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PROACTIVE MANAGEMENT OF OCCUPATIONAL SAFETY AS PART OF A COMPANY'S SUSTAINABLE DEVELOPMENT STRATEGY – TOWARDS IMPROVING HEALTH, QUALITY OF LIFE AND IMAGE OF THE ORGANIZATION

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Purpose: The objective of this article is to examine how proactive occupational safety management can be a strategic element of sustainable development in modern enterprises. The research aims to investigate the relationship between safety culture, employee engagement, and organizational performance, especially in the context of ISO 45001 standards and corporate social responsibility.
Design/methodology/approach: The study uses a mixed approach, combining a review of national and international literature from 2019-2024 with empirical research conducted in Polish manufacturing companies. The methods include structured surveys, document analysis, and the assessment of key performance indicators (KPIs). The theoretical scope covers occupational safety, organizational behavior, sustainable development, and proactive leadership.
Findings: The findings reveal that companies promoting proactive safety behaviors-particularly among operational staff experience higher levels of reported safety climate and more frequent improvement initiatives. Structured feedback systems, leadership commitment, and internal motivation were found to be critical in fostering proactive attitudes. The research confirms that occupational safety should not be seen solely as a compliance tool but as a source of innovation, trust, and strategic advantage.
Research limitations/implications: The study is based on a sample of medium and large manufacturing companies in Poland, which may limit the generalizability of results to other sectors or regions. Future research could expand the scope to include other industries or cross-cultural comparisons.
Practical implications: The study highlights the importance of incorporating proactive occupational safety management into business strategy. It provides recommendations for improving employee engagement, feedback systems, and safety leadership. The findings can help companies develop more effective safety programs and track their impact using proactive indicators.
Social implications: A proactive occupational safety culture in an organization contributes to improved employee well-being, trust, and overall quality of life. It also strengthens the organization's reputation and is consistent with broader CSR and sustainability goals, potentially influencing industry standards and public policy.

Originality/value: The article presents a comprehensive framework linking proactive occupational safety behaviors with sustainable development. It provides new insights based on practical research, aimed at managers, decision-makers, and safety professionals.
Keywords: Proactive safety management, sustainable development, ISO 45001, safety culture.
Category of the paper: Research paper.

1. Introduction

In modern business management, occupational safety has evolved from a reactive obligation to a strategic pillar of sustainable development. Organizations increasingly recognize that ensuring a safe and healthy work environment is not only a legal and ethical imperative, but also a driver of human capital development, innovation, and long-term performance. This article analyzes the concept of proactive occupational safety management as a key element of a sustainability-oriented strategy in manufacturing companies.

The article combines original empirical research conducted between 2019 and 2024, including the results of the author's doctoral thesis, with a comprehensive review of the literature on international standards, scientific research results in the field, and industry practices. The main focus is on the integration of proactive work safety behaviors in organizations and the mechanisms that stimulate such engagement-leadership, organizational climate, internal motivation, and structured feedback systems. The research was conducted in medium-sized and large manufacturing companies, which provide a representative context for assessing the maturity of safety culture.

In response to the ISO 45001 standard, a proactive approach to management was analyzed as a means of risk prediction and well-being improvement. The article also analyzed the relationship between safety initiatives and corporate social responsibility (CSR), brand image, and competitive advantage. Particular attention was paid to the development and use of proactive indicators and key performance indicators (KPIs) as tools for assessing the effectiveness of occupational safety practices.

By emphasizing the need to move from reactive compliance to proactive value creation, this study aims to contribute to the evolving discussion on occupational safety as a dynamic, integrative, and forward-looking function of sustainable business development.

2. Sustainable development and proactive occupational safety management

The inclusion of occupational health and safety (OHS) in sustainable development strategies is becoming a key issue for modern businesses. According to the International Labour Organization (ILO), the proactive promotion of safe working conditions has a significant impact on sustainable social development (ILO, 2025). The ISO 45001:2018 standard (ISO, 2018) further reinforces the need not only for organizations to comply with the legal framework, but also to proactively manage risk through a systematic approach such as the PDCA cycle (Claro et al., 2025). In this context, OHS management is not merely a function of ensuring compliance with regulations, but a strategic tool for long-term resilience and value creation (Kubasiński, 2023).

2.1.The importance of proactivity for organizational culture and corporate values

Organizations that embed proactivity into their occupational safety strategy reflect a high degree of internal accountability, commitment, and ethical maturity at all levels of management. Rather than responding to incidents post-factum, proactive organizations engage in the anticipation of risks, continuous monitoring of processes, and preventive intervention (Patel et al., 2022). This behavior translates into a shared organizational mindset in which safety is not merely a procedure but a core cultural value.

As highlighted in ISO 45001 standard (2018), cultivating a culture of prevention and participation is central to improving occupational health and safety outcomes. Clause 5 of the standard emphasizes the leadership's role in ensuring consultation, active involvement, and communication of values that support a safety-first culture. Proactivity in this context is not limited to hazard prevention - it becomes a strategic principle that is integrated with leadership behavior, team communication, and personal responsibility.

Empirical research confirms that companies fostering such cultures report significantly fewer accidents, stronger compliance behaviors, and higher levels of employee trust and satisfaction (Proactive occupational safety..., 2023; Claro et al., 2025). These organizations create a psychologically safe environment in which employees feel empowered to report near misses, share improvement suggestions, and engage in continuous learning. As Kubasiński (2024) notes, this transparency increases internal cohesion while also reinforcing external reputation and employer branding.

Furthermore, the integration of proactivity into organizational values aligns with the Social dimension of the ESG (Environmental, Social, and Governance) agenda. The "S" in ESG demands that companies account for human capital, health, and workplace well-being. Proactive safety practices - such as near-miss reporting systems, behavioral safety observations, and regular communication of safety KPIs - are now viewed as indicators of social responsibility and ethical governance. As Wen H. (2024) and ILO (2025) point out,

this alignment is becoming not only desirable but essential for companies seeking long-term sustainability and stakeholder trust.

Ultimately, proactivity in safety is not a standalone program, but a cultural enabler that influences decision-making, strengthens values, and fosters shared responsibility. It bridges the gap between formal systems and lived organizational realities, making it an indispensable element of sustainable business development.

2.2.Stimulating factors of proactive attitudes and their organizational impact

The development of proactive attitudes in a company depends on several internal and external factors. These include leadership style, internal communication, autonomy, and clarity of responsibilities (Da Silva, Amaral, 2023). A study conducted by Kubasiński (2023) found that employees who have access to structured feedback mechanisms and opportunities for empowerment are significantly more likely to exhibit proactive behaviors in the context of work organization and safety.

The implementation of ISO 45001 (ISO, 2018) promotes proactivity by requiring organizations to consult with employees and involve them in decision-making processes related to occupational safety (Boulfoul et al., 2025). This participatory approach increases the sense of responsibility for safety performance at all levels of the organization and encourages innovation in identifying hazards. Companies that recognize and reward preventive initiatives, thereby promoting employee activity, create a positive cycle of engagement and improvement (Safety culture..., 2023; ILO, 2025).

Stimulating proactive attitudes among employees requires the implementation of organizational mechanisms that promote initiative, responsibility, and a participatory safety culture. Companies that prioritize proactive safety management typically employ several well-documented strategies, both procedural and psychological, to increase engagement and encourage continuous improvement.

One key factor is internal motivation, often reinforced through recognition systems, freedom in performing tasks, and clearly communicated expectations regarding safety performance, including occupational health and safety. Employees who feel empowered and supported are more likely to take the initiative in reporting hazards, suggesting improvements, and following preventive practices (Neal, Griffin, 2006; Kubasiński, 2023).

Leadership style also plays an important role in this regard. A transformational and servant leadership approach that emphasizes inspiration, ethical behavior, and team development has been found to significantly increase proactive employee engagement (Guldenmund, 2010; ISO, 2018). Occupational safety specialists also play an important role, serving as role models and communicating the strategic importance of proactive measures for maintaining a safe working environment.

Another important mechanism is the presence of structured reporting and feedback systems. These include anonymous safety suggestion programs, digital incident reporting tools, and regular reviews of safety performance. Research shows that when such systems are transparent and linked to organizational learning, employees perceive them as valuable tools for change rather than merely bureaucratic procedures (ILO, 2025).

Another important aspect is the organizational climate, in particular openness, support for innovation, and shared responsibility, which also correlates strongly with proactive behavior. A culture that promotes cross-functional cooperation and encourages learning from potentially dangerous situations fosters collective awareness and resilience. Companies often support this through safety days, participatory workshops, and team problem solving (Kubasiński et al., 2024).

Finally, training, instruction, and competency development programs focused on risk anticipation, root cause analysis, and behavioral safety contribute to building employee confidence and their ability to respond to potential hazards. Combined with career development paths and incentive systems, they represent a long-term investment in proactive engagement. All these factors together influence the maturity of an organization's safety culture and its ability to move from compliance-based safety management to proactive safety management.

2.3.Identification of proactivity-enhancing factors: own and literature-based findings

An integrated analysis of literature and empirical research indicates that the following factors most effectively foster proactive behavior among employees (Kubasiński, 2024; ILO, 2025):

- intrinsic motivation: individuals who perceive safety as a personal value are more inclined to act without external prompts,
- organizational climate: trust, fairness, and open communication form the psychological foundation for expressing concern,
- leadership: supportive leaders who model safe behaviors influence the entire workforce,
- reporting systems: platforms for reporting near misses and proposing improvements must be accessible and non-punitive.

These elements were identified not only in the theoretical models but also through field research conducted among employees in medium-sized manufacturing enterprises. The author's case studies reveal that proactive attitudes are particularly robust in companies where those factors coexist and are reinforced through organizational routines and culture.

Data collected from survey instruments and qualitative interviews confirm that employees in such environments are more likely to engage in risk assessments, suggest preventive or corrective actions, and actively monitor the implementation of safety protocols (Kubasiński, 2023). These observations provide strong empirical support for the thesis that proactive

behavior is not solely a function of personality traits but also a result of systemic reinforcement mechanisms.

The findings are consistent with previous studies by Wen L. (2024), who emphasized cognitive awareness and psychological readiness, and Mangler et al. (2021), who demonstrated the importance of embedded behavioral training and policy alignment. When organizations integrate these factors into their safety strategies, they build the foundation for a mature safety culture, in which proactivity becomes the norm rather than the exception.

Overall, the identification of these factors offers both diagnostic and strategic value. Diagnostically, they allow for safety culture audits and targeted interventions. Strategically, they inform leadership development, training design, and structural adjustments that collectively contribute to a resilient and forward-looking organization.

2.4.Models for evaluating the effectiveness of proactive measures

Assessing the effectiveness of proactive safety measures within an organization requires a shift away from traditional reactive indicators toward comprehensive performance indicators. Modern occupational safety frameworks increasingly rely on both leading and lagging indicators, as well as proactive indicators, to capture the full range of safety outcomes (Da Silva, Amaral, 2023).

Leading indicators and proactive indicators are predictive measures that reflect the state of preventive actions. They include the number of near-miss reports, the frequency of safety training, participation in hazard identification, and the results of internal audits (Enhancing OSH performance..., 2025). These measures serve as early warning signals and support decision-making before events occur. Outcome indicators, on the other hand, include traditional measures such as accident rates, lost time injuries (LTIs), and occupational diseases. Although they measure results, they do not provide information on causes.

Kubasiński (2023) proposed an original methodology for assessing proactive actions in the context of systemic OSH management. This method combines behavior observation, task-based risk analysis, and dynamic tracking of proactive KPIs at both the individual and organizational levels. This hybrid model enables the creation of feedback loops that reinforce the continuous improvement cycle.

According to the literature, effective safety management systems in organizations integrate both types of indicators, enabling real-time monitoring and strategic adjustment (Frontiers in Environmental Health, 2025). Organizations that adopt this approach gain greater resilience, lower risk exposure, and higher employee engagement.

Proactive assessment models often rely on visualization tools such as dashboards and heat maps that illustrate the maturity of safety in individual departments. These tools are increasingly supported by digital platforms and artificial intelligence, as highlighted in research by Wen H. (2024), which demonstrated the use of knowledge graphs to assess real-time risk prediction capabilities.

3. Methods

The research presented in this article is based on a combination of actual empirical research and a literature review conducted mainly between 2019 and 2024. A significant part of the empirical results comes from the author's doctoral thesis, which included a multi-year assessment of proactive practices in occupational safety management.

The data was collected from a sample of employees working in medium-sized and large industrial companies in Poland. These companies were selected due to their advanced implementation of occupational safety systems and their declared interest in incorporating a proactive safety strategy into their broader sustainable development policy. The organizations surveyed reflect different levels of safety culture maturity and include various levels of management and operational staff.

The literature review focused on both Polish and international sources, including scientific journals, monographs, and normative documents such as ISO 45001 (ISO, 2018). Methodological triangulation combines survey results, structured interviews, and document analysis, offering a holistic approach to understanding the dynamics and impact of proactive health and safety behaviors.

The research process was divided into three main stages:

1. Identification and classification of factors stimulating proactive attitudes in the workplace.
2. Assessment of the relationship between proactive behaviors and organizational outcomes, such as employee well-being, absenteeism, and employer image.
3. Evaluation of an original method for measuring the effectiveness of proactive actions within an OHS management system.

In order to obtain qualitative information, in-depth interviews (IDI) were conducted with OHS specialists. Quantitative data was collected using a structured questionnaire (PAPI/CAWI), and the results were analyzed using descriptive statistics to identify trends and correlations. The study covered medium and large industrial companies operating in Poland.

The conceptual basis of the study is the PDCA (Plan–Do–Check–Act) cycle used in safety systems, the proactive/reactive safety model, and the integration of OHS indicators (proactive, leading and lagging) as tools for measuring safety and strategic effectiveness.

4. Results

The results presented in this chapter are based on empirical research conducted among occupational health and safety specialists and employees at various levels from 78 selected companies. They constitute a sample of comprehensive research that formed the basis for developing a method for assessing the effectiveness of proactive measures in systematic occupational safety management. The research focused on the relationship between proactive attitudes, organizational factors, and the effectiveness of safety systems.

Respondents participating in the study provided their answers in structured interviews and questionnaires. The following key areas were assessed:

- employee awareness and initiative in reporting hazards and proposing improvements,
- effectiveness of feedback systems for reporting,
- management commitment to promoting a safety culture,
- access to resources supporting proactive behavior (training, internal campaigns, suggestion reporting systems).

The results show that over 68% of respondents actively participated in reporting potentially dangerous situations, and 61% said that their suggestions led to specific changes in procedures or technical safeguards. The most frequently cited factors motivating proactive behavior included support from supervisors, clear communication, and a transparent reward system for reported safety initiatives (Figure 1).

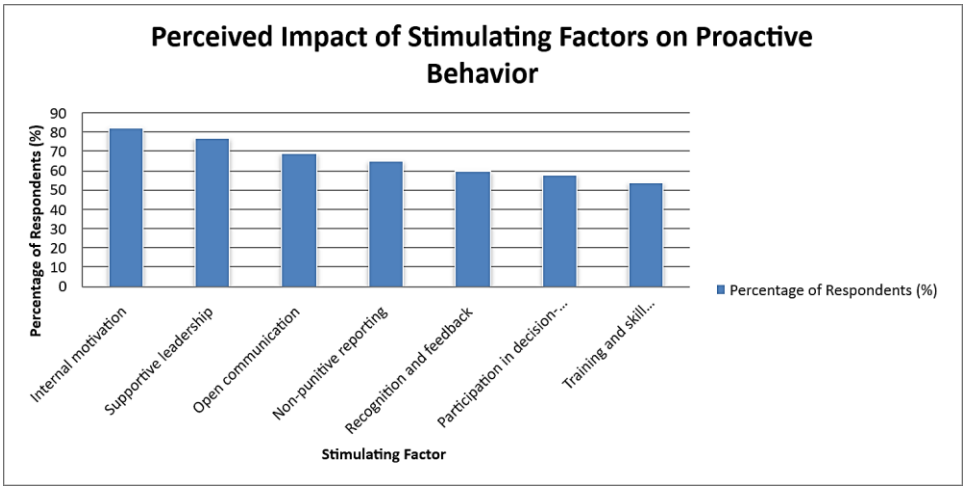

Figure 1. Factors motivating proactive behavior.

Source: own compilation.

Figure 2 illustrates the percentage of proactive engagement at different levels of the organization. The highest rate was recorded among front-line employees in companies with mature safety management systems based on ISO 45001 (ISO, 2018).

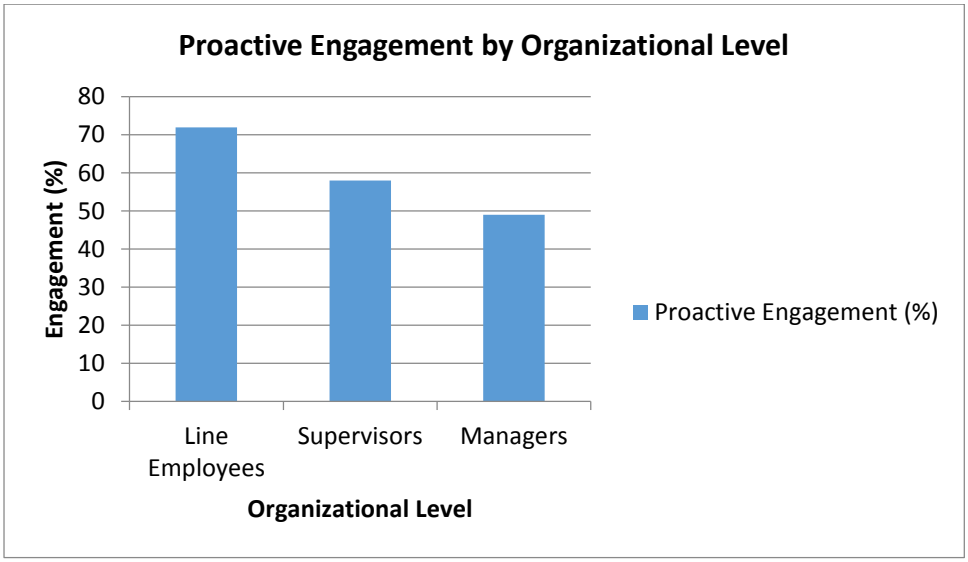

Figure 2. The percentage of proactive engagement at different levels of organization.

Source: own compilation.

This chart shows how proactive engagement decreases with the level of hierarchy, suggesting a need for integration strategies at the management level. Operational-level employees show the highest level of proactive engagement, indicating strong bottom-up commitment to safety culture.

In addition, interviews showed that in organizations that had implemented cyclical feedback systems and visual scoreboards, the number of safety suggestions was on average 35% higher than in organizations without structured systems (Figure 3).

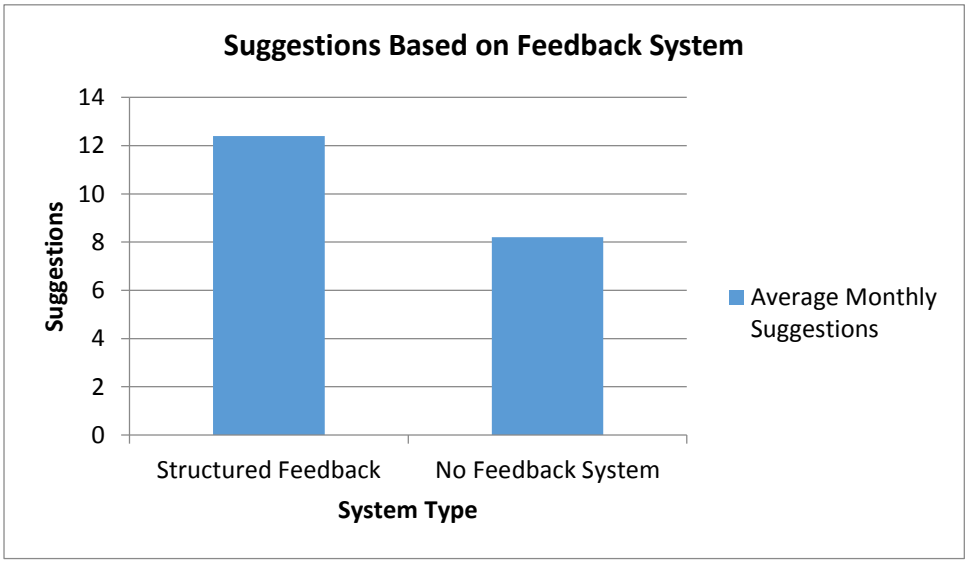

Figure 3. Safety suggestions based on the feedback system.

Source: own compilation.

The data confirm that structured suggestion collection systems significantly improve proactivity in reporting problems. Organizations with structured feedback systems report more safety suggestions from employees.

Another important finding was the high correlation (r = 0.71) between employees' perception of the safety climate and the number of proactive behaviors reported each quarter (Figure 4). This confirms that the atmosphere in an organization plays a significant role in mobilizing preventive actions.

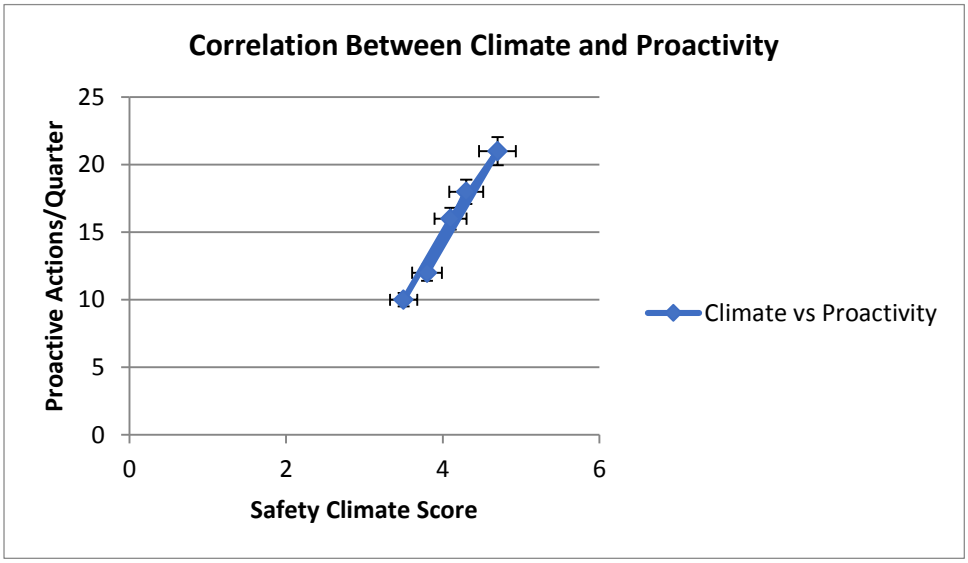

Figure 4. Correlation between safety climate and proactivity.

Source: own compilation.

A strong positive correlation can be observed, confirming the influence of the organizational climate on safety-related attitudes.

5. Discussion

The results of the study presented in Chapter 4 clearly show the importance of a proactive approach to shaping occupational safety management, especially when it is part of a broader sustainable development strategy. Quantitative data, supported by qualitative insights, indicate that companies with higher levels of proactive engagement, especially at the employee level- also report a better internal safety climate and more frequent preventive behaviors. This correlation is consistent with research findings that emphasize the importance of a preventive culture based on employee engagement and internal motivation (Neal, Griffin, 2006; Kubasiński, 2023).

The study also highlights the role of structured feedback systems and open communication mechanisms, which significantly increase the frequency of safety suggestions. These systems appear to serve both as a diagnostic tool and a catalyst for continuous improvement, as confirmed by the latest interpretations of the ISO 45001 standard (ISO, 2018).

It is important to note the differences between operational employees and management in terms of proactive engagement in safety in the companies surveyed. While operational (line) employees showed a 72% rate of proactive participation, this figure dropped significantly among middle and senior management. This result may reflect a gap between strategy and practice-a well-known problem in many hierarchical organizations (Reason, 1997). This suggests a need for targeted training and initiatives involving management to strengthen accountability for safety at all levels of management.

The discussion also covers the broader implications of a proactive approach to safety for organizational culture and social responsibility. Employees who feel empowered and have the tools to report hazards and suggest improvements contribute directly not only to reducing accidents but also to improving morale, trust in the organization, and the employer's image (Guldenmund, 2010; ILO, 2023). In this sense, occupational safety goes beyond its traditional role and becomes a strategic factor for competitiveness and sustainable development.

The limitations of the study include the relatively small number of organizations that participated and the anonymity of the entities, which limits the generalizability of the results to other sectors. Nevertheless, the patterns identified provide valuable information for practitioners and can serve as a reference point for future research in various sectors.

6. Summary and conclusions

The article analyzes the role of proactive occupational safety management as an integral part of sustainable development strategies in modern enterprises. Based on empirical data from Polish manufacturing companies and a review of the literature from 2019 to 2024, it was confirmed that an initiative-taking approach to safety significantly contributes to strengthening organizational culture, improving employee well-being, and enhancing the overall image of companies. The inclusion of ISO 45001 (ISO, 2018) standards, internal motivation, leadership, and structured feedback systems proved to be a decisive factor in promoting preventive behavior at all levels of the organization.

The results of the study argue in favor of moving away from reactive compliance to proactive value creation in occupational safety management. They also highlight the need to develop key performance indicators (KPIs) to effectively assess the effectiveness of safety initiatives. Furthermore, differences in the commitment of operational and managerial staff indicate a need for systemic adaptation and integrative leadership. The study also confirms that investing in proactive workplace safety not only supports regulatory compliance but also creates long-term value and competitive advantage.

In summary, promoting a proactive approach to workplace safety-through management involvement, feedback systems, employee motivation, and integration with sustainability strategies-delivers tangible benefits for businesses and society. These insights provide food for thought for those responsible for safety in organizations and practical applications for improving workplace safety within the framework of sustainable development.

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