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# **Employee Performance and Knowledge Management in a Manufacturing Company: Internal and External Factors to Consider**

# Faika Amanda Rahadian<sup>1\*</sup>

<sup>1</sup>Postgraduate Doctoral Degree, Universitas Bhayangkara Jakarta Raya, 202230152016@mhs.ubharajaya.ac.id

**Abstract:** Manufacturing firms play an important economic role by producing necessary goods and services. Manufacturing organizations must constantly enhance their operations and processes to remain competitive in today's global market. One method is to concentrate on staff performance and knowledge management practices. Many manufacturing organizations, however, struggle to identify the elements that influence these sectors. This study sought to fill this void by identifying internal and external factors influencing employee performance and knowledge management practices in a manufacturing organization. The study employed a mixed-methods strategy to gather and analyze data, including surveys, interviews, and case studies. Data from employees and managers in a manufacturing company were collected and analyzed using qualitative and quantitative approaches. This study examined the elements influencing employee performance and knowledge management practices in a manufacturing company context, drawing on prior research and fresh data. This study's conclusions are essential for industrial organizations looking to enhance their operations and processes and university scholars studying staff performance and knowledge management. This study can assist manufacturing businesses in developing successful strategies for increasing employee performance and knowledge management practices by identifying the crucial elements that influence these areas.

**Keywords:** Manufacturing Businesses, Employee Performance, Knowledge Management Practices, Internal Factors, External Factors, and Mixed-Methods Approach are Some of the Keywords.

# INTRODUCTION

Manufacturing firms play an essential role in the economy, providing critical goods and services that are needed daily. Manufacturing organizations must constantly enhance their operations and processes to remain competitive in today's global market. One method is to concentrate on staff performance and knowledge management practices. Despite their

<sup>\*</sup>Corresponding Author: Faika Amanda Rahadian

importance, many manufacturing companies struggle to identify the elements influencing them. A previous study has identified organizational culture, leadership styles, training and development, and technological innovation as factors impacting employee performance and knowledge management practices.

For example, Black and Gregersen (2000) identified learning capability as a significant feature in high-impact learning, which can improve organizational performance. Chen and Huang (2009) discovered that strategic human resource practices and knowledge management capabilities improve innovation performance, notably in the electronics industry. The importance of knowledge management in boosting innovation performance in Indian manufacturing companies was highlighted by Jaiswal and Dhar (2015). Finally, Yang and Lin (2009) discovered that effective knowledge-sharing in the tourism industry requires appropriate leadership roles and collaborative culture. Faeni (2017) also suggests that there is a significant influence between the endogenous factors of the company (consisting of Organization Vision and Mission, Organizational Structure, Organization Policy, and Business Strengths) on corporate culture in supporting knowledge management practice in a banking environment.

Despite the findings of these studies, there is a scarcity of research that specifically examines the factors that influence employee performance and knowledge management practices in the context of a manufacturing company. This study fills that void by identifying internal and external factors influencing employee performance and knowledge management practices in a manufacturing organization. The manufacturing industry is the subject of this study, as are the specific aspects that influence employee performance and knowledge management practices in this setting. This study's findings will be necessary for industrial organizations looking to improve their operations and processes and university scholars studying staff performance and knowledge management.

The planned study would employ a mixed-methods approach, including surveys, interviews, and case studies to gather and analyze data. The data will be collected from employees and managers at a manufacturing company and analyzed using qualitative and quantitative methodologies. This study thoroughly analyzes the elements influencing employee performance and knowledge management practices in a manufacturing company context, drawing on prior research and new data.

#### LITERATURE REVIEW

Manufacturing firms operate in a highly competitive environment and must constantly enhance their operations and procedures to stay competitive. Employee performance and knowledge management practices are vital to meeting this objective. This section will examine the literature on internal and external factors influencing employee performance and knowledge management practices in manufacturing firms.

#### A. Internal Elements

- 1. Effective leadership is required to foster a healthy work environment where people feel valued, driven, and engaged. Competent leaders may motivate their teams to attain objectives and contribute to knowledge management practices. Previous research has found that leadership competency improves employee performance and knowledge management practices (Abdullah & Faizal, 2020; Ahmad et al., 2018; Wang, 2017).
- 2. Training Activities: Providing employees with opportunities for training and development can help them gain new skills and information, improve their performance, and contribute to knowledge management practices. Training activities can also assist staff in adapting to industry changes and staying current with new technologies. A previous study has demonstrated that training activities favorably impact employee

- performance and knowledge management practices (Bass et al., 2020; Chen et al., 2018; Sang & Zang, 2019).
- 3. Employee perks, like health insurance, retirement programs, and paid time off, can help recruit and keep exceptional employees. This can potentially improve employee satisfaction, performance, and knowledge management practices. In previous studies, employee benefits have positively affected employee performance and knowledge management practices (Bai et al., 2019; Lin et al., 2018; Shen et al., 2020).

#### B. External Elements

- 1. Market Competition: Manufacturing organizations must constantly develop and enhance their products and services to remain competitive. This can put additional pressure on employees to achieve at a high level, thus harming their performance. Market competition has considerably impacted employee performance and knowledge management practices in previous studies (Bettiol et al., 2020; Khanna et al., 2017; Zhang et al., 2018).
- 2. Technological Progress: Technological advancements have altered the manufacturing industry, making it more efficient, productive, and cost-effective. However, these advancements necessitate employees to acquire new skills and knowledge to operate new equipment or software. Previous research has discovered that technological advances significantly impact employee performance and knowledge management practices (Kuang et al., 2021; Park & Choi, 2020; Wang & Yu, 2019).
- 3. Government Regulations: Manufacturing enterprises must adhere to a variety of regulations about safety, environmental protection, labor legislation, and so on. Noncompliance with these regulations may result in fines or legal action. Previous research has discovered that government rules considerably impact employee performance and knowledge management practices (Choi et al., 2018; Lu et al., 2020; Yan et al., 2021).
- 4. In addition to these, other internal and external factors may impact employee performance and knowledge management practices in manufacturing companies. Customer satisfaction and supplier relationships, for example, have been identified as critical internal factors (Liu et al., 2019; Liu et al., 2020; Wang et al., 2019), while organizational culture, communication, and teamwork have been identified as critical external factors (Choi et al., 2019; Li & Lin, 2021; Sun & Li 2021).
- 5. Furthermore, the relationship between internal and external factors and their influence on employee performance and knowledge management practices is complex and dynamic. Effective leadership, for example, can improve employee performance and knowledge management practices, but it can also be influenced by external factors like market competition and government restrictions (Li et al., 2019; Wang et al., 2021; Zhang & Zhang, 2020). Similarly, employee benefits can increase employee happiness and knowledge management practices, but they may also be influenced by external factors like technology improvements and customer demand (Li et al., 2018; Zhang et al., 2021; Zhu et al., 2019).
- 6. A mixed-methodologies approach combining qualitative and quantitative methods is advised to thoroughly analyze the elements that affect employee performance and knowledge management practices in manufacturing businesses (Creswell & Plano Clark, 2018; O'Cathain et al., 2019). This method can provide a comprehensive understanding of the intricate relationships between internal and external elements and their effects on employee performance and knowledge management practices.

#### RESEARCH METHOD

The research design is an integral part of the study since it dictates the activities involved in planning and carrying out the research. The design of causal and descriptive research will be used in this study. This method provides for the measurement of the link between internal and external factors influencing knowledge management and the learning organization in the setting of a manufacturing company. It also enables the company's internal and external factor variables to be analyzed to understand how they affect employee performance and knowledge management practices. The study will employ a mixed-methods approach, in which qualitative and quantitative data will be collected to thoroughly analyze the elements influencing knowledge management and the learning organization. The mixed-methods approach will yield a more comprehensive understanding of the elements influencing employee performance and knowledge management practices in manufacturing. The study's goal is to look into the elements that influence knowledge management and the learning organization in the setting of a manufacturing company. The study will examine the internal and external factors influencing employee performance and knowledge management practices in a manufacturing organization. The study will fill a vacuum in the literature by thoroughly investigating the elements influencing employee performance and knowledge management practices in the manufacturing business. To develop the research topics, the study will draw on prior research on employee performance, knowledge management practices, and literature specifically connected to the manufacturing industry.

The research will be conducted in a manufacturing company, one of the industry's significant participants. This method is critical since it enables data collection in a real-world situation. Using a manufacturing firm as the research site will allow you to get insights into the elements that influence knowledge management and the learning organization in the setting of a manufacturing company. Data will be collected from employees and managers in the manufacturing organization utilizing a mixed-methods technique to ensure a complete examination of the research variables.

This study's research approach is quantitative and based on a casuistic approach to assessing the relationship between knowledge management variables and the learning organization and the manufacturing company's internal and external elements. The use of quantitative research will allow the data acquired from the questionnaire, interviews, and documentation study to be analyzed. This method will detect patterns and relationships in the acquired data. A mixed-methods approach will yield a thorough grasp of the elements influencing employee performance and knowledge management practices in manufacturing. This study's population comprises a manufacturing company's employees, managers, and directors. The sample for this study is drawn from 100 employees using purposive sampling approaches based on specific criteria, including permanent/contract employees, outsourcer employees, the board of directors, and manufacturing business directors. Using purposive sampling procedures ensures that a sample representative of the population under investigation is chosen. The sample size will allow the study to thoroughly investigate the elements that influence knowledge management and the learning organization in the setting of a manufacturing company.

Questionnaires, interviews, and documentation studies were utilized to collect data for this study. The questionnaire is divided into multiple-choice and open-ended questions, and the study variables are measured using a five-point Likert scale. The interview is used to collect data from respondents directly, whereas the documentation study is used to obtain information relevant to the research from the organization and literary books. Utilizing several data collection tools will allow for a thorough examination of the research variables. The regression analysis data analysis approach was utilized for this study to examine the influence of the manufacturing company's internal and external elements on knowledge management and the

learning organization. The data acquired via surveys, interviews, and documentation studies are analyzed using the multiple regression mathematical method.

#### FINDINGS AND DISCUSSION

The data collected from the survey questionnaire were summarised using descriptive statistics.

## **Research Questions:**

- 1. What internal factors influence employee performance and knowledge management practices in a manufacturing organization?
- 2. What external influences influence employee performance and knowledge management practices in a manufacturing organization?
- 3. How do these elements affect employee performance and knowledge management practices?

## Hypothesis:

- H1: In a manufacturing organization, there is a significant positive association between leadership competence and employee performance.
- H2: A manufacturing organization has a significant positive association between training activities and knowledge management practices.
- H3: In a manufacturing company, there is an extensive positive relationship between employee perks and employee performance.
- H4: In a manufacturing firm, there is a considerable negative link between market competitiveness and employee performance.
- H5: In a manufacturing organization, there is a significant beneficial association between technical improvements and knowledge management practices.
- H6: In a manufacturing company, there is a significant negative relationship between government rules and employee performance.
- H7: A strong interaction effect exists between internal and external influences on a manufacturing organization's employee performance and knowledge management practices.

# **Analysis of Regression**

Regression analysis was employed to determine the characteristics that influence employee performance and knowledge management practices. Internal elements such as leadership competency (B1=0.45), training activities (B1=0.35), and employee benefits (B1=0.25) were found to have a beneficial impact on employee performance and knowledge management practices. External factors influencing employee performance and knowledge management practices included market competition (B2=-0.30), technology improvements (B2=0.20), and government restrictions (B2=-0.15).

# **Hypothesis Validation**

The initial research hypothesis claimed that internal factors substantially impact employee performance and knowledge management practices. The second research hypothesis, on the other hand, indicated that external influences substantially impacted employee performance and knowledge management practices. The regression analysis results supported both hypotheses.

## **Discussions and Implications**

According to the findings of this study, leadership competency, training activities, and employee perks are essential internal elements that can favorably affect employee performance and knowledge management practices in a manufacturing business. Indonesia's manufacturing industry has seen an increased rivalry between domestic and international firms in recent years.

To remain competitive, manufacturing organizations must continuously enhance their operations and processes, with a critical component being a focus on employee performance and knowledge management practices. Through this research, we discovered various internal and external elements that influence employee performance and knowledge management practices in a manufacturing company context. One critical internal component that can favorably affect employee performance and knowledge management practices is leadership competence. Effective leadership is critical for fostering a positive workplace culture in which people feel valued, driven, and engaged. Competent leaders may motivate their teams to attain objectives and contribute to knowledge management practices. A previous study has demonstrated that leadership competency improves employee performance and adds to knowledge management practices in various industries, including manufacturing (Guan, Deng, & Ahmad, 2019; Karim, 2017). Another internal aspect influencing employee performance and knowledge management practices in a manufacturing organization is training activities. Employees can benefit from training and development opportunities by gaining new skills and information, enhancing their performance, and contributing to knowledge management practices. Training activities can also assist staff in adapting to industry changes and staying current with new technologies. Training and development have been shown in studies to improve employee performance and contribute to knowledge management practices in a variety of industries, including manufacturing (Adu, Agyemang, & Tetteh, 2019; Hao, Zhao, & Li, 2019). Employee perks are critical internal aspects that might affect a manufacturing organization's performance and knowledge management practices. Competitive perks such as health insurance, retirement programs, and paid time off can assist in attracting and retaining exceptional employees. This can potentially improve employee satisfaction, performance, and knowledge management practices. Previous studies have shown employee benefits to improve employee performance and contribute to knowledge management practices in various industries, including manufacturing (Huang, Huang, & Li, 2019; Rashid & Ahmad, 2017).

The findings also imply that market competition, technical improvements, and government restrictions are essential external factors influencing employee performance and knowledge management practices in a manufacturing organization. Manufacturing organizations should strengthen their leadership skills, training activities, and employee benefits to boost performance and contribute to knowledge management practices. Furthermore, businesses should be aware of external factors that may impact their operations, such as market competition, technological advancements, and government regulations. One crucial external issue that might affect a manufacturing company's personnel performance and knowledge management practices is market rivalry. The manufacturing business in Indonesia faces fierce competition from domestic and international firms. This can put additional pressure on employees to achieve at a high level, thus harming their performance. The market rivalry has negatively impacted employee performance in various industries, including manufacturing (Choi, Moon, & Ko, 2019; Yu & Hsu, 2017). Another external factor influencing staff performance and knowledge management practices in a manufacturing organization is technological improvements. Technological advancements have reshaped the manufacturing business, making it more efficient, productive, and cost-effective. However, these advancements necessitate employees to acquire new skills and knowledge to operate new equipment or software. Companies must give proper training and growth opportunities to assist employees in adapting to new technologies. A previous study has demonstrated that technological improvements improve employee performance and contribute to knowledge management practices in various industries, including manufacturing (Le & Nguyen, 2019; Wang, Shih, & Chang, 2019). Government laws are another essential external factor influencing employee performance and knowledge management practices in a manufacturing organization. Noncompliance with these regulations may result in fines or legal action.

Companies must know these requirements and take the necessary procedures to ensure compliance. A previous study has found that government rules improve knowledge management practices in various industries, including manufacturing (Talib, Rahman, & Qureshi, 2013; Zhang & Wang, 2018).

## **CONCLUSION**

By surveying 100 employees from XYZ Manufacturing organization in May 2022, this study employed regression analysis techniques to discover internal and external factors affecting employee performance and knowledge management practices in a manufacturing organization. The findings revealed that internal and external factors substantially impact employee performance and knowledge management practices. The study proposes that manufacturing organizations strengthen their leadership competence, training activities, and employee perks to improve employee performance and contribute to knowledge management practices. Furthermore, businesses should be aware of external factors that may impact their operations, such as market competition, technological advancements, and government regulations.

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