (2016). The ethics of algorithms: Mapping the debate

Paine, L. S. (1994). Managing for organizational integrity

Peters, K., & Halcomb, E. (2015). Interviews in qualitative research.. *Nurse researcher*.

Ravid, D. M., Tomczak, D. L., White, J. C., & Behrend, T. S. (2020). EPM 20/20: A review, framework, and research agenda for electronic performance monitoring

Ried, L., Eckerd, S., & Kaufmann, L. (2022). Social desirability bias in PSM surveys and behavioral experiments: Considerations for design development and data collection

Schafheitle, S., Weibel, A., Ebert, I., Kasper, G., Schank, C., & Leicht-Deobald, U. (2020). No stone left unturned? Toward a framework for the impact of datafication technologies on organizational control

Singh, U., & Srivastava, K. (2009). Interpersonal trust and organizational citizenship behavior. *Psychological Studies*.

Thornton, P. H., & Ocasio, W. (2008). Institutional logics. *The Sage handbook of organizational institutionalism*, 840(2008), 99-128.

Tom, V. (1971). The role of personality and organizational images in the recruiting process. *Organizational Behavior and Human Performance*.

Van de Poel, I. (2015). Conflicting values in design for values. *Handbook of ethics, values, and technological design: Sources, theory, values and application domains*, 89-116.

Williams, C. (2007). Research methods

Woolston, C. (2020). White men still dominate in UK academic science. *Nature*.

12. APPENDIX

Interview Questions:

Conceptual Investigations:

- For you as an HR professional, what's your take on ethics?
- Why are these values important?
- Are they also crucial for the performance management process?
 - Is it difficult to achieve it?
 - Why is it difficult?
 - Can you give an example?
- What do other people think?

Empirical Investigations:

- What are the relevant partners in the design?
- People might have different values; how do you resolve such clashes?
 - Can you give an example?
- If you could get rid of the existing biases in performance management systems, how would you
 do it?

Technical Investigations:

- From your view, is it possible to program ethics into information systems?
 - Can you give an example?
- What are the limits?
- Do you prefer ethics over technology or technology over ethics?

Dear (PMS PROVIDERS NAME) Team,

I hope this message finds you well.

My name is Babak Fathi, from the University of Twente, in the Netherlands. I am conducting a study on the key ethical considerations that are essential during the design process of performance management systems, and I am keen to understand the potential challenges that may arise.

Your company, (PMS PROVIDERS NAME), is renowned for its innovative HR solutions, and I strongly believe your unique insights would bring immense value to my research. Therefore, I am writing to request a 45-minute interview with a representative who is well-versed in the design process of your performance management system and the ethical dimensions thereof.

Your contribution to this research will offer a deeper understanding of ethical considerations in performance management system design, potentially leading to improvements in the field. In return, I will be delighted to share the aggregated findings of the study, offering a chance to benchmark and enhance your practices.

The insights from (PMS PROVIDERS NAME) will significantly influence the outcome of this research, contributing to a broader comprehension of ethical issues in HR.

I'm excited about the opportunity to discuss this further.

Best regards,

Babak Fathi University of Twente B.Fathi@Student.Utwente.nl