

## Analysis of Lack of Work Planning: A Case Study of High Work Accidents at PT Indonesia Morowali Industrial Park

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ARTICLE INFO	Abstract
<p><b>Article History:</b>            Submitted:            24 Maret 2025</p> <p>Accepted:            08 April 2025</p>	<p>This study aims to identify various errors that contribute to the failure of human resource management in planning worker safety in a company, which results in a hazardous working environment for employees. Additionally, this study focuses on presenting strategies in the form of solutions that can be applied to address these issues within the context of human resource management. The method used in this study is a qualitative approach, which presents descriptive theories related to the problem, supported by accurate, up-to-date data, and various literature reviews. The population studied consists of employees who have been affected by hazardous working conditions in companies due to management errors in managing the company, which ultimately resulted in losses and triggered a lack of safety for workers, with 25 accident cases resulting in 39 deaths, 82 injuries, and 40 complaints of dizziness. The results of this study will consist of an analysis of corporate management failures and effective strategies to be implemented in corporate management planning to reduce the risk of hazardous environments for workers or employees in a company.</p>
<p><b>Keywords:</b>            Work Planning; Employee Safety; Work Environment; Human Resource Management</p>	
	Abstraks
<p><b>Kata Kunci:</b>            Perencanaan Kerja; Keselamatan Karyawan; Lingkungan Kerja; Manajemen Sumber Daya Manusia</p>	<p>Penelitian ini bertujuan untuk mengidentifikasi berbagai kesalahan yang berkontribusi terhadap terjadinya kegagalan manajemen sumber daya manusia dalam membuat perencanaan penjaminan keselamatan para pekerja di suatu perusahaan, yang berdampak dalam memberikan lingkungan kerja yang bahaya bagi para karyawan. Selain itu, penelitian ini juga berfokus pada penyajian strategi berupa solusi yang dapat diterapkan untuk mengatasi permasalahan ini dalam konteks manajemen sumber daya manusia. Metode yang digunakan dalam penelitian ini adalah metode kualitatif, yang menyajikan teori-teori deskriptif yang memiliki hubungan dengan permasalahan, dalam penyajiannya juga didukung oleh data akurat, terkini, serta berbagai kajian pustaka. Populasi yang menjadi objek penelitian adalah para karyawan yang mengalami dampak bahaya dari lingkungan kerja dalam perusahaan akibat kesalahan manajemen dalam mengelola perusahaan, yang pada akhirnya menyebabkan kerugian dan memicu</p>
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	tidak adanya keamanan bagi pekerja dalam bekerja dengan jumlah kasus kecelakaan sebanyak 25 kasus yang mengakibatkan 39 orang meninggal, 82 orang korban terluka, dan 40 orang mengeluh gejala pusing. Hasil penelitian ini akan berupa analisis terhadap kegagalan manajemen perusahaan serta strategi yang efektif untuk diterapkan dalam perencanaan pengelolaan perusahaan guna mengurangi risiko terjadinya lingkungan bahaya bagi pekerja ataupun karyawan di suatu perusahaan.
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## INTRODUCTION

Effective Human Resource Management (HRM) is a key element in creating a safe and productive work environment. HRM will ensure that all company operational activities run smoothly and under control. Therefore, HRM will carry out work planning in advance which includes the number of workers needed, equipment and supplies that will be used during operational activities, as well as related to the division of tasks and also working time in order to create a balance between work and individual performance levels. Work planning is a strategic process in managing the workforce that aims to create a balance between company needs and employee welfare. The result of work planning is a result that ensures that employee continuity not only maintains the company's productivity level but also ensures employees can enjoy their work comfortably and safely (Priyatono, 2019).

Employees who feel comfortable and safe at work will be more productive in completing their duties in accordance with the field in which they work (Rahmi et al., 2019). However, when workers get various unrest both due to lack of work safety guarantees and ineffective division of tasks and work time, it can cause employees to experience fatigue and can even trigger accidents at work (Agus Yudha Prawira Adistana et al., 2018). This problem occurs in one of the companies in Indonesia, PT Indonesia Morowali Industrial Park (IMIP) (Nanang, 2025). This company is a company that manages a nickel-based industrial area with the longest industrial chain in the world whose main products are nickel, stainless steel and carbon steel. The company not only recruits employees from the local community but also recruits employees from foreign countries. The company applies this to get various ideas, innovations and different perspectives to get the best decision. Of

course, this has been planned in advance between production management and Human Resources management. However, it turns out that the planning carried out is still not perfect, which directly contributes to the high number of work accidents. One of the main causes identified was worker fatigue due to long working hours and minimal rest time. Many workers in the region reportedly work up to 15 hours per day without days off, which increases the risk of accidents due to decreased focus and stamina (Litha, 2025). This shows that workforce planning that does not consider safety aspects can have a negative impact on workers' welfare (Waititu et al., 2017).

The lack of strict regulations in regulating working hours and supervising working conditions is a major challenge in HRM planning in the Morowali Industrial area (Dhewy, 2025). Excessive focus on productivity without regard to the balance between workload and worker health creates high-risk conditions. In addition, communication barriers between foreign workers and local employees also exacerbate the situation, as miscommunication can hinder the effective implementation of safety procedures (Kamal Bahrain et al., 2023). Thus, weaknesses in HRM planning not only impact the performance of individual workers, but also increase the overall potential for accidents (Suhendra, 2025).

This research aims to analyze how the lack of HRM planning contributes to the high number of workplace accidents in the Morowali Industrial area. Using a qualitative approach, this research will explore the factors that lead to weak workforce planning, its impact on workplace safety, and the solutions that can be applied to improve the HRM system to be more oriented towards worker safety

and welfare. Through this research, it is hoped that companies and stakeholders can understand the importance of workforce planning that is not only

oriented towards productivity, but also on the safety and health aspects of workers (Industrial, 2024)

## METHOD

This research was conducted by collecting data from various written sources through the literature study method. This technique involves reviewing books, journals, documents, and reports relevant to the research topic (Chigbu et al., 2023). To analyze the cases discussed, the approach used is a literature study combined with qualitative research methods. This approach aims to understand various phenomena related to the experiences of research subjects, including aspects of behavior, perception, and motivation (Queirós et al., 2017).

This research was conducted in depth by applying a qualitative descriptive approach, which emphasizes the use of words and language in a natural context and based on systematic scientific methods (FUADDAH & FRIDAYNE, 2023).

## RESULTS

Based on the results of a survey conducted by the Federation of Mining and Energy of the Confederation of Indonesian Trade Unions (FPE KSBSI), several main factors were found that caused the high number of work accidents in the Morowali industrial area, Central Sulawesi, one of which was very long working hours, which led to physical fatigue of workers (Tuk Indonesia, 2025). At IMIP, the average worker works about 56 hours per week, or more than 225 hours per month, which is far beyond the standard of healthy working hours. This fatigue has the potential to reduce workers' vigilance, increasing the possibility of work accidents (Sarjan Lahay, 2024). In addition to the problem of fatigue, the survey also highlighted the lack of effective implementation of an effective occupational safety and health (K3) culture at IMIP. The weak implementation of K3 occurs due to inadequate supervision from the management and a less harmonious relationship between local workers and foreign workers (TKA) (Aryo Bhawono, 2025). This worsens the condition and adds to the difficulties in carrying out the work safety procedures that have been established. Another factor that worsens work safety in this area is the inadequacy of personal protective equipment (PPE). Although companies provide PPE for workers, survey results show that the use of PPE is often not in accordance with applicable safety regulations. Some workers also feel uncomfortable with the

existing PPE, so they are reluctant to use it properly (Novianto, 2015). This risks increasing work accidents that could have been prevented with better protection.

In addition to problems related to PPE and fatigue, company policies that prioritize nickel production rather than worker safety also contribute to the high accident rate (Quiroz et al., 2023). With a strong focus on increasing production, workers' working hours become very long, without considering the potential impact on safety (Ramadani, 2021). These prioritized productions often neglect worker safety, and tired physical conditions and the pressure to meet production targets increase the likelihood of accidents. The survey also showed that most workers at IMIP do not have an educational background relevant to the industrial world, such as engineering or occupational safety. Many workers have educational backgrounds such as teacher training, medical care, or other fields that are not directly related to safety in the workplace (Lahay & Dedi, 2024). This indicates that many workers do not have sufficient understanding of the importance of safety and OSH procedures that must be implemented in an industrial environment. Therefore, despite training efforts regarding OSH, workers' understanding is still very limited and increases the risk of accidents.

While the company has made several efforts to improve safety, such as internal and external training and regular safety meetings, the survey shows that there are still many areas that need improvement. The system of supervision and implementation of occupational safety procedures needs to be improved, and these improvements must cover all aspects, from company policies to more effective supervision and training for workers (Susilawati et al., 2023). The government must also be more active in supervising the implementation of occupational safety standards in this industry so that work accidents can be minimized (Bagaskara, 2025).

In addition to challenges related to fatigue, personal protective equipment (PPE), and company policies, misunderstandings between local workers and foreign workers (TKA) are also one of the factors that worsen occupational safety in the Morowali industrial estate (Pranadita et al.,

2020) . This communication barrier generally occurs due to differences in culture, language, and understanding of work safety procedures. Local workers often feel neglected or undervalued by foreign workers, hindering effective cooperation in implementing safety standards. In emergency conditions or high-risk work, this lack of understanding can slow down the necessary response and increase the risk of accidents (Maryanto, 2022). The lack of clear lines of communication and the lack of cross-cultural understanding also exacerbates the situation, creating a less conducive work environment. In addition, weak supervision from management makes this communication problem even more difficult to overcome, thus affecting the effectiveness of implementing work safety in the field (Prameswari, 2023).

Overall, while there have been some efforts that have been made by imip and companies operating in the region to improve occupational safety, many fundamental issues still need to be addressed. Too much focus on production without paying attention to workers' welfare, excessive working hours, insufficient ppe, and lack of understanding of osh among workers must be addressed immediately. Companies and governments need to make major changes so that occupational safety becomes a top priority, which in turn will reduce the number of frequent work accidents (SALMAWATI ET AL., 2020).

## DISCUSSION

In general, fatigue and work accidents are caused by two factors: human and environmental. The human factor is the unsafe actions of humans such as deliberately violating the required work safety regulations, the lack of skill of the workers themselves. While from environmental factors, namely the unsafe condition of the work environment which involves, among others, equipment or machinery (Riyan et al., 2023) . A good company is a company that really takes care of the safety and health of its employees by making rules about occupational safety and health that are implemented by all employees and company leaders. Here are some strategies that the Human Resources (HR) department can implement to overcome the impact of fatigue and improve work safety in the company.

### 1. Balanced Workload Management

Workload is the capacity of work that is imposed on labor or employees either physically or mentally and is their responsibility. Every job

is a burden for the doer and each workforce has its own ability to cope with its workload as a workload that can be in the form of physical, mental, and social burdens. Workload is a situation where many or few tasks given to the workforce have an influence on employee performance. When task demands are low, employees have the ability to carry out tasks easily with low workload and performance remains at an optimal level (Mahawati et al., 2021).

Based on an ergonomic point of view, every workload obtained by a person must be appropriate and balanced both on physical abilities, cognitive abilities, and the limitations of humans who receive these loads (Mahawati et al., 2021) . A very excessive workload will cause an unfavorable impact on the workforce in general, which will cause fatigue both physically and mentally and will trigger emotional reactions such as headaches, indigestion, and irritability (Jodie Firjatullah et al., 2023).

Unbalanced workload is one of the main factors causing fatigue. Therefore, companies need to establish a fair distribution of tasks and pay attention to the physical and mental limits of workers. Organizing work schedules in accordance with labor regulations can help reduce the level of fatigue experienced by workers (Wardhana & Tejamaya, 2024) . In addition, providing adequate rest time is also very important so that workers are able to recover their energy. A work rotation system can be implemented to prevent workers from continuously performing strenuous tasks, and to ensure that workers are not over-exploited (Dwitha Ramdhani & Soraya, 2024).

### 2. Implementation of Flexible Working Hours

Flexible working hour arrangements are one of the many work arrangements used in many organizations. According to (Kumar et al., 2023), these work arrangements are very common. Flexible working hours are the answer to the various challenges faced by the workforce or employees who work to get out of various work pressures, fatigue, and conflicts between work and family. People who are allowed to choose what time they can start and finish their work tend to be more satisfied and comfortable with their work.

Working hours that are too long can increase workers' fatigue levels. Therefore, a flexible working hours policy can be an effective solution

in increasing labor satisfaction (Priatista, 2025). Reducing excessive overtime hours and only applying them in urgent situations is a step that can be taken by companies. In addition, a more humanized alternating or shift work system can help workers in managing work-life balance. Adopting a work system that allows workers to get additional rest time after working for a long duration can also be one way to reduce the risk of fatigue.

### **3. Improving Occupational Safety and Employee Training**

Occupational safety according to (Dos Santos, 2017) is the protection of employees from injuries caused by work-related accidents. Occupational safety is also related to machinery, work tools, materials, and processing processes, work platforms and work environments as well as how to do work and production processes. Occupational safety is intended to provide protection to labor, which involves safety, health, maintenance of work morale, and treatment according to human dignity.

#### **4. Employee training**

is a process that aims to improve the skills, knowledge, and competence of the workforce so that they can work more effectively and efficiently in carrying out their duties. According to ( , training is an effort designed by the organization to provide employees with the skills needed in **current** or future jobs. This training is an important part of human resource development (HR) to improve productivity and work quality.

Improving work safety should be a top priority in the mining industry. With proper training, workers can better understand the importance of safety and how to avoid fatigue accidents (Wijaya et al., 2024) . Conducting regular training on Occupational Safety and Health (OHS) is essential to ensure that workers understand emergency procedures in the workplace. In addition, providing health facilities in the work area can help detect and treat signs of excessive fatigue more quickly (Priatista, 2025) . Encouraging a work culture that places safety as a top priority will also help reduce the number of accidents.

### **5. Performance Management and Human Resource Evaluation**

Effective performance management and human

resource (HR) evaluation are essential in creating a safe and productive work environment. Structured performance evaluations help companies identify risk factors in daily operations and assess the extent to which employees comply with work safety standards. According to (Alfafa, 2024) , implementing an evaluation system that includes safety aspects, such as compliance with work procedures and the use of personal protective equipment (PPE), can reduce the potential for work accidents. In addition, safety-based performance appraisals can encourage a more disciplined and responsible work culture, where employees understand the importance of implementing safe work procedures.

In addition to performance evaluation, companies also need to conduct regular safety training to improve employees' understanding and skills in dealing with work risks. (Wijaya et al., 2024) stated that this training includes emergency evacuation procedures, the use of safety equipment, and accident prevention strategies. With a regular training program, employees will be better prepared to deal with emergency situations and be able to work more safely. In addition, companies can also utilize technology in work safety monitoring, such as automatic sensor systems or work environment monitoring devices, to identify potential hazards more quickly. With the combination of good performance management and safety-focused HR evaluation, companies can create a safer, more productive and sustainable work environment.

### **CONCLUSIONS**

Lack of work planning in human resource management (HRM) is one of the main factors causing the high number of work accidents in the Morowali industrial area. The company, PT Indonesia Morowali Industrial Park (IMIP), has failed to balance productivity with worker welfare. Excessively long working hours without adequate rest cause fatigue, which contributes to the risk of accidents. In addition, weak regulation and supervision of the implementation of occupational safety and health (OHS) exacerbate the situation. Communication barriers between foreign and local workers also hinder the effective implementation of safety procedures, increasing the risk of workplace accidents.

To overcome these problems, strategies such as balanced workload management, flexible working hours, safety improvement through

training, and safety-based performance evaluation are needed. Better workforce management will help reduce worker fatigue levels and increase their awareness of the importance of safety procedures. In addition, the government's role in overseeing the implementation of safety standards in the industry should be strengthened so that policies that are more oriented towards workers' welfare can be optimally implemented. With improvements in the HRM system, companies can create a safer, more productive and sustainable work environment for workers.

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