

## WORK MEASUREMENT IN HRM: AN EVALUATION TOOL FOR DETERMINING EMPLOYEE TIME AND WORKLOAD STANDARDS

Nazwar Muhajir Saimima<sup>1\*</sup>, Ramlawati<sup>1</sup>, Nur Alam<sup>1</sup>

<sup>1</sup>Master of Management, Postgraduate, Muslim University of Indonesia

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### ABSTRACT

Work measurement plays a crucial role in Human Resource Management (HRM) as an objective instrument for determining employee time and workload standards. In practice, the lack of accurate work measurement often leads to unrealistic performance targets and workload imbalances, which negatively impact employee performance and productivity. This article aims to analyze the role of work measurement as an evaluation tool in determining time and workload standards in the HRM context. The research method used is a literature study with a descriptive-analytical approach through a review of relevant scientific journals, books, and academic publications. The results of the study indicate that work measurement contributes significantly to establishing objective and realistic time standards, supporting proportional workload distribution, and indirectly improving employee performance and productivity by creating ergonomic and psychologically conducive working conditions. This study concludes that work measurement is a strategic HRM instrument that supports data-based decision-making and sustainable performance management.

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### Corresponding Author:

**Nazwar Muhajir Saimima** | Master of Management, Postgraduate, Muslim University

Email: [nazwarsaimima77@gmail.com](mailto:nazwarsaimima77@gmail.com)

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## 1. INTRODUCTION

The increasingly competitive world of work demands that organizations manage human resources effectively and efficiently. In the context of Human Resource Management (HRM), employees are viewed as strategic assets that play a crucial role in achieving organizational goals. Therefore, employee performance management focuses not only on work results but also on work processes, time efficiency, and the balance of workloads received by each individual. One important aspect of HRM that serves as a basis for managerial decision-making is work measurement, particularly in determining employee work time and workload standards objectively and systematically (Joesyiana, Basriani, & Susanti, 2024).

Work measurement is a management technique used to determine the standard time required for an employee to complete a work activity at a normal level of performance. Accurately determining time standards is crucial because it directly relates to workforce planning, work scheduling, performance appraisals, productivity calculations, and establishing a fair compensation system. Furthermore, work measurement also serves as a tool for evaluating employee workloads to prevent unequal distribution of work, which can lead to work fatigue, stress, and decreased performance and job satisfaction (Ramadhani, 2020).

Various previous studies have examined work measurement in the context of the manufacturing and service industries. These studies have shown that work measurement methods such as work sampling, time study, and time-based workload analysis can improve operational efficiency and employee productivity. Other studies emphasize that appropriate work measurement can help management identify wasteful work time and nonproductive activities. However, most previous studies still position work measurement in technical and operational terms, without comprehensively linking it to the strategic function of HRM as a tool for evaluating employee performance and well-being (Pangestu, 2025).

Furthermore, previous research has generally focused on a single aspect, namely determining time standards or analyzing workload separately. However, in modern HRM practices, these two aspects are interrelated and should be viewed as a unified work evaluation system. The lack of integration between time standard measurement and workload analysis often leads to inaccuracies in performance assessment, workforce planning, and managerial decision-making. This situation indicates a research gap that requires further study, particularly in linking work measurement as a strategic evaluative instrument in HRM (Ramdhani, Muflihat, & Anwar, 2025).

Based on the previous literature review, the scientific novelty *of* this article lies in its integrative approach in viewing work measurement as an HR evaluation tool that is not only technical but also strategic. This article positions work measurement as a managerial instrument for simultaneously determining employee time and workload standards, with the aim of supporting improved performance, work efficiency, and workload balance. This approach is expected to broaden the perspective of work measurement, which has previously tended to be limited to solely operational aspects.

The research problem underlying this study is how work measurement can be effectively used as an evaluation tool in HRM to determine optimal employee time and workload standards. Furthermore, this article discusses the extent to which work measurement can contribute to creating a fair, efficient, and sustainable work system. Thus, the study focuses on the strategic role of work measurement in supporting HRM decision-making based on data and objective analysis.

The purpose of this article is to examine the concept and role of work measurement in HRM as an evaluation tool for determining employee time and workload standards. This article is expected to provide a comprehensive conceptual understanding of the importance of work measurement and serve as a reference for practitioners and academics in

developing effective, efficient, and human resource performance-oriented work management systems.

## **2. RESEARCH METHODS**

The research method used in this article is a literature *review* with a descriptive-analytical approach. The research was conducted by reviewing and analyzing various relevant literature sources, such as scientific journals, textbooks, and academic publications related to work measurement, time standards, workload, and their application in Human Resource Management (HRM). The data obtained were systematically analyzed to identify concepts, methods, and key findings from previous research. The results of the analysis were then synthesized to build a comprehensive understanding of the role of work measurement as an evaluation tool in determining employee time and workload standards. This approach enabled the author to identify research gaps and formulate relevant conceptual contributions to the development of HRM studies.

## **3. RESULTS AND DISCUSSION**

Based on the literature review and conceptual analysis conducted, this research yields several scientific findings related to the role of work measurement in Human Resource Management (HRM), particularly as an evaluation tool for determining employee time and workload standards. These findings are presented not as raw data, but rather as conceptual understanding and scientific patterns that systematically explain the relationships between variables.

### **Work Measurement as an Instrument for Determining Time Standards**

Work measurement as an instrument for determining time standards is an important foundation for effective, data-driven human resource management. The main findings of this study indicate that work measurement can produce objective, measurable, and scientifically accountable work time standards. This is because work measurement is not based solely on managerial assumptions or intuition, but rather through systematic procedures that directly observe employee work activities under normal working conditions. Thus, the resulting time standards reflect realistic time and are in accordance with human work capacity (Rahmi, Suryani, Qonita, & Bilqis, 2025) .

Work measurement methods such as *time study* and *work sampling* play a crucial role in representing the normal time required for employees to complete a task. *Time study* allows for detailed time measurement of each work element, allowing for identification of value-added and wasteful activities. Meanwhile, *work sampling* provides a snapshot of the proportion of time employees spend on various activities within a given period. Scientifically, the reliability of this method lies in its ability to account for variations in work pace, task complexity, and work environment conditions that affect employee performance. Furthermore, work measurement also incorporates *allowance* factors , including physiological needs, rest periods, and potential fatigue, ensuring that the established time standards are neither coercive nor excessive.

Establishing accurate time standards has direct implications for work efficiency and clarity of performance expectations. When time standards are realistically set, employees clearly

understand the work targets to be achieved and the deadlines for completing tasks. This clarity can scientifically reduce role ambiguity, a frequent source of stress and workplace conflict. With measurable time standards, employees can organize their work rhythms in a more planned manner, while management has a solid foundation for monitoring and evaluating performance.

The trends found in this study indicate that organizations that implement systematic work measurement tend to have more stable and consistent productivity levels. This can be explained by the theory of operational efficiency, which states that clear work standards will reduce unnecessary performance variations. Conversely, organizations that set subjective time targets risk creating a mismatch between work demands and employee capacity, ultimately resulting in decreased work quality and increased burnout (Indawati, Efendi, & Wildan, 2024).

These findings align with previous research, which found that work measurement-based time standards can improve the accuracy of workforce planning, activity scheduling, and operational control. However, this article expands on this perspective by emphasizing that time standards serve not only as technical tools in production or operational processes but also as performance evaluation instruments in HRM. Objectively established time standards can serve as benchmarks for fair, transparent, and consistent performance assessments, thus supporting the creation of a more professional performance management system (Mediana & Hwihanus, 2024).

Thus, work measurement as a tool for determining time standards plays a strategic role in bridging the interests of organizational efficiency and employee well-being. This approach strengthens work measurement's position as an integral part of modern HRM, focused on sustainable performance and evidence-based decision-making.

### **Employee Workload Analysis Based on Work Measurement**

Employee workload analysis based on work measurement is a scientific approach that is increasingly relevant in modern human resource management. The findings in this study indicate that work measurement can provide an objective basis for assessing employee workload by comparing actual working time with established time standards. This approach allows management to accurately identify whether an employee is experiencing work overload *or* work underload. Scientifically, this condition can be explained through the theory of human work capacity, which states that each individual has limited physical and mental abilities to carry out work activities continuously without causing negative impacts on health and performance (Safitri et al., 2025).

Workload analysis based on time measurements provides a realistic picture of the work intensity experienced by employees. When actual work time consistently exceeds the standard time, this indicates an excessive workload that has the potential to cause physical and psychological fatigue. This phenomenon can be explained through work fatigue theory, which states that the accumulation of work activities that exceed an individual's capacity will reduce levels of concentration, work speed, and accuracy in completing tasks. Conversely, if actual work time is significantly lower than the standard time, a condition of excessively light workload occurs, which can lead to decreased work engagement *and* employee motivation.

The trends identified in this study indicate that workload imbalance often stems from the absence of clear time standards or task distribution that is not based on systematic job analysis. In many organizations, work allocation is still based on the habits or subjective perceptions of superiors, without considering task complexity and individual work capacity. As a result, some employees receive excessive workloads, while others experience underwork. This creates workload imbalances that impact not only individual performance but also the work climate and overall organizational performance.

From a scientific perspective, workload imbalance has direct implications for work quality and error rates. Employees experiencing excessive workloads tend to exhibit increased errors due to decreased levels of accuracy and work endurance. Furthermore, an unproportionate workload can also potentially increase job stress, which in the long term can lead to chronic fatigue ( *burnout* ). Conversely, employees with excessively light workloads often experience a decreased sense of responsibility and meaning in their work, resulting in lower productivity and innovation.

The results of this study are consistent with previous research that suggests that time-based workload analysis is an effective tool for creating a fairer and more balanced work system. Previous research has shown that organizations that systematically conduct workload analysis are able to increase employee job satisfaction and reduce absenteeism and turnover rates. However, this article provides an additional contribution by emphasizing the importance of integrating workload analysis and standard time measurement as a unified HRM evaluation system (Handaru & Hidayat, 2026) .

This integrative approach has a strong scientific basis because workload cannot be accurately analyzed without objective time standards. Time standards serve as a standard benchmark that allows management to assess workload levels proportionally. Without time standards, workload analysis risks being subjective and inconsistent. Therefore, work measurement serves not only as a technical tool for determining working hours but also as a strategic instrument in managing employee workload.

By integrating standard time measurement and workload analysis, organizations can design more rational and sustainable work systems. This approach enables management to adjust workforce size, redistribute tasks, and redesign jobs *based* on data. Ultimately, workload analysis based on work measurement contributes to creating a balance between work demands and employee capacity, thereby supporting improved performance, employee well-being, and organizational sustainability.

### **The Relationship between Work Measurement and Employee Performance and Productivity**

The relationship between work measurement and employee performance and productivity is a key finding in this study, particularly in understanding how work measurement indirectly contributes to improved performance. The analysis shows that work measurement does not automatically or directly increase employee productivity. However, work measurement acts as a fundamental mechanism that creates structured working conditions through the establishment of time standards and proportional workload

allocation. This clear work structure ultimately drives sustainable improvements in employee performance and productivity (Alif & Ahmadi, 2024).

Scientifically, work measurement supports the creation of an ergonomic and psychologically conducive work environment. Rationally established time standards allow employees to work according to their physical and mental abilities, thereby reducing the risk of work fatigue. From an ergonomic perspective, the match between work demands and human capacity is crucial for maintaining movement efficiency, safe work postures, and a stable work rhythm. Meanwhile, from a psychological perspective, clear work standards provide a sense of security and certainty for employees in carrying out their tasks, so they can focus their energy and attention on achieving optimal work results (Rahma & Astuti, 2025).

The variable trends found in this study indicate that when time and workload standards are set rationally, job stress levels tend to decrease and job satisfaction increases. This phenomenon can be explained through work-balance theory, which emphasizes the importance of alignment between job demands and individual capacity. An imbalance between these two aspects is often a major trigger for work stress and decreased performance. By measuring work, organizations have a tool to control work demands to keep them within optimal limits, thereby avoiding excessive work pressure (Firdaus, Wiharno, & Fitriani, 2024).

Furthermore, performance measurement also serves as a managerial control tool that prevents unrealistic work expectations. Without clear time standards, employees often face changing and unpredictable work targets, potentially creating uncertainty and job anxiety. Performance measurement provides an objective basis for target setting, thus making the relationship between employees and management more transparent and fair. This contributes to increased employee trust in the performance appraisal system, which in turn positively impacts motivation and work commitment.

Compared with other research that emphasizes a direct relationship between work measurement and productivity, this article offers a more comprehensive perspective by positioning psychological and ergonomic factors as intermediary variables. Productivity is determined not only by the speed or volume of work, but also by the physical and mental condition of employees in carrying out their tasks. Therefore, sustainable productivity improvements can only be achieved if organizations are able to create a balanced and humane work environment, one of which is supported by the systematic implementation of work measurement.

These findings reinforce the argument that work measurement plays a strategic role in human resource performance management. Work measurement serves not merely as a control or supervisory tool, but as a means to create a work system that supports employee well-being and development. When employees work under measurable, fair, and appropriate conditions, they tend to demonstrate more stable performance, higher productivity, and higher levels of job satisfaction. Therefore, work measurement can be viewed as an important foundation for building an effective performance management system oriented toward organizational sustainability (Chaeroni, Masiva, Firdausiyah, & Sodik, 2024).

## **Implications of Work Measurement on HR Decision Making**

Subsequent scientific findings have shown that work measurement significantly contributes to supporting data-driven HR decision-making. Time standards and workload analysis generated from work measurement can be used as a basis for workforce planning, determining recruitment needs, performance assessments, and designing compensation systems (Siagian, Muzayana, Fadhillah, Febrianti, & Dinata, 2025) .

Scientifically, the use of work measurement data reduces subjectivity in managerial decision-making. This occurs because decisions are based on measurable work analysis results, not on mere perceptions or assumptions. This trend suggests that organizations that adopt work measurement as part of their HRM systems tend to have more consistent and transparent policies.

These results align with previous research that found data-driven HR systems can increase employee trust in management. However, this article adds a new dimension by emphasizing that performance measurement also serves as a tool for evaluating the sustainability of work systems, particularly in maintaining a balance between organizational efficiency and employee well-being (Hizbulloh, Firdaus, Hafsari, Santoso, & Wijoyo, 2025) .

Overall, the scientific findings obtained in this study are able to answer the research questions formulated in the introduction. Work measurement has been proven to be an effective evaluation tool in determining integrated employee time and workload standards. Furthermore, work measurement also plays a role in supporting improved performance, work efficiency, and the quality of HR decision-making.

These findings confirm that an integrative approach to work measurement is a relevant scientific contribution to the development of HRM studies. By linking technical, psychological, and managerial aspects, this article provides a more holistic understanding of the importance of work measurement in modern human resource management.

## **4. CONCLUSION**

Work measurement is a strategic instrument in Human Resource Management that plays a crucial role in determining time standards and analyzing employee workloads objectively and in an integrated manner. Work measurement serves not only as a technical operational tool but also as a basis for performance evaluation that supports work efficiency, fair task distribution, and a balance between work demands and employee capacity. Scientific findings confirm that the implementation of rational time and workload standards can create ergonomic and psychologically conducive working conditions, thus indirectly impacting employee performance and productivity. Thus, the research objective was achieved, namely strengthening understanding of the role of work measurement as a data-driven and sustainability-oriented HRM evaluation tool. Future studies can be directed at empirical testing of work measurement in various industrial sectors and its integration with analytical and digital technology-based HRM approaches.

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