

Analysis of The Implementation of Occupational Safety and Health (K3) on Employee Performance Efficiency At UD Industri Tahu Tiga "S" Prima In Batu City

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ABSTRACT

This research aims to evaluate the implementation of Occupational Safety and Health (K3) and its impact on employee performance efficiency at UD Industri Tahu Tiga "S" Prima in Batu City. The study underscores the significance of an effective K3 system in minimizing accident risks while enhancing employee performance. It adopts a qualitative research approach with a descriptive, in-depth analysis. The sampling method used is purposive sampling, targeting specific informants. Data collection methods include field research with primary data through interviews, documentation, and observations, as well as library research for secondary data. The study also references literature and journal articles related to the case. The findings reveal that the implementation of K3 at UD Industri Tahu Tiga "S" Prima in Batu City remains suboptimal, with many employees neglecting Personal Protective Equipment (PPE) and overlooking work accident risks. In the tofu production process, stages like soybean grinding, boiling, filtering, molding, cutting, and frying present potential accident hazards, which the company needs to address to ensure employee safety and well-being, providing a sense of comfort and security at work.

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INTRODUCTION

Companies need several strategic studies for management management in order to succeed and meet consumer standards (Gunawan *et al*, 2024). One of the companies that continues to grow is UD Industri Tahu Tiga "S" Prima, Batu City. This company is engaged in the field of tofu management which began its journey around the 70s (first generation). The company's business began to grow thanks to the hard work of the second generation, and in 1999 the UD Industri Tahu Tiga "S" Prima was built. This industry is one of the largest industries in Batu City with adequate Human Resources (HR) in its production process. According to Sofyan (2016) and Gunawan *et al* (2024), Human Resources play an important role in the success of an organization or company, because humans are assets that need to be maintained and improved in quality. Human resources are always an important part for a company to achieve success (Dodanwala dan Santoso, 2022 ; Kristanto and Purnamasari, 2022). Occupational Safety and Health (K3) is an important element in human resource management which is intended to protect employees from the possibility of accidents and occupational diseases (Putri and Lestari, 2023) Work accidents are usually caused by lack of supervision and suboptimal implementation of Occupational Health and Safety (K3). Based on data from the International Labor Organization (ILO), Indonesia recorded 370,747 work accidents in

2023, which shows the need for extra attention in implementing K3 in companies (Zakaria, 2024).

Occupational Safety and Health (K3) is an effort to protect all workers from the risk of work accidents and is very important for companies to pay attention to the health (Dzulfiqh, 2023). According to Ahmad (2022) the purpose of implementing occupational safety and health (K3) is to provide a sense of security to employees at work so that operational activities can be carried out under certain conditions. Occupational safety and health (K3) is the process of preventing accidents and diseases in the workplace, involving employers and workers in identifying and taking preventive measures against potential risk factors (Rifqi *et al*, 2023).

In the research conducted by Indah *et al* (2024), the observed phenomena include several things, namely in terms of work accidents that occur, and analyzing the causes of accidents in the workplace as a phenomenon that affects employee work efficiency. As a result of the phenomenon of problems regarding occupational safety and health (K3), a phenomenon of problems regarding employee performance emerged (Asrini *et al*, 2020 ; Aprianti and Almansur, 2023). The implementation of a good work safety system reflects good governance, where compliance with Occupational Safety and Health (K3) regulations is not only an obligation, but also part of a commitment to creating a safe and professional work environment (Harum , 2025). Thus, there is a *lack of research* , namely that previous researchers focused more on work accidents and causes of accidents, while researchers focused more on implementation in companies.

The performance is the result of performance achievement that has been achieved by an employee according to his main function in a certain period (Lestari *et al*, 2023). Factors that influence performance, namely special nature or characteristics, atmosphere, attitude and others can be overcome by employees who refer to the work implementation program that has been set by the company (Jahanshahi *et al*, 2020).

At UD Industri Tahu Tiga "S" Prima Kota Batu, employee work efficiency also needs to be considered to achieve optimal results from the entire production process carried out, human resources need to be aware of improving skills and knowledge about occupational safety and health against work accidents in the work environment. Occupational safety and health (K3) are interrelated with performance efficiency. Effective implementation of Occupational Safety and Health (K3) helps reduce the risk of work accidents. By reducing incidents, companies can avoid operational disruptions due to accidents, so that efficiency is maintained. Good occupational safety and health not only protect workers from physical risks, but also improve workers' mental well-being. Workers who feel safe and protected will be more motivated to work well, thereby increasing performance efficiency.

LITERATURE REVIEW

Occupational Safety and Health (K3)

Occupational Safety and Health (K3) is a very important aspect in maintaining employee welfare and productivity. Maintaining a safe and healthy work environment is not only the company's moral responsibility, but also a strategic investment to improve business performance and sustainability (Kusuma *et al*, 2022). Occupational safety and health is the process of preventing accidents and diseases in the workplace, which involves employers and workers in identifying and taking preventive measures against potential risk factors (Ramadhani, 2020). On the other hand, Olanipekun and Jiboku (2021) also emphasized that occupational health and safety have a positive effect on employee performance. Comfortable and safe environmental factors in the workplace, as well as responsibility for occupational health and safety for employees will form healthy,

safe, and productive employees who are expected to work efficiently. Indicators Affecting Occupational Safety and Health According to Saputra and Mahaputra (2022) there are several indicators of occupational safety and health, namely Personal protective equipment, Safe workplace, Use of work equipment, Healthy workplace, and Lighting in the workplace.

Work safety

Occupational safety is any effort made to reduce the possibility of accidents while doing work. Occupational safety indicates a safe or protected condition from damage or loss in the workplace (Febriana *et al*, 2025). Occupational safety is an effort that guarantees the integrity and safety of workers and the environment (Benson *et al*, 2024). The existence of this reality makes protection of workers for occupational safety an important thing and must be implemented by company management. Mistakes in the use of equipment, lack of personal protective equipment for workers, and inadequate workforce skills can actually cause very large potential hazards in the form of work accidents, fires, explosions, environmental pollution and disease are important in efforts to provide guarantees to employees.

Occupational Health

Occupational health is a very important thing for companies to pay attention to the health. With a good occupational health program, employees will be absent less often due to illness suffered by coworkers or coworkers outside the workplace. This will provide material benefits for employees (Chang *et al*, 2021). Working in a comfortable and pleasant place can help employees work longer and increase productivity (Shammout, 2021). Occupational health is an effort to maintain the health of all workers, both physically, mentally, and socially, by dealing with health problems caused by diseases suffered, the work environment, or work (Waldron, 2013).

Efficiency

Efficiency measurement is one of the important benchmarks in measuring quality in increasing production. Efficiency is often interpreted as how a company can produce at the lowest cost, but efficiency is more than just managing the relationship between input and output, namely how to allocate available production factors optimally to produce maximum output (Bogetoft, 2013). Work efficiency is one of the factors that can affect employees. So basically employees carry out their work based on efficiency if employees are obedient in working, employee performance tends to increase but employee performance can also decrease if employees are less efficient in working, as well as described by Abun *et al* (2021).

Employee performance

Definition of Performance is the achievement of an employee in completing his work both in terms of quality and quantity according to the responsibilities that have been given (Maryani *et al*, 2021). According to Pradhan and Lena (2017), employee performance is something that is individualistic because each employee has different skills in carrying out work and every activity that encourages the development of the company is an indicator of employee performance. However, Performance is an indicator. Performance is an output in terms of quality and level achieved by each employee after working with reference to the workload or tasks of each individual who has been entrusted and what output has been done or not done which is received by individuals or groups of people in an organization (Swedana, 2023).

RESEARCH METHODS

This research was conducted at UD Industri Tahu Tiga “S” Prima Kota Batu located on Jl. Wukir Gg Temas Village/Sisir Alternative, Batu City, East Java. This research was conducted using a qualitative research type that is descriptive and uses in-depth analysis. The sampling method in this case is the informant or resource person, namely *Purposive sampling*. This Purposive sampling method is based on the criteria determined by the researcher. The data collection method used in field research is primary data with interview methods, documentation and observation of business owners and employees of UD Industri Tahu Tiga "S" Prima Kota Batu. Library research in the form of secondary data Data collection from other sources, such as literature studies, journal articles related to the case to be studied. Data is collected based on the results observation, documentation, literature study and in-depth interviews (Fitri, 2024). Triangulation methods are used to strengthen the validity of data by collecting data from various sources, such as user interviews, direct observation, and document analysis.

RESULTS AND DISCUSSION

Implementation of Occupational Safety and Health (K3) on Employee Performance Efficiency at UD Industri Tahu Tiga “S” Prima, Batu City

The implementation of occupational safety and health (K3) standards is very important to protect workers from the risk of accidents and occupational diseases. However, its implementation is still very low, many employees do not use personal protective equipment (PPE) while working and ignore the risk of work accidents. At the tofu production stage, there is definitely the potential for work accidents such as in the grinding, boiling, filtering, molding, cutting, and frying of soybeans that need to be considered by the company so that employee safety and health can be met and can provide a sense of comfort and security when employees work . The reason for the current lack of implementation of Occupational Safety and Health (K3) is because there are several indicators that influence it, such as incomplete personal protective equipment, an uncomfortable work environment, use of work equipment, and lighting in the work environment. To improve employee work efficiency at UD Industri Tahu Tiga "S" Prima Kota Batu, company leaders can implement Occupational Safety and Health (K3) in accordance with the provisions of the *standard operating procedure* (SOP) and increase employee awareness of the importance of implementing K3 to maintain safety while working. The implementation of Occupational Safety and Health (K3) is very important to create a safe and efficient work environment.

The results of the interview on November 15, 2024 with Mr. " S" and Mr. "R" as employees regarding the importance of implementing occupational safety and health (K3) at UD Industri Tahu Tiga "S" Prima Kota Batu . It is directly seen that the implementation of K3 is very important for employee performance in improving employee welfare, employee safety must be considered from work equipment, materials and processing processes, the work environment must be maintained so as not to cause accidents for employees, from the health aspect, attention must be paid to the physical, mental, and emotional stability of employees which can trigger health at work. By paying attention to employee safety and health, it can trigger the work efficiency of UD Industri Tahu Tiga "S" Prima Kota Batu employees. Implementation of safety and Occupational health (K3) is still not optimal in its application . UD Industri Tahu Tiga “S” Prima Batu City has not implemented Occupational Safety and Health which involves in-depth risk analysis to find potential hazards and threats to workers. Its application is still very low, many

employees do not use personal protective equipment (PPE) while working and ignore the risk of work accidents. In the tofu production stage, there is definitely the potential for work accidents such as in the soybean grinding, boiling, filtering, printing, cutting, and frying sections that need to be considered by the company so that employee safety and health can be met and can provide a sense of comfort and security when employees work.

Factors of Implementation of Occupational Safety and Health (K3) on Employee Performance Efficiency at UD Industri Tahu Tiga “S” Prima, Batu City

There are several inhibiting and supporting factors at UD Industri Tahu Tiga “S” Prima Kota Batu so that its implementation is not optimal. The following are the results of an interview on November 16, 2024 with Mr. “S” and Mr. “R” that the inhibiting factor is that employees still have a low understanding of K3 policies, indicated by not complying with existing regulations, such as still using personal protective equipment while working. For supporting factors at UD Industri Tahu Tiga “S” Prima Kota Batu, only a few supporting factors such as the availability of work equipment maintenance, and cleanliness of the work environment are considered. The results of this study are in accordance with research conducted by Sulistyowati, D. A., and Susetiyono (2023), Nasution *et al* (2023), and Pramesti *et al* (2023) also analyzed the supporting and inhibiting factors for the implementation of occupational safety and health (K3).

On the other hand, other supporting factors are the Occupational Safety and Health (K3) Policy which is a benchmark for increasing understanding of Occupational Safety and Health (K3), the government has appealed to every company to implement the Occupational Safety and Health (K3) regulations. This is intended so that employees are safe and comfortable while working. as regulated in PP No. 50 of 2012 concerning the Implementation of the Occupational Safety and Health Management System. The K3 training factor is also a supporting factor for occupational safety and health (K3), Based on the results of research at UD Industri Tahu Tiga "S" Prima Kota Batu, employees have never received training related to K3. This is different from research conducted by Fadhilah *et al* (2024) which suggests that workers receive training on K3. Research shows that the higher the knowledge, the better the behavior in using Personal Protective Equipment (PPE) .

Efforts to implement occupational safety and health (K3) are also one of the supporting factors. UD Industri Tahu Tiga “S” Prima in Batu City has made several efforts made by the owner to achieve the target of occupational safety and health (K3). However, these efforts have not been optimal as expected due to the lack of commitment from employees in their implementation. Employees still underestimate the risk of accidents and tend to ignore the use of Personal Protective Equipment (PPE). The results of this study are also in line with research conducted (Kusumasmoro, 2016) at PT Ferron Par Pharmaceuticals regarding SOPs that have been fulfilled in accordance with existing procedures in the company, have been recorded in PROTAP (Permanent Procedure). This means that research conducted by Kusumasmoro (2016) that all SOPs in K3 must be implemented, this is to facilitate all activities that meet the SOP, this is not in line with research conducted at UD Industri Tahu Tiga “S” Prima in Batu City. The efforts made have not been maximized in implementing K3.

Inhibiting factors include the lack of individual understanding of K3, this requires immediate solutions to these inhibiting factors so that the company does not experience difficulties in implementing Occupational Safety and Health (K3) at UD Industri Tahu Tiga “S” Prima Kota Batu, the low understanding of each worker regarding K3 policies is an obstacle in implementing Occupational Safety and Health (K3). Lack of understanding of potential hazards can result in accidents, which have an impact on

workers and companies, because it can reduce efficiency in tofu production. Low understanding of K3 policies is characterized by not complying with existing regulations, such as still being hesitant to use personal protective equipment while working.

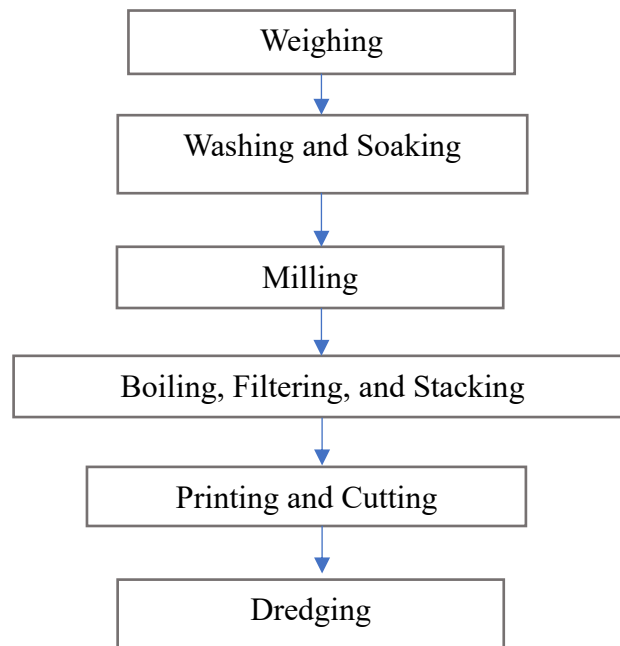


Figure 1. Production Process Flow at UD Industri Tahu Tiga “S” Prima, Batu City
Source: Secondary Data, 2024

From Figure 1 above, employees carry out the initial process of weighing to frying, and this requires health protection. However, on the other hand, the obstacle is the lack of awareness of occupational safety and health (K3), at UD Industri Tahu Tiga “S” Prima Kota Batu, employee knowledge is still limited regarding K3 and other procedures related to occupational safety and health (K3), therefore it is one of the inhibiting factors in the implementation of Occupational Safety and Health (K3). Workers do not yet have basic knowledge about the importance of occupational safety. Lack of focus while working or a sense of security without using complete Personal Protective Equipment (PPE) increases the risk of accidents. There is a feeling of discomfort, awkwardness, and it feels disturbing when wearing personal protective equipment in the work environment. This was also conveyed by research according to (Yenni, 2017) The results of employee behavior analysis show that there is still minimal employee awareness of the importance of using Personal Protective Equipment (PPE), as well as feelings of discomfort, dislike, burden, and disturbance when wearing personal protective equipment in the workplace.

At UD Industri Tahu Tiga “S” Prima in Batu City, each worker's low understanding of the Occupational Safety and Health (K3) policy is an obstacle in implementing K3. Lack of understanding of potential hazards can result in accidents, which have an impact on workers and the company, because it can reduce efficiency in tofu production. Low understanding of the Occupational Safety and Health (K3) policy is characterized by not complying with existing regulations, such as still being hesitant to use personal protective equipment while working. Lack of awareness of Occupational Safety and Health (K3), at UD Industri Tahu Tiga “S” Prima in Batu City, employee knowledge is still limited regarding K3 and other procedures related to K3, therefore it is one of the inhibiting factors in implementing the implementation of occupational safety and health (K3). Equipment that is no longer effective with the age of the equipment that has been around for a long time. Such as tools for grinding soybeans, stoves for cooking soybean porridge,

pans for printing tofu, and steam boilers. Which must be checked regularly to minimize the potential for accidents. In this study, equipment checks have been carried out but have not been carried out routinely and are still not optimal in their implementation.

CONCLUSION

The implementation of Occupational Safety and Health (K3) towards employee performance efficiency at UD Industri Tahu Tiga “S” Prima, Batu City has not been implemented optimally because it has not fully followed the national Occupational Safety and Health (K3) standards that have been regulated in government policy. The supporting factors in this study are occupational safety and health (K3) policies, Occupational Safety and Health (K3) training, and efforts to implement Occupational Safety and Health (K3). The inhibiting factors in this study were individual understanding of occupational safety and health (K3), lack of employee awareness of occupational safety and health (K3), and lack of attention to work equipment.

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