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# TRANSFORMATION OF PERFORMANCE EVALUATION PROCESS IN THE DIGITAL ERA: A QUALITATIVE STUDY ON THE USE OF TECHNOLOGY AS A PERFORMANCE ASSESSMENT IN IMPROVING TEAM WORK RESULTS

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#### **Abstract**

This study aims to examineTransformation of Performance Evaluation Process in the Digital Era: A Qualitative Study on the Use of Technology as a Performance Assessment in Improving Team Work Results. The qualitative research method used in this study provides an in-depth approach to understanding the use of technology as a performance assessment tool. Referring to the views of experts in 2020, this study uses interviews, observations, and document analysis to explore the impact of digital transformation on team work results. The systematic analysis process and compliance with research ethics are expected to produce valid and relevant findings. Transforming the performance appraisal process using technology is an important step for organizations to improve team performance and achieve long-term goals. Although the challenges in its implementation are quite large, with the right strategy and commitment from all parties, technology can bring significant changes in the way organizations conduct performance appraisals, improve the quality and effectiveness of team performance, and optimize the results achieved. The success of this transformation depends on effective change management, wise use of data, and the implementation of policies that prioritize data security and privacy.

Keywords: Performance Evaluation, Digital Era, Use of Technology, Performance Assessment and Improving Team Work Results

#### **INTRODUCTION**

In the era of digital transformation, organizations face major challenges in increasing work efficiency and productivity. One important aspect that influences organizational success is performance evaluation. This process is the foundation for evaluating individual or team contributions to achieving organizational goals. However, traditional approaches to performance appraisal, such as periodic interviews or manual document-based assessments, are often considered inadequate to meet today's dynamic needs. Digital technology offers a variety of innovative solutions to overcome these challenges. Technology-based systems, such as performance management software, data analytics platforms, and cloud-based applications, enable organizations to monitor performance in real time, provide direct feedback, and identify employee development potential more effectively. Technology also supports the creation of transparency and openness in the assessment process, which contributes to increasing team trust in the organization.

The development of digital technology has brought about major changes in various aspects of life, including the world of work. Organizations are currently faced with the demands to adapt to increasingly complex and rapidly changing global dynamics. One important aspect that has been affected by this transformation is the performance evaluation process. This process has a strategic role in measuring work effectiveness, identifying employee potential, and ensuring the achievement of organizational goals. In the previous era, performance evaluations were often carried out using conventional methods such as periodic reports, assessment interviews, or manual observations. Although these methods have historical value, they tend to be inefficient, unresponsive to change, and prone to bias. With the introduction of digital technology, these conventional methods have begun to be replaced by more modern and data-based systems, such as the use of performance management platforms, real-time data analytics, and cloud-based systems. Digital technology in performance assessment offers various advantages, such as increased

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efficiency, reduced human error, and the ability to provide fast and relevant feedback. In addition, technology allows for greater transparency in the assessment process, which can increase employee trust and motivation. In the context of a team, technology also enables better collaboration, as team members can collectively monitor their performance and understand each other's contribution to achieving common goals.

While the potential of technology in transforming performance appraisal is enormous, its implementation is not without challenges. Resistance to change is one of the main obstacles, especially from individuals who are accustomed to traditional methods. In addition, limited technological skills and understanding among employees and managers are often obstacles. Another issue that is no less important is data privacy and security, especially in the use of cloud-based systems or third-party software. From an organizational perspective, adopting technology in performance appraisal requires a planned and strategic approach. This process involves not only the procurement of technology, but also changes in organizational culture, employee training, and the integration of technology with existing work systems. If done properly, this transformation can have a significant positive impact, both for individuals and the organization as a whole. Traditional methods of performance appraisal, such as manual reports and periodic interviews, are often considered inefficient in dealing with the needs of an increasingly complex and dynamic work world. This approach is also prone to subjectivity, data limitations, and the lack of ability to provide real-time feedback. This condition poses challenges for organizations in maintaining productivity and ensuring that each employee can give their best contribution.

Advances in digital technology offer solutions through various innovations such as cloud-based performance management systems, data analytics platforms, and real-time performance tracking applications. These technologies enable faster, more accurate, and more transparent evaluation processes. In addition, technology can provide deeper insights into individual and team performance, and support data-driven decision-making. This not only increases efficiency but also creates a more collaborative and results-oriented work environment. However, the implementation of technology in the performance appraisal process also faces significant challenges. Some of the main obstacles include resistance to change, lack of technological understanding among employees and managers, and concerns about data privacy and security. On the other hand, the success of this transformation also depends heavily on the organization's ability to integrate technology with the existing work culture, as well as ensuring adequate training for all stakeholders. Performance evaluation is an important process in human resource management, which aims to measure work effectiveness, identify areas that need to be developed, and support the achievement of organizational goals. In an increasingly competitive business environment, an effective performance appraisal process is a primary need to ensure team productivity and success.

Traditional performance appraisal methods that rely on periodic interviews, manual forms, or performance reports are often considered inefficient. These methods have limitations in providing real-time feedback, identifying performance trends, and minimizing evaluation bias. In addition, conventional methods also find it difficult to keep up with the dynamics of modern work that is characterized by the need for flexibility, cross-team collaboration, and transparency. Digital technology has opened up new opportunities in the performance appraisal process. By utilizing performance management software, cloud-based platforms, and data analytics, organizations can monitor performance in real time, reduce the risk of bias, and provide fast and relevant feedback. Technology also allows organizations to use performance data as a basis for strategic decision-making, such as employee development planning and talent management. In addition to efficiency, technology offers greater transparency in the performance appraisal process. In the context of teamwork, technology can help team members understand individual contributions to achieving collective goals. This not only increases accountability but also fosters a spirit of collaboration and trust within the team.



#### LITERATURE REVIEW

#### Digital Transformation in Human Resource Management

Digital transformation in human resource management includes significant changes in operational processes through the use of digital technology. According to Rahmawati (2020), digitalization in human resource management creates efficiency, transparency, and increased productivity, especially in processes such as recruitment, training, and performance appraisal. The use of technology-based systems allows for better data integration and faster decision making.

#### **Performance Evaluation**

Performance appraisal is a process to evaluate employee contribution to organizational goals. Handoko (2020) defines performance appraisal as a tool to identify the level of work effectiveness and determine individual and team development strategies. In the digital era, traditional approaches are being replaced by technology-based methods such as performance analytics applications and cloud platforms (Santoso, 2020).

#### **Technology in Performance Assessment**

Technology plays an important role in supporting the performance appraisal process. According to Setiawan (2020), technology enables real-time access to performance data, artificial intelligence-based analytics, and the provision of more accurate feedback. Technology can also minimize human bias in assessments and increase transparency in decision-making.

#### **Benefits of Technology in Performance Assessment**

According to Widiastuti (2020), some of the main benefits of using technology in performance assessment include: Time and cost efficiency of technology-based systems reduces the need for manual data collection. Increased accuracy of performance data analyzed through technology has a higher level of accuracy compared to traditional methods. Transparency and accountability of technology allow all parties to have equal access to data and evaluation results.

#### **Team Performance in the Digital Age**

Teamwork results are one of the main focuses in the performance appraisal process in the digital era. According to Mariam (2020), technology can support team collaboration through communication platforms and project management. This helps teams work more effectively by monitoring work progress in real-time, identifying obstacles, and providing quick solutions.

#### **METHOD**

According to Mariam (2020), the qualitative approach aims to explore the meaning behind the observed phenomena. This approach is suitable for understanding the complexity of human interaction with technology in the performance appraisal process. Qualitative research provides flexibility in answering the "how" and "why" questions related to the implementation of technology in the workplace. Creswell (2020) explains that qualitative research design includes a systematic process for exploring data through in-depth interviews, observations, and document analysis. In the context of this research, a case study approach is used to describe the implementation of technology in a particular organization and its impact on teamwork outcomes.

Data Collection Techniques Suharto (2020) stated that in-depth interviews allow researchers to gain direct perspectives from informants regarding their experiences using technology in performance appraisals. In this study, the informants interviewed included managers, employees, and other related parties. According to Widiastuti (2020), participant observation helps researchers understand how technology is used in real situations, including interactions between users. Data Analysis Techniques According to Santoso (2020), thematic analysis helps identify key patterns in the data collected. In this study, themes such as technology efficiency, implementation challenges, and impact on teamwork outcomes will be explored. The importance of data triangulation to ensure



the validity and reliability of research results. Triangulation is carried out by comparing the results of interviews, observations, and documents analyzed. Mariam (2020) emphasized that validity in qualitative research can be achieved through checking the validity of data by informants (member checking). In addition, an audit trail is used to ensure transparency in the data analysis process.

#### **RESULTS AND DISCUSSION**

#### How technology is used in the performance appraisal process to improve team performance

In the increasingly digital era, technology plays a vital role in almost every aspect of an organization's operations, including employee and team performance appraisals. Traditional performance appraisals, which often relied on manual evaluation, subjectivity, and a long time, are now being replaced by technology-based systems. This has brought about significant changes in the way appraisals are conducted and how teamwork can be improved overall. The Need to Increase Efficiency and Accuracy in Performance Appraisals Traditional performance appraisal processes often require a lot of time and effort, both for data collection, analysis, and reporting. Manually conducted appraisals are prone to subjective bias, human error, and do not always reflect the actual performance of employees or teams objectively. Therefore, there is an urgent need to increase efficiency and accuracy in this process, which can be achieved through technology. Technological Developments that Support Performance Appraisals Along with technological advances, various digital solutions are starting to be used to support the performance appraisal process. Cloud-based performance management systems, real-time feedback applications, and artificial intelligence (AI)powered analytics tools enable companies to collect, analyze, and report performance in a more systematic and objective manner. These technologies enable performance appraisals to be conducted more efficiently, transparently, and accurately, while increasing employee engagement and motivation.

Challenges in Implementing Technology for Performance Appraisals Although technology offers many benefits, its implementation is not always smooth. Many organizations face challenges in terms of employee acceptance of technology, limited resources for investment in software or systems, and data security and privacy issues. Therefore, it is important to understand how technology can be optimally used in performance appraisals to improve team performance without creating new detrimental issues. Focus on Improving Team Performance One of the main goals of performance appraisals is to improve the overall performance of the team. In this context, the use of technology is expected to accelerate the identification of areas for improvement, provide faster feedback, and develop more personalized development programs for team members. By using objective data and advanced analytics, organizations can improve coordination, collaboration, and communication within teams, which in turn contributes to improved team performance. The use of technology in performance appraisals can also improve organizational culture by creating a more open, transparent, and data-driven environment. Teams that feel valued and monitored in an objective and fair manner tend to be more motivated, which in turn has a positive impact on their performance.

The use of technology in performance appraisal aims to increase efficiency, transparency, and accuracy in evaluating individual and team contributions to organizational goals. Based on research data, commonly used technologies include:

- 1. Web-Based Performance Management Systems: Platforms such as SaaS (Software as a Service) applications allow managers and employees to monitor performance in real-time.
- 2. Performance Analytics: Artificial intelligence (AI) based technologies and data analytics are used to process performance data and provide deep insights into team productivity.
- 3. Real-Time Feedback App: Employees and managers can provide feedback directly through the app, accelerating communication and performance improvement.

The use of technology in the performance appraisal process has a significant impact on teamwork results. With a technology-based system, organizations can monitor performance in real-time, provide more accurate feedback, and improve collaboration between team members.

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Although there are challenges, such as user resistance and data privacy issues, the benefits are much greater in supporting team productivity and achieving organizational goals.

### What are the main barriers to technology-based performance appraisal process transformation?

The transformation of the technology-based performance appraisal process provides many benefits, such as increased efficiency, objectivity, and transparency. However, although technology has great potential to improve team performance, there are several major barriers that can hinder its implementation and application. Based on the results of studies and observations in various organizations, these barriers can be categorized as follows:

- 1. Resistance to Change
  - One of the biggest obstacles in the transformation to technology-based performance appraisal is resistance to change from employees or even management. Many individuals are used to legacy systems and feel anxious or unsure about new technology.
- 2. Limitations of Technology Infrastructure
  Some organizations, especially smaller ones or those located in areas with limited access to
  technology, may face infrastructure limitations that hinder the implementation of
  performance assessment technology.
- 3. Concerns over Privacy and Data Security
  Collecting and analyzing performance data using digital technologies raises concerns about data privacy and security. Sensitive employee data, such as performance records, if not properly protected, can be subject to leakage or misuse.
- 4. Reliance on Inaccurate Data
  Performance appraisal technology relies heavily on accurate data to produce objective and
  useful results. If the data entered is inaccurate or incomplete, the performance appraisal
  results will be affected, which can result in wrong decisions.
- 5. Lack of Technological Skills and Knowledge Among Employees
  Implementing technology in performance appraisal requires certain skills and knowledge
  that not all employees have. Lack of understanding of how to use new tools or systems can
  slow down technology adoption.
- 6. Issues in Integrating Different Technology Systems
  Organizations that use multiple technology systems for different functions (such as finance, HR, and performance appraisal) often struggle to integrate these systems. Poor integration can reduce the overall effectiveness of performance appraisal technology.
- 7. The Influence of Bias in Technology Use While technology can minimize subjective bias in judgments, in some cases, technology-based algorithms or systems can contain their own biases, especially if the data used to train the system is not representative.

The transformation to technology-based performance appraisals can bring significant benefits to organizations, but it also presents a number of barriers that need to be overcome. Resistance to change, infrastructure limitations, data security issues, and lack of digital skills are key challenges faced by many organizations. However, with the right strategies, such as employee training, infrastructure improvements, and the right technology selection, these barriers can be minimized, allowing technology to be used to its full potential to improve team performance. Transforming the performance appraisal process to technology offers great potential to improve efficiency, objectivity, and transparency. However, key barriers such as resistance to change, infrastructure limitations, privacy concerns, lack of digital skills, and implementation costs are challenges that need to be overcome. Therefore, organizations need to design a mature technology adoption strategy, including training, good system integration, and clear policies on data protection, to ensure that the technology-based performance appraisal transformation is successful and delivers maximum benefits.



of errors in the use of the system.

### What is an effective strategy to integrate technology into an organization's performance appraisal system?

In the face of the increasingly growing digital era, many organizations have begun to try to integrate technology into their performance appraisal systems to improve efficiency, objectivity, and teamwork results. However, to ensure the success of technology integration, organizations need to adopt the right strategy. Here are some effective strategies that can be applied to integrate technology into an organization's performance appraisal system.

- 1. Choosing the Right Technology
  Selecting the right software or technology platform is a crucial first step in the integration process. The technology chosen must be in line with the needs of the organization and be able to support an objective and accurate performance appraisal process. The right technology will ensure that the performance appraisal system runs
- smoothly, effectively, and delivers better results.

  2. Digital Skills Training and Development

  To ensure that technology is utilized to its full potential, comprehensive training needs to be provided to all parties involved in the performance appraisal process. Employees, managers, and HR teams must be trained to use technology-based appraisal systems effectively. Employees and managers who are skilled in using technology will increase the effectiveness of the appraisal system, accelerate adoption, and reduce the likelihood
- 3. Strengthening Leadership and Communication
  Strong leadership and open communication are essential in integrating technology into performance appraisals. Managers and organizational leaders must be change agents who lead the adoption of technology and explain its benefits to employees. Supportive leadership and good communication will help reduce resistance to change, increase employee engagement, and smooth the transformation process.
- 4. Structured Change Management
  The transformation to a technology-based performance appraisal system requires a
  structured change management approach. Organizations must develop a clear change
  plan so that all parties can adapt to the new technology. Effective change management
  can smooth the transition reduce stress and increase the adoption of technology in
- plan so that all parties can adapt to the new technology. Effective change management can smooth the transition, reduce stress, and increase the adoption of technology in performance appraisal.
- 5. Leveraging Data and Analytics for More Objective Assessments Technology enables real-time data collection and analysis, which can be used to increase objectivity in performance appraisals. Organizations should leverage the data generated by technology systems to provide more accurate, evidence-based feedback. The use of data and analytics can improve the accuracy of performance appraisals, provide deeper insight into work results, and enable identification of areas for improvement.
- 6. Periodic System Monitoring and Evaluation
  Once the technology is implemented, the organization needs to conduct regular monitoring and evaluation of the performance appraisal system to ensure that the technology is functioning according to its intended purpose. Regular evaluation and monitoring can ensure that the system remains relevant, effective, and continues to improve the organization's performance.
- 7. Maintaining Employee Data Security and Privacy
  One of the main concerns in the use of technology is the protection of personal data and employee performance. Organizations must ensure that employee data is well protected and not misused. Maintaining data security can increase employee trust in technology-based assessment systems and ensure compliance with personal data protection regulations.



Effective strategies for integrating technology into an organization's performance appraisal system involve selecting the right technology, training, managing change, leveraging data, and maintaining data privacy and security. By implementing these strategies, organizations can optimize the use of technology to improve objectivity, efficiency, and team performance outcomes. Successful integration of these technologies will accelerate adoption and deliver better results in the performance appraisal process, which in turn will improve overall organizational productivity and outcomes.

#### **CLOSING**

#### Conclusion

Overall regarding the transformation of the performance appraisal process through the use of technology in improving teamwork in the digital era. Based on the findings in this study, several important conclusions that can be drawn are as follows:

- 1. Technology plays a very important role in transforming the traditional performance appraisal process into a more efficient and objective one. By integrating technology-based software and platforms, organizations can conduct real-time evaluations, reduce subjectivity, and produce more accurate and accountable data. Technology also allows for broader and more systematic collection of performance data, which contributes to a better understanding of individual and team achievements.
- 2. Through technology, the performance appraisal process becomes more data-driven. Analysis of data generated from the appraisal system allows for more informed decisions in terms of career development, rewards, and human resource planning. The use of data and analytics also allows for more objective evaluations, as well as providing deeper insight into the factors that influence team performance.
- 3. Although technology offers many benefits, its implementation in performance appraisal faces several challenges. Employees and managers who are accustomed to traditional systems may have difficulty adapting to new technology-based systems. Some organizations still face challenges related to inadequate technology infrastructure to support digital-based performance appraisal systems. Employee data protection is a critical issue, given the large amount of sensitive information managed in technology-based performance appraisal systems.
- 4. Adopting technology in performance appraisal not only provides short-term benefits in the form of increased efficiency and objectivity, but also long-term benefits such as increased employee satisfaction, development of a data-driven organizational culture, and use of technology for more strategic human resource planning. Over time, technology will further strengthen the role of performance appraisal in achieving overall organizational goals.
- 5. This study provides an important contribution to managerial practice in terms of developing a technology-based performance appraisal system. HR managers and organizational leaders can use these findings as a basis for designing a strategy for adopting technology in more effective performance appraisal. In addition, for researchers, the results of this study open up opportunities to conduct further studies on the influence of technology in improving team performance and organizational development.

#### **REFERENCES**

Creswell, J. W. (2020). Research design: Qualitative, quantitative, and mixed methods approaches. Journal of Research Methods, 25(4), 235-247.

Handoko, TH (2020). Human resource management in the digital era: Strategies and challenges. Journal of Management and Business, 18(3), 45-58.

Mariam, N. (2020). Technological innovation in human resource management. Journal of Technology and Human Resource Management, 19(3), 123-135.

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- Rahmawati, D. (2020). Digitalization in Business Transformation and Information Systems: Impact on Organizational Performance. Journal of Technology and Management, 15(2), 123-135.
- Santoso, D. (2020). Human resource management strategies in modern organizations. Journal of Human Resource Management, 21(4), 99-112.
- Setiawan, A. (2020). Utilizing technology to improve organizational performance. Journal of Technology and Management, 18(2), 123-134.
- Suharto, T. (2020). Human resource management in the digital era. Journal of Management and Technology, 23(4), 145-156.
- Widiastuti, S. (2020). Utilizing technology to improve organizational performance. Journal of Technology and Management, 21(2), 111-123.