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Seen Safety Performance from the Perspective of Safety Plan, Safety Behavior, and Safety Culture through Management Control as a Moderating Variable: A Conceptual Framework

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Abstract

This research aims seen safety performance from the perspective of safety plan, safety behavior, and safety culture through management control as a moderating variable, a conceptual framework. The research method used is a qualitative analysis method from the perspective of the conceptual framework. Based on the results of the literature review obtained in this study, there is a paradigm that is developing today that it seems as if work safety is only for the protection of labor safety alone, while the occupational safety factor is also very much needed by companies to maintain investment sustainability.

Keywords
safety performance; safety plan; safety behavior; safety culture; management control

I. Introduction

Increasingly competitive industrial competition and the current globalization of trade have an impact on very fierce competition in all aspects, this requires companies to further optimize all their resources to maintain their business continuity, the 4th industrial revolution is a combination of technology by integrating technological resources, human machines and, providing a major change in the sector. The use of technology, machines, and humans has risks and dangers that can cause work accidents so there is a decrease in efficiency and productivity, which has negative implications for the organization as a whole (Singh and Misra 2021). Organization must have a goal to be achieved by the organizational members (Niati et al., 2021). The success of leadership is partly determined by the ability of leaders to develop their organizational culture. (Arif, 2019).

Accidents large and small are events that are not desired by all industry players, the accidents referred to are like fires or explosions caused by uncontrollable processes. In addition, accidents at one installation have a domino effect that can spread to other installations resulting in a chain of accidents resulting in a more severe condition the impact of major accidents on the chemical industry can cause many losses both to company property, casualties, environmental pollution, and ecological problems (Chen et al., 2020)

In previous studies, it was explained that planning, design, and procurement greatly affect safety performance, this is different from research that says that technological and human failures are the cause of accidents due to failure to predict allipossibilities, attitudes or commonly referred to as safety behavior have a positive effect on safety performance, but some argue that employee participation in health and safety issues, as well as safe behavior in the workplace, depends on management, a safety culture positively affects safety performance this is different from the results of other researchers who stated that the role of strong safety culture moderation on the influence of the adverse

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impact of project complexity on safety performance by safety management (Trinh and Feng, 2020).

This research aims seen safety performance from the perspective of safety plan, safety behavior, and safety culture through management control as a moderating variable, a conceptual framework.

II. Review of Literature

2.1 Safety Performance

Safety issues in an organization are placed as a very big problem, this happens along with capacity building, accountability, and changes to regulations and environmental norms. Companies face stricter legal challenges so they need to adjust concrete measures to improve safety performance (Eyer, 2018).

The increase in company performance is of course influenced by safety performance, because according to research that there is an established relationship between the company's work culture in terms of company performance and safety performance, in addition to that there is a close relationship between injuries and work accidents that result in the loss of human life which negatively affects organizational productivity, profit and brand image. So, to reduce work injuries, companies need to develop a safety management system and integrate it into policies, strategies, and processes so that the system built is in line with the company's vision and mission and can be run by the goals of developing the system.

An established relationship was found between the company's work-related culture in terms of company performance or safety performance, there is a close relationship between work injuries and accidents that result in the loss of human life which negatively affects organizational productivity, profit, and brand image. To reduce work injuries, the company has developed a safety management system and integrated it into policies, strategies, and processes.

Safety performance is an illustration of the quality of work related to safety, besides that safety performance is an important indicator of organizationalitransparency and brand values because safety is part of the occupational and environmental safety management system.

2.2 Safety Plan

Safety planning is a good start coming from project development, minimizing costs, and reducing time. Occupational safety and health planning is a basic instrument for the management of an identification activity and if appropriate, then risk assessment and preventive step planning are the practices that can reduce the potential for accidents and increase worker productivity (Gurmu, 2019).

The occupational safety plan should be considered as a real instrument in the workplace to carry out work safely and safely and all information contained in this document should contain about planning, organizing, and controlling each of the activities from the point of view of safety and health in the workplace. Therefore, we face an alarming reality and point out that the lack of effectiveness of safety planning can be a decisive factor in the realization of a worker safety risk.

2.3 Safety Behavior

Safety behavior is classified into two main categories: safety compliance and safety participation. The degree of compliance with safety is closely related to measures regarding safety, such as compliance with safety regulations and compliance with safety instructions. Safety participation is a safety-related behavior that is voluntary, such as a willingness to support colleagues, be regularly involved in safety training programs, and make safety recommendations (Amponsah-Tawaih and Adu, 2016).

Behavior is a person's actual activity about other individuals and the world around them based on corporate policy. Safety behavior is an activity carried out by individuals as a form related to protection. Safety behavior is an important factor in safety performance that has many benefits over other factors, such as injury and death.

Safety behavior is inseparable from safety performance and is influenced by various processes. Safety behavior refers to the safety activities of employees in the workplace expressed by the actions of employees to establish and improve safety in the work environment.

Workers who have safety behaviors are workers who voluntarily pay attention to their safety, and the safety of colleagues, comply with safety regulations in the workplace, provide advice to reduce potential risks in the workplace, and always wear safety equipment.

2.4 Safety Culture

Since the Chornobyl accident in 1986, the concept of safety culture has been a tremendous concern, in any investigation into work accidents safety culture has become a very concerning issue. The safety culture in an organization affects the organization's productivity and business competition with competitors (Kartikawati and Djunaidi, 2018).

Defining the safety culture into common values, commitments, beliefs, communication, behaviors, and habits of the members of the organization, has a very strong impact on safety behavior and safety performance. Top management's commitment to safety and their support of safety systems can help companies achieve greater safety benchmarks.

Physical condition, behavior. procedures, management, competence, and collaboration are important components of the occupational safety culture, defines safety culture as the attitudes, values, assumptions of perceptions, and habits of relevant members of the organization to deal with safety risks, and to measure the occupational safety culture it is necessary to analyze the policies made. In addition to leadership style, participation in the implementation of occupational safety and communication are characteristics of the safety culture.

2.5 Management Control

In realizing all the goals that an organization wants to achieve, control from management is needed, this is done to ensure that employees have consistent behavior with the organization's strategy (Feder and Weißenberger, 2021). In addition, the purpose of management control is to motivate employees to have behaviors that are in line with the goals set by the organization.

Management can assess the effectiveness of safety performance through control over the implementation of safety regulations, leadership, safety planning, safety compliance, performance measurement, risk assessment, safety inspection, and safety culture. The control function in a company can be carried out starting from the management level to the top management level as stakeholders in the company using a management control system.

Internal and external factors must be controlled to influence safety performance therefore requires an effective safety management strategy to reduce accident rates through optimization of resources, practices, and structures. Safety management systems can affect organizational systems, working groups, and individual behaviour.

III. Research Method

Research methods are steps taken by researchers to collect data or information to be processed and analyzed scientifically (Octiva et al., 2018; Pandiangan, 2018). In addition, the research method is also a procedure, procedure or scientific steps used to obtain data as a fulfillment of research objectives. This means that this activity is a systematic investigation of a phenomenon (Asyraini et al., 2022; Octiva, 2018; Pandiangan, 2015).

The research method used is a qualitative analysis method from the perspective of the conceptual framework. Qualitative analysis uses subjective judgment based on "soft" or non-quantifiable data (Jibril et al., 2022; Pandiangan et al., 2018; Pandiangan, 2022). Qualitative analysis deals with intangible and inexact information that can be difficult to collect and measure. Machines struggle to conduct qualitative analysis as intangibles can't be defined by numeric values (Octiva et al., 2021; Pandiangan et al., 2021; Pandia et al., 2018). Conceptual framework includes one or more formal theories (in part or whole) as well as other concepts and empirical findings from the literature. It is used to show relationships among these ideas and how they relate to the research study (Pandiangan et al., 2022; Tobing et al., 2018).

IV. Result and Discussion

Based on the results of the literature review obtained in this study, there is a paradigm that is developing today that it seems as if work safety is only for the protection of labor safety alone, while the occupational safety factor is also very much needed by companies to maintain investment sustainability.

Materially, losses due to work accidents that affect workers are only a small part of business losses, but when viewed from the business operational side, losses due to work accidents are very large, ranging from the cessation of the production process to damage to high-value property, not even a few work accidents that cause the company to close and cause environmental or natural damage.

The characteristics of the chemical industry that have a high risk of danger to potential accidents require the existence of serious safety planning, therefore the involvement of management in carrying out control certainly determines a safety plan prepared by a company, the good and bad of a plan is very dependent on the seriousness of management in achieving the goal of improving safety performance which in the end good safety performance will impact on the overall performance of the company.

Occupational safety planning is an inseparable part of occupational safety management which will ultimately improve safety performance in the business itself, in other words, that work safety planning has a very positive effect on safety performance in a company. Therefore, work safety must be carried out from the planning, manufacturing, installation, discharging, and at the time of change. If this has been done by the company, the target of work harmony will be achieved by expectations.

In addition to equipment, environmental and cultural factors, there are very important factors in the assessment of safety performance, namely employee behavior factors, so that employee behavior can reflect a safe action in carrying out work, of course, there must be

strict involvement and control from management. management's uniqueness in shaping the behavior of employees who have a caring attitude towards safety is certainly a very important factor, without control from management, usually, employees tend to have behaviors that are less concerned about the safety of themselves and others who are in the workplace and if this happens, it will certainly greatly affect the safety performance of a company.

A company that has a high risk of work accidents due to the use of dangerous equipment and raw materials such as the chemical industry must certainly have a good workplace safety culture, creating a culture of workplace safety can not only be done by workers but also a commitment from management to create this culture. The management control function must be estimated to realize a culture of safety in the workplace, creating a culture of safety in the workplace, of course, will greatly affect the safety performance of a company organization which of course the end of all its goals is the continuity of efforts for the welfare of all parties, both workers and employers.

To realize a workplace that is free from work accidents and occupational diseases, it is necessary to have a safety culture that is rooted in every workplace, to create a culture of workplace safety requires the involvement of all parties, both workers and management. A work safety culture that has been embedded in a business activity can certainly have a very positive impact on safety performance and good safety performance will have a good impact on the sustainability of a business.

One of the safety performance indicators is a decrease or decrease in the number of work accidents, with a decrease in the number of work accidents, of course, can increase work productivity and can increase the efficiency of costs incurred due to work accidents.

In application, the role and function of planning, behavior, and safety culture are very necessary to realize the achievement of safety performance, and theoretically, the results of this research show that safety planning, safety behavior, and safety culture affect safety performance in a company.

V. Conclusion

Based on the results of the literature review obtained in this study, there is a paradigm that is developing today that it seems as if work safety is only for the protection of labor safety alone, while the occupational safety factor is also very much needed by companies to maintain investment sustainability.

To improve safety performance, this study proposes several suggestions, including:

1. Practically speaking, the role and function of management are very necessary to realize the achievement of safety performance through good safety planning efforts, efforts to change employee behavior to prioritize safety, and create a resilience resource in the workplace.
2. Theoretically, it is still necessary to conduct a lot of research that tests the factors that can affect safety performance in achieving business continuity goals.
3. The next study is that this study will be tested empirically to prove that safety planning, safety behavior, and safety culture affect safety performance through control management as moderating variables.

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