



Improvements in occupational health and safety Knowledge management for all engineers

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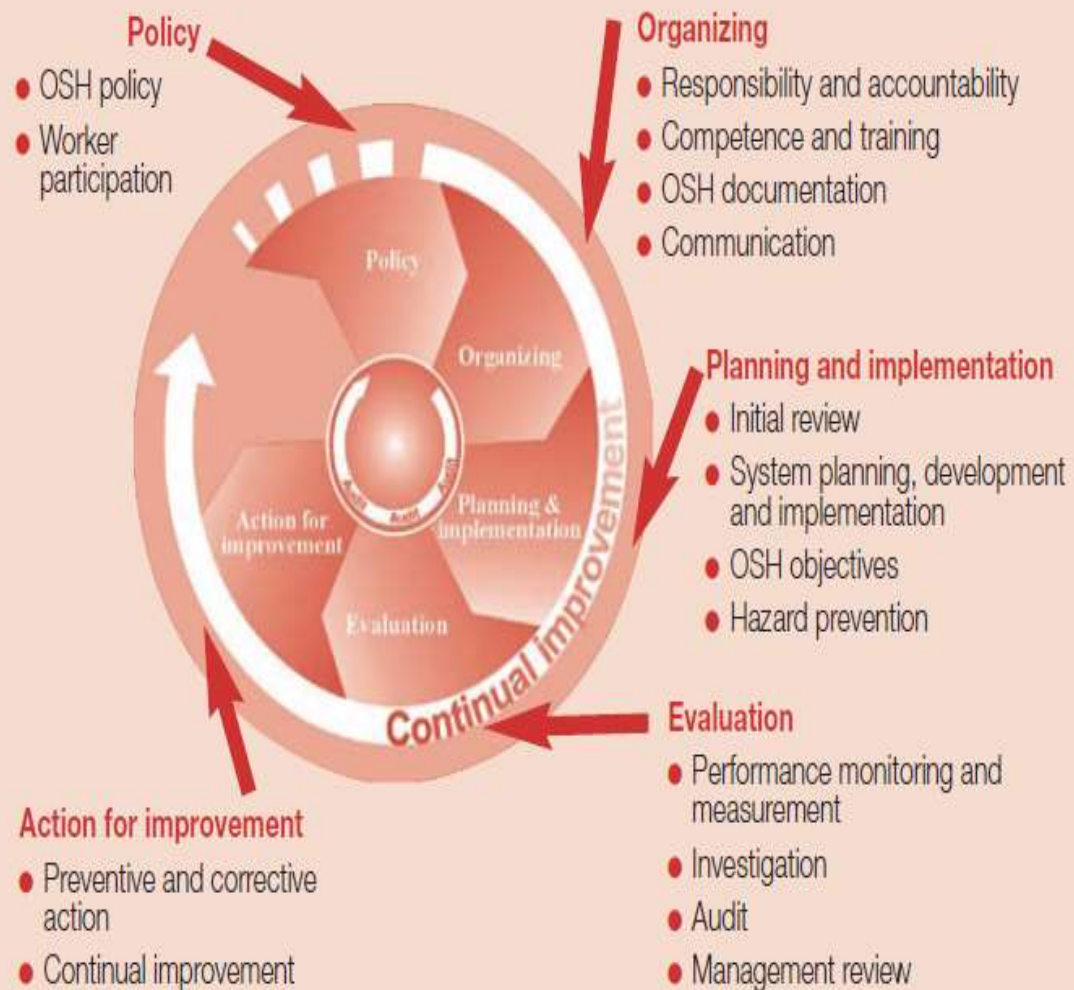
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Outline of Presentation

- Introduction
- Importance of OHS Knowledge Management
- Current Challenges in OHS Knowledge Management
- Leveraging Technology for OHS Knowledge Management
- Strategies for Improving OHS Knowledge Management
- Continuous Professional Development
- Enhancing Compliance and Accountability
- Supporting Mental Health in OHS
- Case Studies and Best Practices
- Measuring the Effectiveness of OHS Knowledge Management
- Conclusion

Introduction

- Critical for ensuring the well-being of engineers in the workplace
- Effective OHS knowledge management systems are essential for minimizing risks, reducing accidents, and promoting a safety-first culture
- Enhancing OHS knowledge management, ensuring that all engineers have the information needed to work safely and efficiently
- As industries evolve and new challenges emerge, the need for effective knowledge management in OHS becomes increasingly important
- By improving the way safety knowledge is managed and disseminated, organizations can reduce workplace accidents, foster a safety-first culture, and ensure compliance with regulations

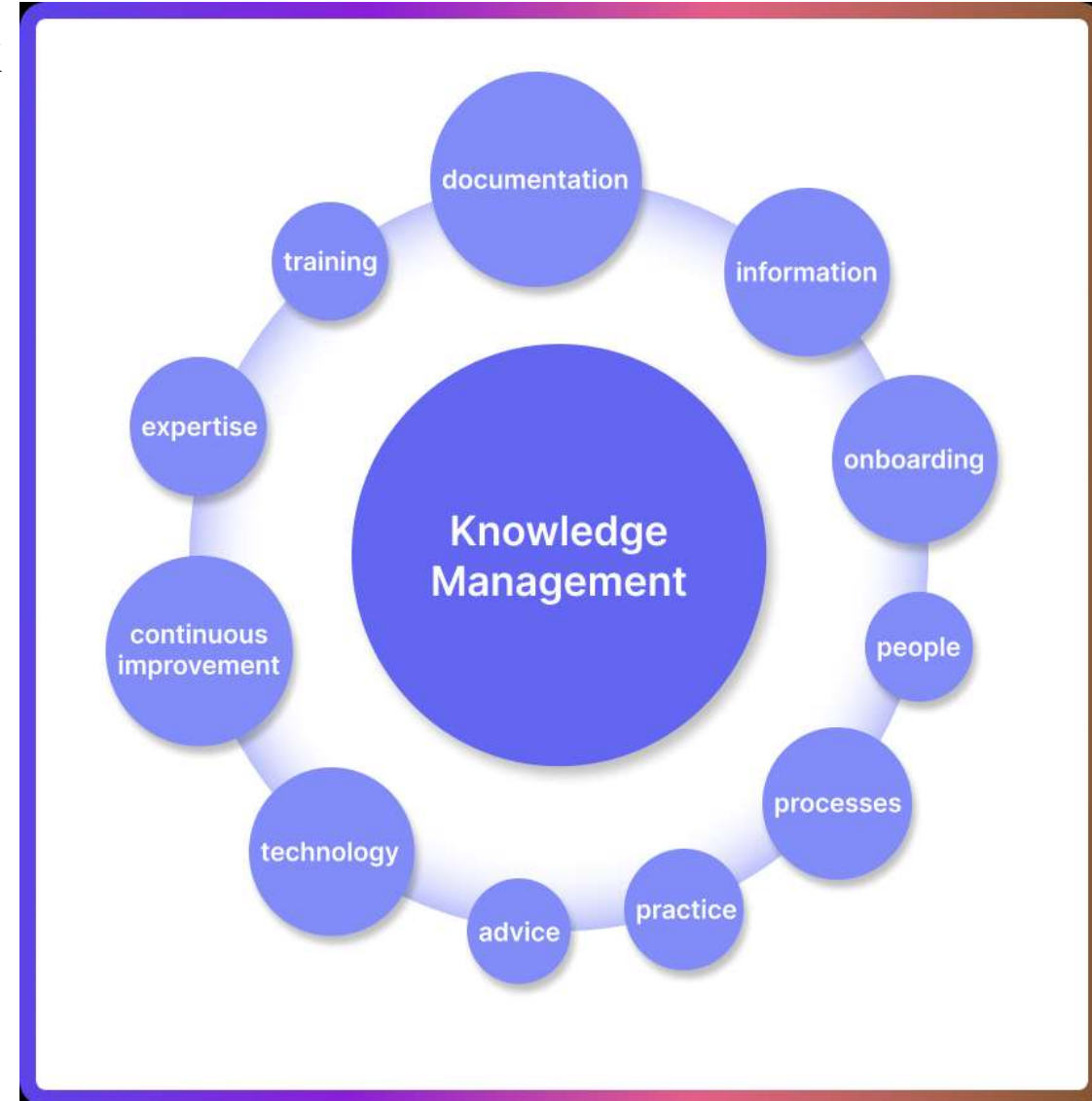


Steps in the implementation of the OH&S management system



Importance of OHS Knowledge Management

- essential in creating a safe and productive work environment for engineers.
- Involves the systematic organization, dissemination, and updating of safety-related information to ensure that all engineers are informed and prepared to mitigate risks.
- Understanding the role of knowledge management in maintaining a safe and compliant work environment.
 - ❖ Keep engineers informed about safety protocols.
 - ❖ Reduces workplace accidents and improves safety outcomes.
 - ❖ Ensures compliance with regulations and fosters a safety-first culture.



➤ Keep engineers informed about safety protocols.



ELECTRICAL SAFETY TIPS

WHILE WORKING FROM HOME







Avoid overloading the outlets and minimize the risk of shock and fire.



Unplug the electrical appliances when it is not in use to save energy.



Regularly check the extension or electrical cords if it is damage or not.



Never run cords under rugs/carpets, doors or windows.



Keep Paper and other combustible materials away from heat sources.



Extension cords should only be used on a temporary basis.



Never plug a space heater or fan into an extension cord or power strip.



Plug the cords properly and make sure that do not become a tripping hazards.

Personal Protective Equipment



Head Protection

Eye Protection

Hand Protection

Chaps Pants

Hearing Protection

High Visibility Vest/Clothing

Harness Fall Protection

Steel-Toed Boots

Mechanical Material Handling Safety



1

2

3

4



Dos



Don'ts

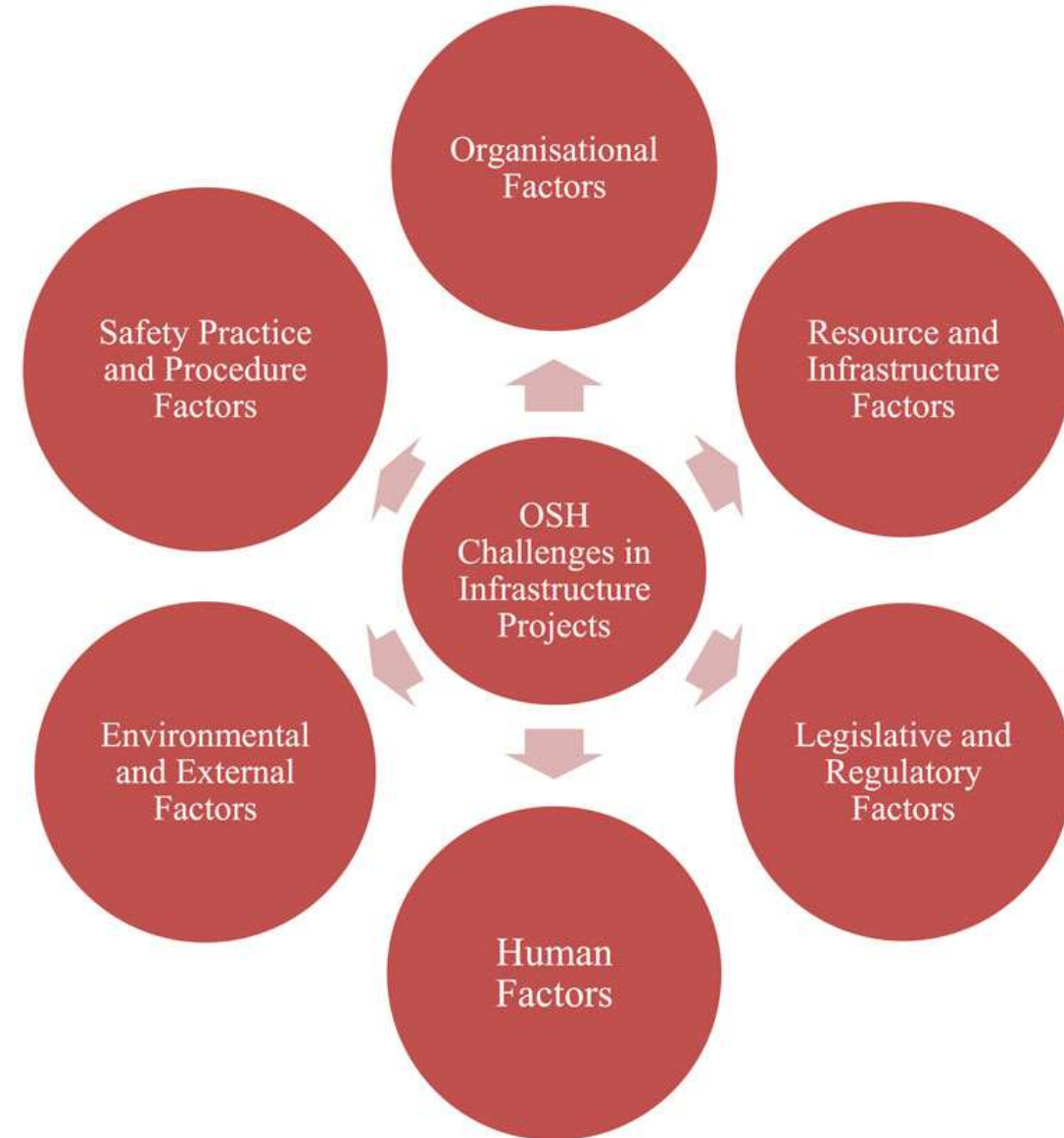
Importance of Occupational Health and Safety in the Steel Industry



Current Challenges (2/1)

- several challenges that engineers and organizations face in implementing effective systems.
- hinder the accessibility, relevance, and engagement needed to maintain a safe work environment.

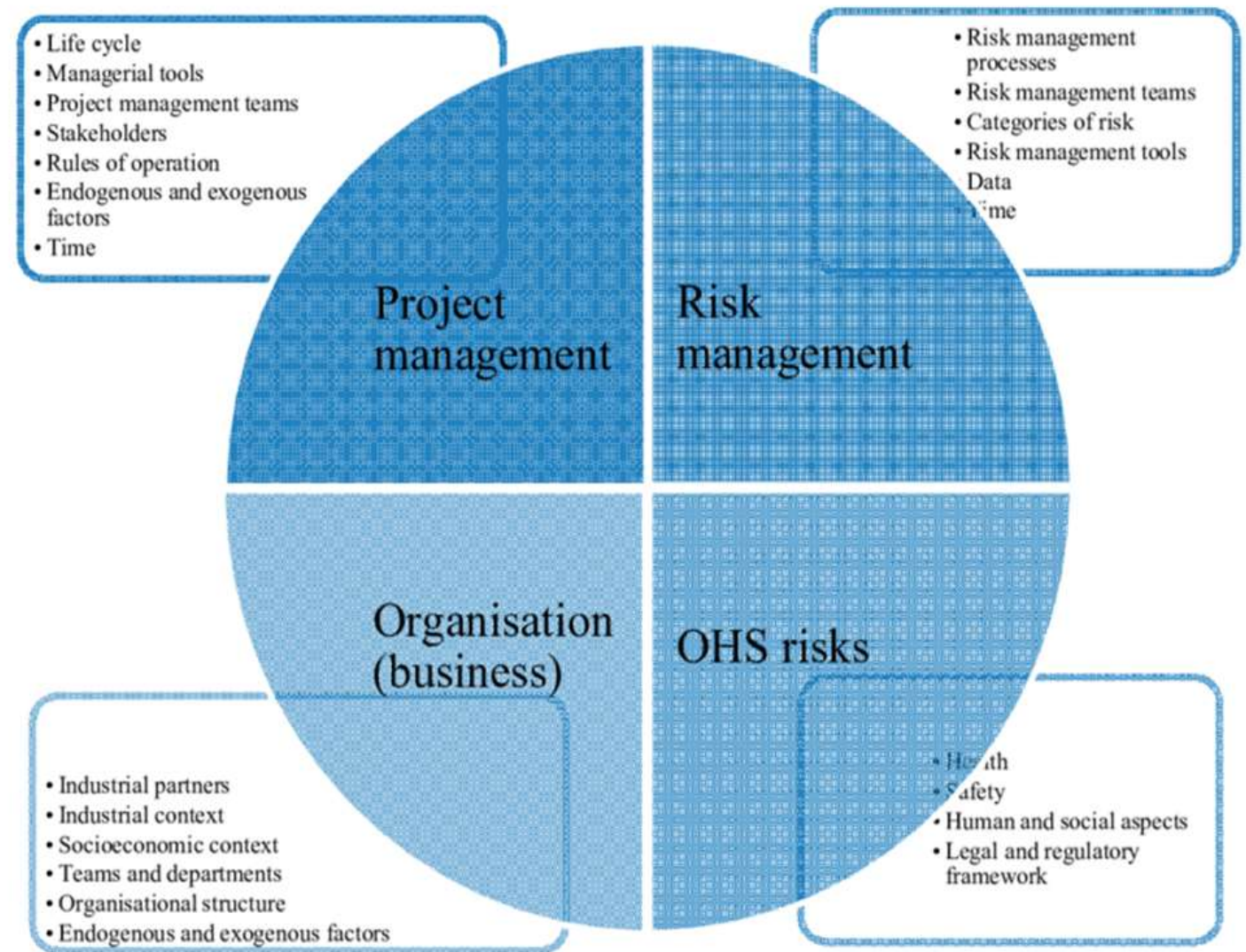
- ❖ Information Accessibility
- ❖ Keeping Information Up-to-Date
- ❖ Relevance of Information
- ❖ Engagement and Compliance
- ❖ Integration with Daily Workflows
- ❖ Cultural and Organizational Barriers



Current Challenges (2/2)

Challenges:

- **Accessibility:** Difficulty in accessing up-to-date safety information.
- **Relevance:** Ensuring information remains current and applicable.
- **Engagement:** Encouraging continuous learning and compliance among engineers.



Leveraging Technology(2/1)

- Advancements in technology offer powerful solutions to the challenges
- By integrating digital tools, platforms, and data analytics, organizations

❖ Centralized Digital Platforms

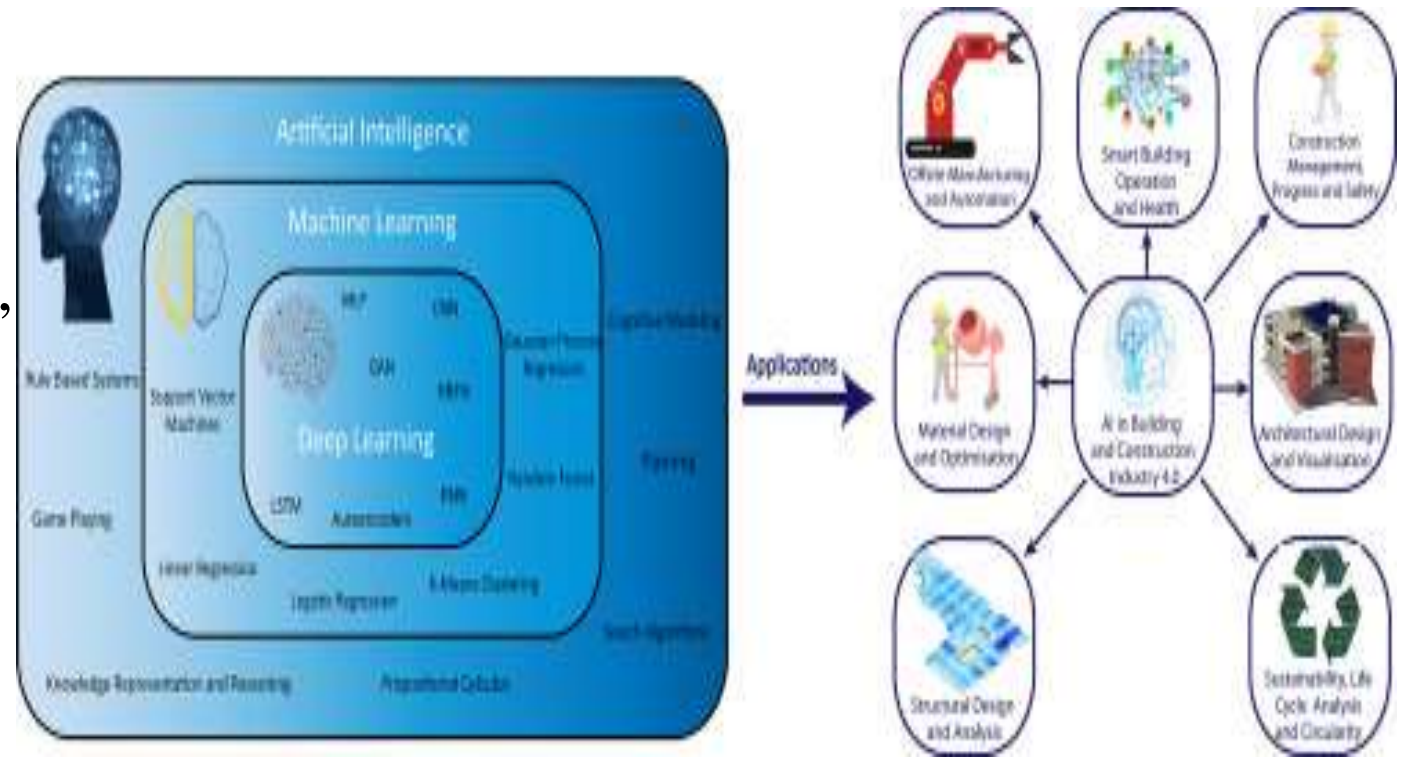
❖ Mobile Applications

❖ Data Analytics and AI

❖ Virtual Reality (VR) and Augmented Reality (AR)

❖ Cloud-Based Collaboration Tools

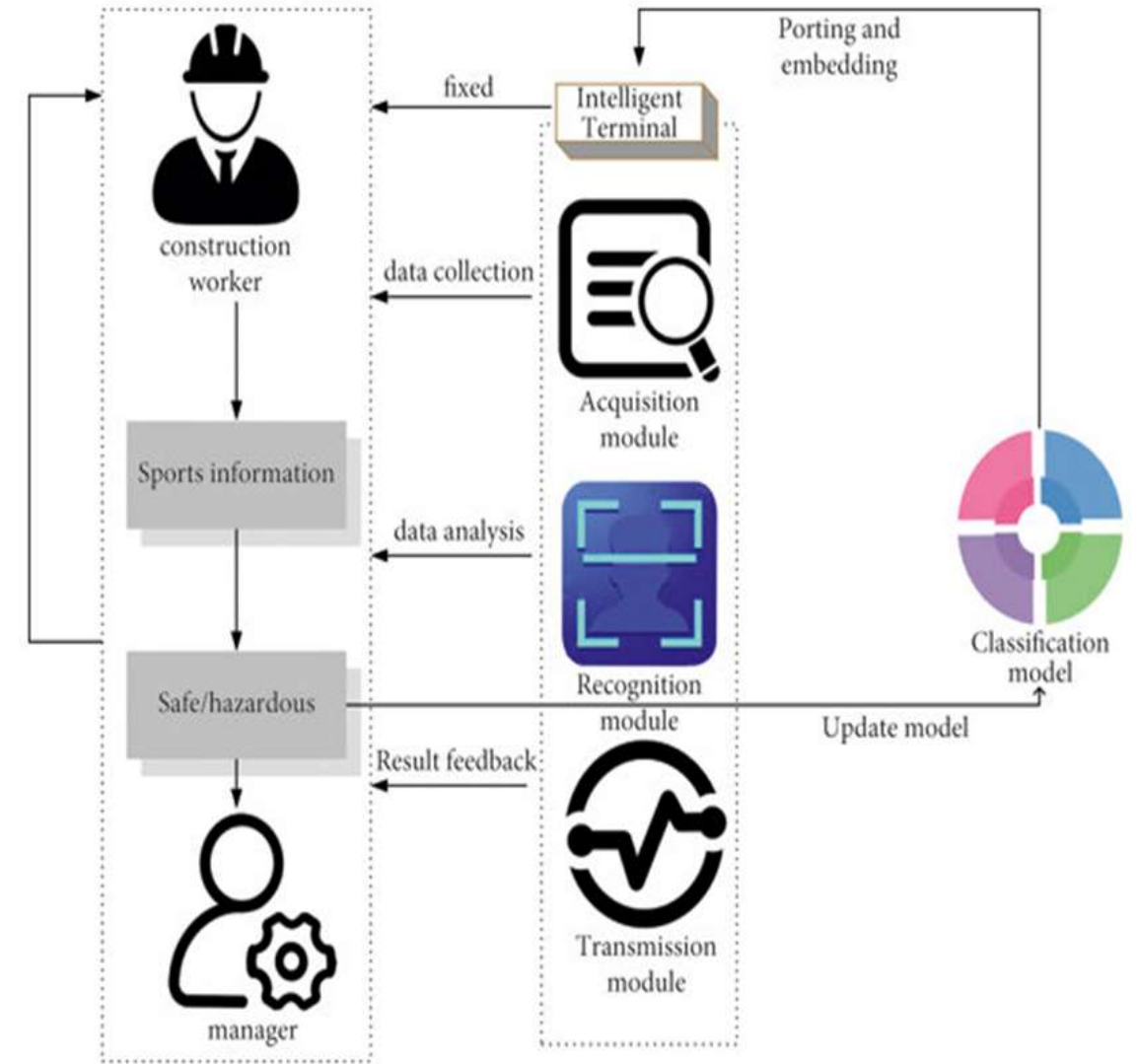
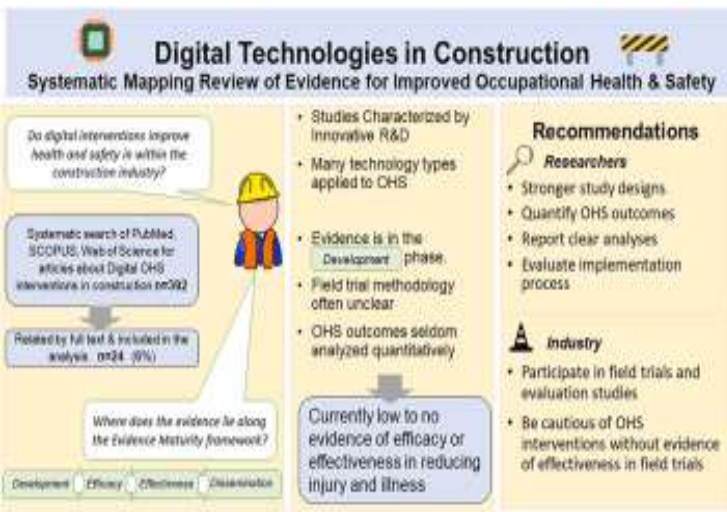
❖ Automated Compliance Management



Leveraging Technology(2/2)

Technological Solutions:

- ❖ **Digital Platforms:** Centralized resources for easy access to OHS information.
- ❖ **Mobile Apps:** On-the-go access to safety protocols and updates
- ❖ **Data Analytics:** Identifying trends and improving safety practices through data analysis.



Strategies for Improving (2/1)

- vital for ensuring a safe work environment for engineers
- Implementing targeted strategies can enhance the accessibility, relevance, and effectiveness of practices
 - ❖ Regular Updates and Maintenance
 - ❖ Implementing User-Friendly Systems
 - ❖ Enhancing Training and Development
 - ❖ Promoting a Safety-First Culture
 - ❖ Integrating OHS into Daily Workflows
 - ❖ Facilitating Collaboration and Knowledge Sharing
 - ❖ Utilizing Data for Continuous Improvement
 - ❖ Enhancing Accessibility and Inclusivity



Strategies for Improving(2/2)

Key Strategies

- Regularly update and disseminate safety protocols.
- Promote a safety-first culture through communication and collaboration.
- Implement user-friendly systems to ensure easy access to OHS resources.



Continuous Professional Development

- Ongoing professional development is essential for maintaining and enhancing
- Stay current with evolving safety standards, technologies, and best practices
 - ❖ Ongoing Training Programs
 - ❖ Certification and Credentials
 - ❖ E-Learning and Online Resources
 - ❖ Mentorship and Peer Learning
 - ❖ Access to Latest Research and Best Practices
 - ❖ Performance Evaluation and Feedback
 - ❖ Encouraging Lifelong Learning

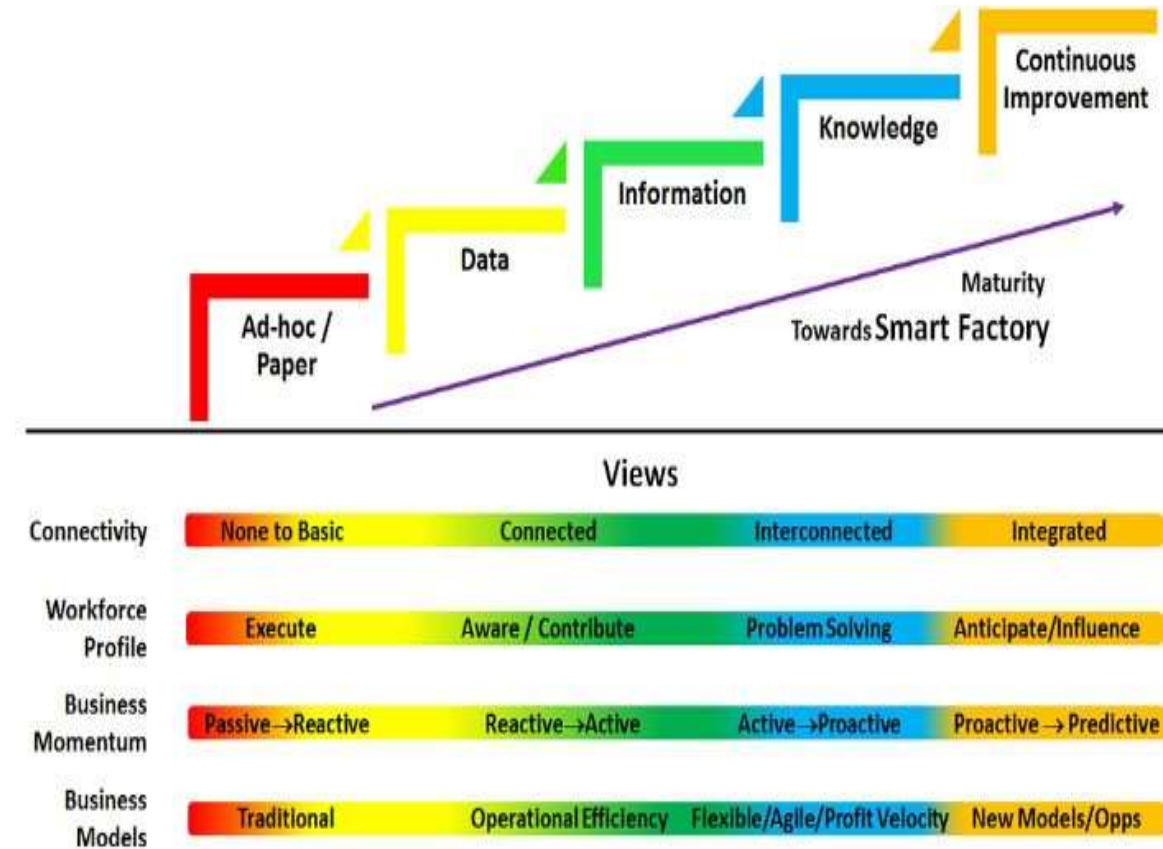
Focus Areas:

- ❖ **Training Programs:** Regular training on the latest OHS standards and practices.
- ❖ **Certifications:** Encouraging engineers to pursue OHS certifications.
- ❖ **Lifelong Learning:** Promoting continuous improvement in safety knowledge.



Continuous Professional Development

Why Professional Development never Ends for Engineers



Enhancing Compliance and Accountability

Ensuring compliance with Occupational Health and Safety (OHS) regulations and fostering a culture of accountability are crucial for maintaining a safe work environment

Effective strategies for enhancing compliance and accountability help organizations meet regulatory requirements and ensure that safety practices

Strategies for Compliance:

- Clear Documentation:** Maintain up-to-date records of safety protocols.
- Regular Audits:** Conduct periodic audits to ensure compliance.
- Performance Tracking:** Monitor safety performance through metrics and feedback.



Key Features of ISO 45001 Software

Simplified Compliance Management

- ISO 45001 software automates compliance tasks, centralizes document control, tracks regulation changes, and generates audit reports, minimizing administrative burden and ensuring accurate adherence to standards.

Comprehensive Risk Assessment

- These solutions provide tools for systematic identification, assessment, and management of risks, helping organizations prioritize controls and mitigate potential hazards in real-time, thereby preventing safety incidents.

Efficient Incident Reporting

- Streamlines incident reporting processes, allowing employees to report incidents easily from anywhere.
- It also ensures comprehensive investigation processes and facilitates root cause analysis

Training & Competency Management

- Offers robust training management capabilities, enabling organizations to schedule training sessions, monitor employee competence levels, and ensure employees are equipped with the necessary knowledge and training

Supporting Mental Health in OHS

- Essential for creating a holistic approach to well-being in the workplace
- Engineers, like all employees, benefit from a supportive environment that addresses both physical and mental health

Supporting Mental Well-being:

- ❖ **Mental Health Resources:** Include mental health information in OHS systems.
- ❖ **Stress Management Training:** Provide training on managing workplace stress.
- ❖ **Supportive Environment:** Foster a culture of mental well-being and support.



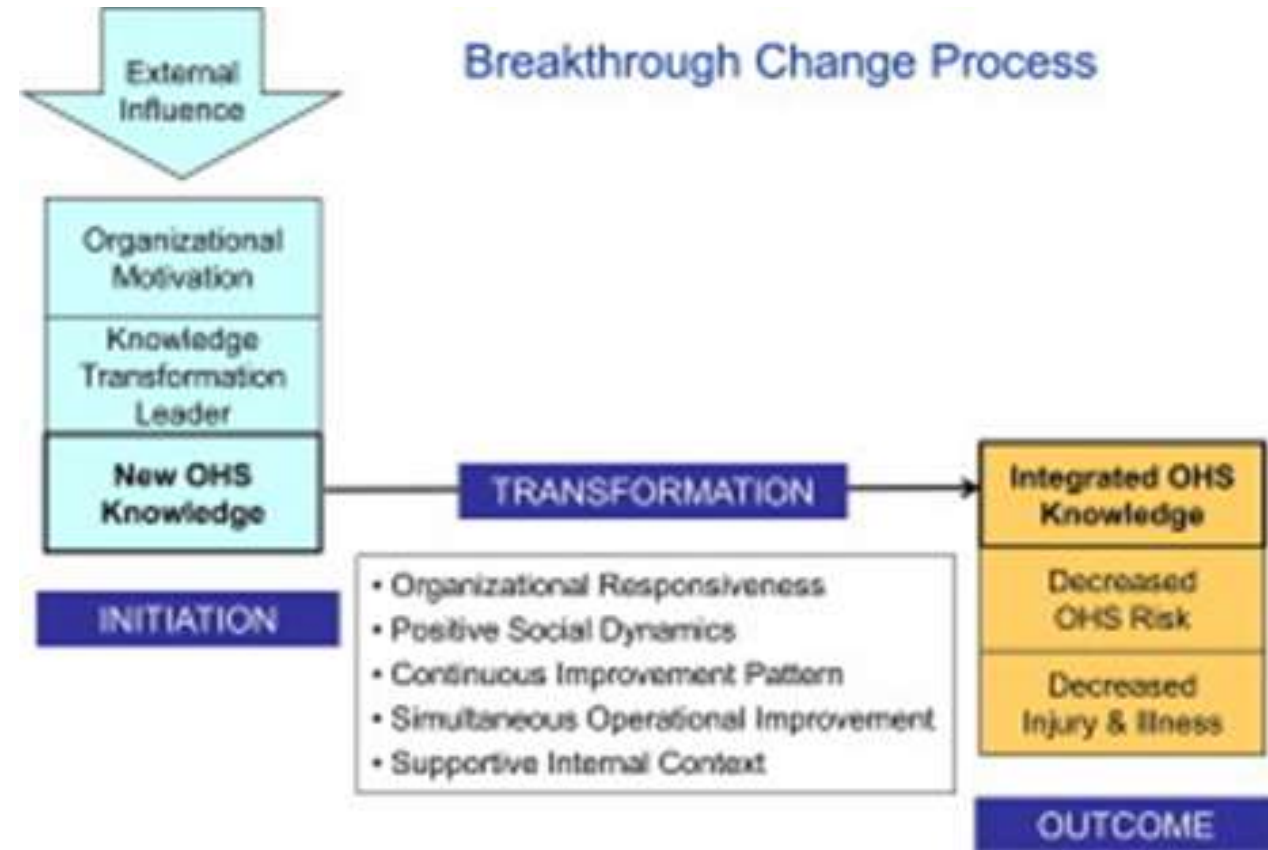
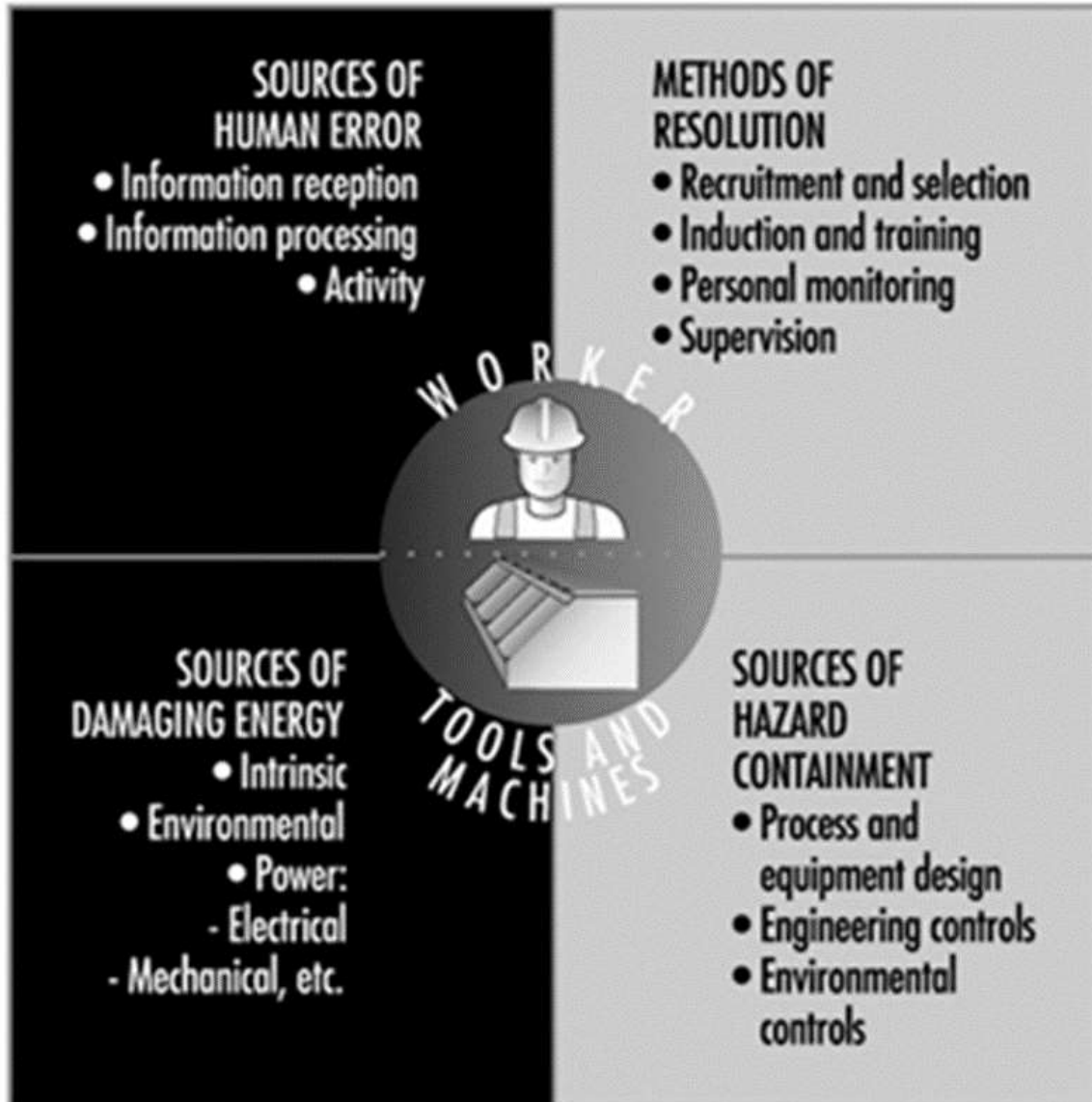
Case Studies and Best Practices

- Examining successful case studies and best practices provides valuable insights into effective
- By learning from real-world examples, organizations can adopt proven strategies to enhance their own OHS practices

Learning from Success:

- ❖ **Case Studies:** Examples of successful OHS knowledge management implementations.
- ❖ **Key Takeaways:** Lessons learned from real-world applications.
- ❖ **Impact:** Demonstrate the positive outcomes on safety and compliance.

Case Studies and Best Practices

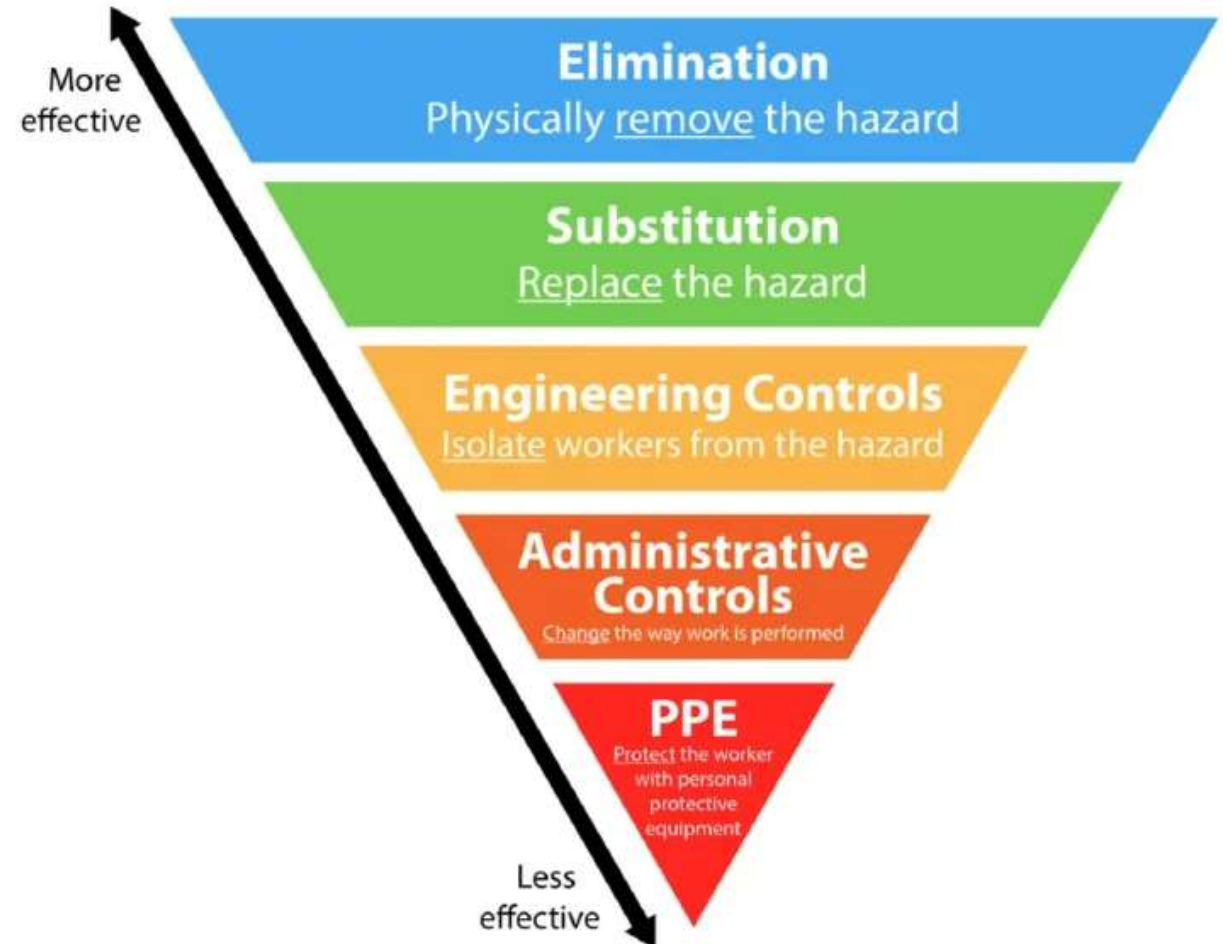


Measuring the Effectiveness

- Crucial for ensuring that safety practices are impactful and continuously improving
- Effective measurement involves evaluating various aspects of OHS management to determine how well safety information is being utilized and its impact on overall workplace safety

Evaluation Metrics:

- ❖ **Incident Rates:** Track the reduction in workplace accidents.
- ❖ **Compliance Levels:** Measure adherence to safety regulations.
- ❖ **Employee Engagement:** Assess feedback and participation in OHS practices.



Conclusion

- a critical component of ensuring a safe and healthy working environment for engineers
- By effectively managing and disseminating safety knowledge, organizations can not only comply with regulations but also foster a culture of safety that prioritizes the well-being of all employees

Final Thoughts

- ❖ About creating a work environment where safety is embedded in every aspect of engineering practice
- ❖ By prioritizing the effective management of safety knowledge, organizations can protect their engineers, enhance productivity, and build a culture of safety that benefits everyone.

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Daniel Podgórski



Occupational Safety Management and Engineering

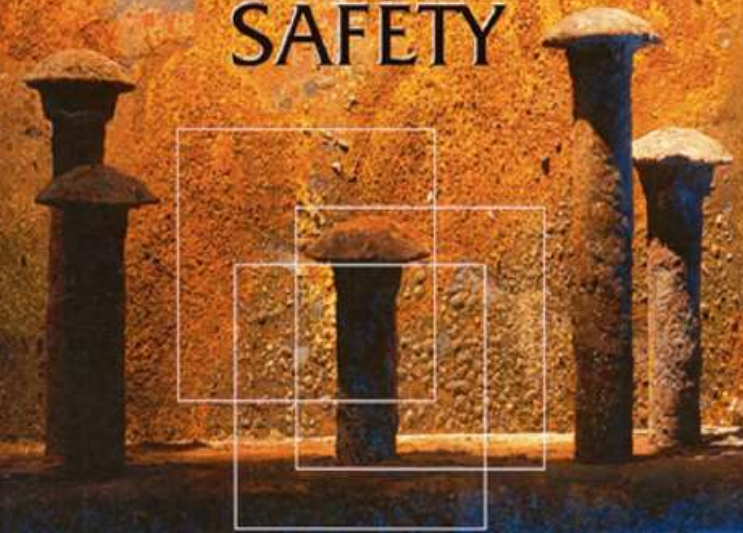
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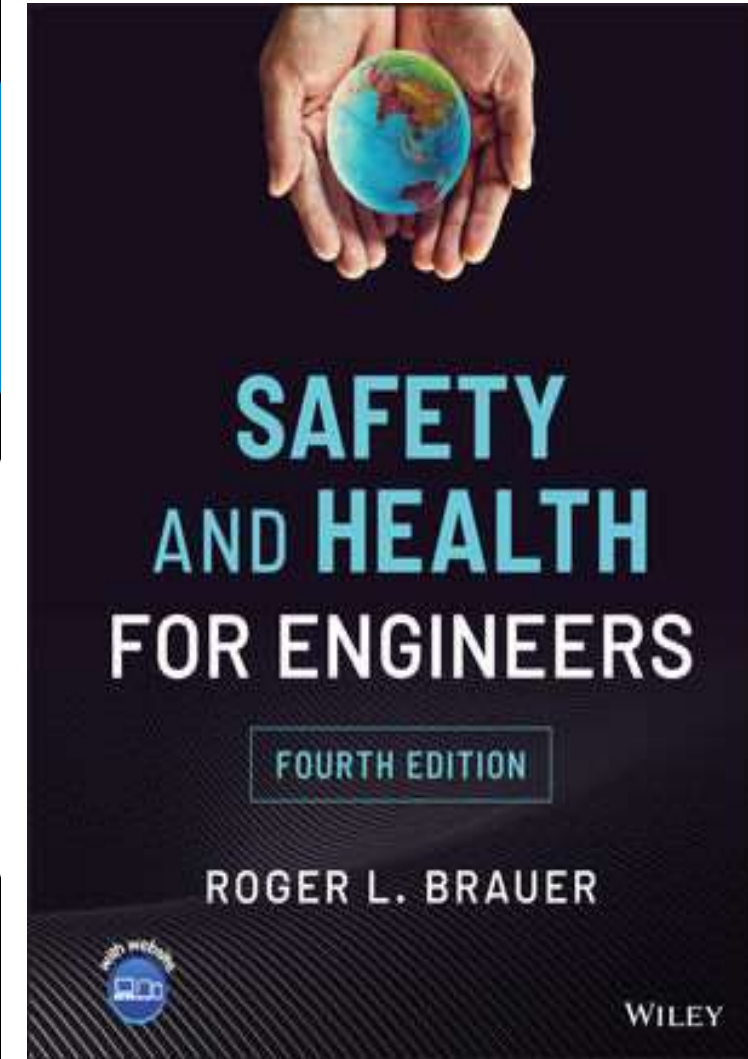
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