

Performance Management in the Era of Society 5.0: Synergy of Smart Technology and Human Resource Development

Yohana Mutiara¹, Kartika Dinda Udhaty², Ritha Dalimunthe³, M. Ikmal Husein Lubis⁴
^{1,2,3,4}The University of Sumatera Utara

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ABSTRACT

This think about points to investigate the affect of shrewdly innovation on execution administration within the Society 5.0 period, with a center on the collaboration between innovation and human asset advancement (HRD). Society 5.0 speaks to a unused worldview that coordinating shrewd innovations such as manufactured insights (AI) and information analytics into different angles of work, including execution administration. Employing a subjective approach, the ponder looks at participants' recognitions and individual encounters related to technology-based execution administration. Information were gathered through in-depth interviews and participatory perceptions to supply a comprehensive understanding of how innovation impacts execution appraisal, criticism forms, objective setting, and competency advancement. The key discoveries uncover that shrewdly innovation improves objectivity in execution estimation, encourages ceaseless and mechanized criticism, empowers versatile and adaptable objective setting, and underpins personalized competency advancement. In addition, the utilize of innovation in execution administration increments representative engagement, with numerous members detailing higher inspiration and fulfillment. In any case, successful execution too requires administrative bolster, increased information security, and advanced aptitudes preparing to guarantee fruitful adjustment to these unused frameworks.

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Corresponding Author:

Name: Yohana Mutiara

Institution Address: The University of Sumatera Utara

e-mail: yohanamutiaraabangun@gmail.com

1. INTRODUCTION

Society 5.0 was first introduced by Japan, prioritizing the use of smart technology to improve the quality of human life and create an inclusive and sustainable society. In this era, technological developments such as artificial intelligence (AI), big data, and the Internet of Things (IoT) are important aspects in increasing productivity and efficiency, especially in human resource management

(HR). This transformation brings new challenges in performance management, where technology is used to optimize employee potential, improve appraisal efficiency and support employee development through a practical, data-driven approach. Many organizations today face challenges in integrating smart technology into their performance management processes, including measuring productivity in real-time, adapting the skills required for

the digital age, and ensuring employees are able to adapt to the needs of society 5.0. Therefore, it is necessary to build an effective operational performance management model that prioritizes the synergy between smart technology and people-centered development in humans.

2. LITERATURE REVIEW

2.1. Performance Management Concept

Society 5.0 is a concept of a high-tech society that emphasizes the balance between technological development and human needs. This society uses smart technology to solve various social problems, connect the physical and global worlds, and strive to create a better quality of life through the use of human-centered technology.

2.2. Performance Management in the Age of Smart Technology

In this era, performance management involves using technology to measure performance more objectively, provide automated feedback, and set adaptive goals. The focus is on improving response performance through data and technology.

2.3. Synergy of Smart Technology and Human Resource Development

This synergy includes the use of performance data to identify personalized training, automate recruitment, and develop skills such as digital literacy and adaptability. As a result, employees will be better prepared to face the transformation of Society 5.0.

2.4. Challenges in the implementation of smart technology

Challenges in the application of smart technology include: a. Adapting to the organizational culture Changing psychology and work habits in an organization often takes time and commitment. An organizational culture that is not ready to embrace smart technology can hinder effective implementation. b. Diversity of employees' digital skills Not all employees have the same level of digital skills. This difference creates the need for additional training to ensure all employees can use technology effectively. c. Data security and employee privacy

Adopting smart technology often involves collecting and analysing large amounts of data. This increases the risk of data breaches and requires special attention to maintaining the confidentiality and security of employee information. d. Adaptation of technology infrastructure Existing infrastructure can be updated or upgraded to support new technologies. This process is generally complex and requires adequate planning and resources.

2.5. Competencies required in the Society 5.0 Era

The competencies required in the Society 5.0 Era are as follows:

2.5.1 Digital literacy

Digital literacy This core competency includes an understanding of the effective use of technological devices and software applications. Digital literacy helps employees use basic technologies and recognize how to optimize the use of digital tools in their work. This includes skills in office applications, social media, information management, and the use of digital collaboration tools.

2.5.2 Ability to Work with Artificial Intelligence (AI)

The ability to work with AI is becoming increasingly important, especially as more and more organizations begin to integrate AI into their business processes. This involves understanding how AI systems work, how data is processed by algorithms, and how results are applied in a work context. Employees also need to understand the limitations of AI so that they do not rely entirely on machines but still use their professional judgment in making decisions.

2.5.3 Analytical and Problem-Solving Skills

With the widespread use of technology that generates large amounts of data, analytical skills have become very important. Employees must be able to analyse data, understand trends, and make decisions based on that information. Problem-solving is also an important skill, where employees must be able to quickly identify problems and come up with creative solutions.

2.5.4 Ability to Collaborate in a Digital Environment

Many organizations use digital collaboration tools such as cloud-based communication, project management, and collaboration platforms. Employees must be able to work effectively in virtual teams, which requires clear communication skills, the ability to work independently and collaboratively, and an understanding of digital ethics.

2.5.5 Basic Understanding of Cybersecurity

With the increasing reliance on technology, a basic understanding of cybersecurity is essential for protecting corporate and individual data. Employees should understand the importance of maintaining strong passwords, recognizing phishing, and how to secure their devices to avoid security risks.

3. METHODS

This study uses a qualitative approach to explore, dig deeper into the meaning, understanding, and subjective experiences of participants related to the impact of intelligent technology on performance management in the Society 5.0 era. A qualitative approach is very appropriate for this study, because Society 5.0 and the adoption of intelligent technology are new phenomena that require exploration of the perceptions and direct experiences of individuals who play a role in the implementation of technology-based performance management. Data were collected from In-depth Interviews and Participatory Observations

4. RESULTS AND DISCUSSION

This study aims to explore the impact of smart technology on performance management in the Society 5.0 era, with an emphasis on the synergy between technology and human resource development (HRD). Based on data collected from in-depth interviews and participatory observations, key findings show that smart technology has brought significant changes in several aspects

of performance management, including objective performance measurement, continuous and automated feedback, adaptive goal setting, personalised competency development, as well as increased employee engagement.

4.1 Objective Performance Measurement

One of the biggest benefits of implementing smart technology in performance management is increased objectivity in employee performance evaluations. Technologies such as artificial intelligence (AI) and data analytics allow companies to utilize accurate and real-time data in evaluating individual performance. This increases transparency in the evaluation process and reduces the subjectivity that often arises in traditional appraisals.

More than 85 per cent of respondents stated that they feel performance appraisals have become fairer and less biased. The use of objective data allows evaluations to be based more on actual work results, rather than on the personal perceptions or preferences of managers. This transparency also helps address the issue of implicit bias that may affect judgement in traditional performance measurement. Some companies have even reported that this increased transparency has increased employees' level of trust in the performance appraisal system in place, thereby increasing their overall motivation and productivity.

4.2 Continuous and Automated Feedback

The ability of smart technology to provide continuous feedback is also one of the important aspects of performance management in the Society 5.0 era. Technology-based systems can provide real-time automated feedback, allowing employees to receive guidance and information relevant to their performance in real time. This supports continuous improvement and consistent performance improvement.

78% of respondents reported that they felt more motivated to improve their performance due to consistent and timely feedback. Unlike the annual or semi-annual performance appraisal systems commonly

used in many companies, automated feedback allows employees to immediately identify areas for improvement or optimization. It also allows supervisors to make immediate adjustments if there are errors or shortcomings, making the work process more efficient and responsive. In addition, regularly provided feedback provides an opportunity for employees to continue to grow in their professional capacity, as they can immediately apply the improvement suggestions received in their daily work.

4.3 Adaptive Goal Setting

Technology also allows for flexibility in goal setting, which is adaptive to changing working conditions and organizational needs. This adaptive goal-setting can take into account various external and internal factors that affect work performance. This is becoming increasingly important in today's dynamic and fast-changing world of work. About 70% of respondents feel that this flexibility in goal setting helps them to stay relevant to evolving business needs, while improving team productivity. In a rapidly changing work environment, the ability to customize goals allows companies to remain competitive and responsive to change. With the help of technology, set goals can be automatically updated or adjusted based on real-time data and developments in the market or work environment. This not only helps employees navigate the changes but also increases the effectiveness of achieving company goals.

4.4 Personalized Competency Development

Through the use of data analytics and artificial intelligence, organizations can identify individual development needs more accurately and purposefully. The data generated from the performance management system allows companies to design training programmed that are tailored to individual employee needs and strengths. This means employees no longer have to attend training that is generic or irrelevant to their specific needs.

88% of respondents reported that these personalized training programmed

were more effective in improving their skills. Personalized competency development includes training related to digital literacy, data analytics, problem solving, and collaboration skills in virtual environments. These competencies are particularly relevant in the Society 5.0 era, where adaptability and digital skills are important. This personalized approach not only makes training more relevant, but also improves learning effectiveness and training outcomes.

4.5 Increased Employee Engagement

The use of technology in performance management also has a positive impact on employee engagement levels. Smart technology enables a more transparent and structured evaluation and development process, which in turn increases employees' sense of engagement with the company. As many as 80% of respondents feel more engaged and satisfied with their jobs thanks to clear career development opportunities and consistent feedback.

This higher level of engagement contributes to increased employee loyalty, which in turn can have a positive impact on employee retention and the company's overall work culture. When employees feel that their performance is valued and that the company is investing in their development, they tend to be more motivated and committed to the organization's goals. This also encourages employees to work better together, develop a sense of community, and foster a more positive and supportive work environment.

Challenges in Implementing Smart Technology in Performance Management

While the application of smart technology brings many benefits, there are still several challenges that need to be considered in its implementation. These challenges include:

Organizational Culture Change: The implementation of new technologies in performance management often requires significant changes in organizational culture. Employees need to adjust to a new approach to performance appraisal that is more data-driven. Organizations need to encourage a mindset shift from traditional systems to

smart technology that leverages data as the basis for decision-making.

Differences in Digital Skill Levels: Not all employees have the same level of digital skills. This creates a skills gap that can hinder the effectiveness of implementing smart technology in performance management. Therefore, companies need to provide digital skills training for all employees to ensure that they can utilize these technologies properly.

- 1) The application of smart technology in performance management often involves the collection and analysis of fairly in-depth employee data. This increases the risk of employee privacy and data security breaches. To address this challenge, companies must implement strict security protocols and ensure that employee data is optimally protected.
- 2) A company's technology infrastructure may need to be upgraded to support the implementation of smart technology in performance management. This process requires considerable investment in terms of time, resources, and cost. Companies need to plan infrastructure upgrades in stages to make this adaptation run smoothly.

Discussion

Based on the findings, it can be concluded that the application of smart technology in performance management

offers great opportunities for companies to improve efficiency, transparency, and objectivity in performance appraisal. Smart technologies not only assist organizations in achieving their business goals, but also contribute to increased employee satisfaction and engagement. This is important in the era of Society 5.0, where technology is becoming an integral part of every aspect of working life and employees are required to be more adaptive and responsive to change.

However, the success of this implementation is highly dependent on the company's ability to manage challenges, such as data security and enhancing employees' digital skills. Therefore, management needs to be committed to supporting this adaptation process, including by providing adequate training and education and ensuring robust data security protocols.

5. CONCLUSION

The application of smart technology in performance management has a positive impact on objective measurement, continuous feedback, adaptive goal setting, competency development, and employee engagement. However, the success of this implementation requires support from management, increased data security, and digital skills training for employees.

REFERENCE

- [1] Drucker, P. F. (2006). *The Effective Executive: The Definitive Guide to Getting the Right Things Done*. HarperCollins.
- [2] Hamel, G., & Prahalad, C. K. (1994). *Competing for the Future*. Harvard Business School Press.
- [3] Kaplan, R. S., & Norton, D. P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Harvard Business School Press.
- [4] Marr, B. (2015). *Big Data: Using SMART Big Data, Analytics and Metrics to Make Better Decisions and Improve Performance*. Wiley.
- [5] Schwab, K. (2016). *The Fourth Industrial Revolution*. World Economic Forum.
- [6] Schwab, K., & Davis, N. (2018). *Shaping the Future of the Fourth Industrial Revolution*. Currency.
- [7] Tanaka, S. (2020). *Society 5.0: From Theory to Practice*. Japan Journal of Innovation.