SAP Solution Brief
SAP Solutions for Sustainability

Operational Risk Management: Keeping People, Assets, and the Environment Safe

Quick Facts

Summary

SAP® solutions help you "go beyond compliance" – to operate in a safer and more reliable way while still running your business optimally. They enable you to learn from incidents, proactively assess and control risks, communicate safe work practices, and ensure visibility into performance, all supporting integrated operational risk management.

Business Challenges

- Lack of cohesive safety and risk visibility across operations
- Growing regulatory burden, higher penalties for violations
- Increasing stakeholder expectations for transparent risk management
- Fragmented approach to people, asset, and process safety management

Key Features

- **Governance** – Enable monitoring, controls, and automatic audit trails for compliance and proactive risk management
- **Planning** – Align operations with key risks and process hazards
- **Execution** – Implement procedures, processes, and training to reduce risks and costs
- **Visibility** – Increase awareness of potential hazards and take preventive measures
- **Optimization** – Implement standardized, auditable processes; perform risk analysis and performance measurement; drive continuous safety improvement
- **Integration** – Embed safety and risk management into daily operations

Business Benefits

- **Reduce operational risks,** protecting people, assets, the environment, and your brand
- **Lower operating costs** through standardized processes and increased visibility
- **Avoid costly incidents, accidents, and production interruptions** with systematic risk management
- **Increase operational efficiency** via process optimization
- **Increase visibility and performance** by monitoring people, equipment, and processes

For More Information

Visit www.sap.com/lines-of-business/sustainability/risk-health-safety-software.epx.

Proactively managing operational risks to people, assets, and the environment is essential for sound corporate performance. Simply meeting regulations is no longer sufficient; to stay in business, you must operate safely. Companies must take all reasonable proactive measures to reduce risk in order to create a sustainable and safe operation. SAP® solutions help you operate in a cleaner, safer way by aligning stakeholder objectives across the enterprise and enabling integrated operational risk management.

Lack of cohesive safety and risk management leads to:

- Poor visibility and a reactive approach to managing safety and risk
- Ineffective employee training, certification, and competency verification
- Delayed recognition of warning signs of abnormal operations
- Outdated procedures and poor knowledge transfer when procedures are updated
- Lack of company-wide prevention of incidents and exposures, with no continuous improvement in risk reduction
- A false sense of security across the enterprise

If you can make your people and operations safer, your company will perform better over the long term. Safety and productivity go hand in hand. The challenge is to operate in a way that aligns with your organization's risk tolerance and stakeholder priorities and helps you achieve business performance targets while reducing the cost of compliance.

PROACTIVE RISK MANAGEMENT

Integrated solutions from SAP let you align key stakeholders, increase operational visibility, and reduce risk by establishing consistent, best practices–based processes for managing safety and compliance. Our operational risk management solutions bring together incident management; proactive environment, health, and safety risk assessment; communication of safe work practices; and performance monitoring with reporting functionality and operational management controls, enabling reliable and safe operations.

Deployed together, SAP solutions help you to:

- Meet all external and internal environment, health, and safety (EHS) requirements and prevent serious incidents
- Gain visibility into EHS risks and performance
- Proactively manage compliance to regulations and your industry's best practices
- Efficiently manage operations to reduce impact to the people and the environment
- Execute a health and safety program and enforce compliance with policies globally
- Facilitate safe operations through cost-effective, reliable maintenance

Incident Management

Safe operations start with ensuring that all incidents are reported – even near misses and observations of unsafe acts or conditions. This requires not only a supportive safety culture but also the tools to make reporting easy. Leading companies track all incidents – all types and severity levels. They use this data to detect failures in their safety systems and prioritize their resources to take appropriate corrective and preventive action. Root cause analysis is essential. If you respond to injuries, damaged equipment, and environmental releases only by repairing the damage (or providing compensation if it is irreparable), you miss the opportunity to learn from these incidents and take action to preclude similar future incidents.

SAP delivers a comprehensive incident management solution that makes it easier for anyone to report an incident of any severity. Once it is reported, the incident manager and other experts can then use the system in a collaborative manner as they take immediate action and then thoroughly investigate the causes, take preventive measures, and manage reporting requirements to completion.

The software integrates with other SAP and non-SAP applications to support:

- Tracking of all incidents, close calls, and safety observations
- Integrated workflows to manage actions across different departments and help ensure closure
- Tracking of incident details related to people, assets, or the environment
- Reporting to internal and external stakeholders

SAP solutions help you effectively manage incident investigations, take corrective and preventive actions so you proactively manage and learn from incidents, and share these lessons across the organization.

Environment, Health, and Safety Risk Assessments

EHS professionals realize that it is not enough to simply respond to incidents. Some hazardous operations require assessment of risk and implementation of proper procedures and control measures before manufacturing or operation can begin. And because things

constantly change, risks must be reassessed and new controls implemented in order to maintain a safe operation.

However, identifying hazards and implementing controls is only part of the story. Safe operations cannot be achieved by the EHS department alone. All employees are responsible for safety, with the help of the EHS professionals. Those who actually carry out the work must be aware of the proper procedures and control measures and must use them. This requires constant vigilance – to communicate, support, and verify that people and systems are working safely.

A proactive risk management process will also give you deep insight into your highest risks so that you can make the best decisions about where to spend money to make things safer. In the past, people often looked at safety as a trade-off versus productivity. The reality is that a safe, smoothly running operation tends to be more effective and more efficient. The key is to ensure that resources are allocated in the right way.

SAP delivers a flexible risk assessment solution that follows best practices for identifying hazards, evaluating the risk, and managing controls to mitigate that risk.

The software leverages other SAP business solutions to support:

- EHS risk assessments
- Comparison of measurements to regulations and standards
- Job hazard analysis
- Documentation of risk levels and control measures, and control effectiveness evaluations
- Action management for risk reduction projects

These solutions help you ensure the health and safety of all employees and contractors and minimize impact to the environment. Now you can streamline processes for a more effective assessment of your hazards and execution of appropriate controls and risk reduction measures.

Safe Work Practices for Maintenance

For operational risks that can harm people and the environment, maintaining your plant assets is a critical business process. Assets that are not maintained to an acceptable level of integrity contribute to many major industrial incidents such as pipeline leaks, chemical plant explosions, and mine collapses. At the same time, maintenance activities themselves can expose workers to hazards that are even more severe than during normal operations. Maintenance workers are under pressure to get the equipment back up and running, which makes shortcuts tempting. But taking forever to repair a hazardous situation isn't the answer either. What is needed is efficient communication between the EHS risk experts and the maintenance planners and workers.

SAP delivers integrated functionality for enterprise asset management that enables you to automatically apply required safety measures to work orders. These include protective equipment, safety instructions, approvals, permits, and other safety requirements that minimize risks efficiently and effectively.

The software integrates with other SAP and non-SAP solutions to support:

- Maintenance management, including preventive and predictive maintenance, maintenance planning and scheduling, and work order management
- Permit-to-work processes to manage various types of maintenance permits including lockout-tagout
- Clear display of safety measures on the workers' job cards
- Linkage of risk and safety information to specific assets or tasks so that it does not have to be created new each time

Integrated solutions from SAP consolidate information and processes on a scalable, flexible platform that empowers stakeholders to anticipate and avoid incidents that could harm people, assets, and the environment.

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These solutions let you plan and execute maintenance in compliance with regulatory requirements and best practices. At the same time, you can achieve new process efficiencies and cost savings while providing workers with transparency to risks and safety measures.

Visibility and Performance Monitoring

One challenge to driving safety and reducing risk across the enterprise is aligning key stakeholders responsible for daily operations – and that means everyone, top floor to shop floor. Without integrated enterprise processes, how can you gain visibility into the status of EHS risks – or achieve transparency into local data, key performance indicators, and local EHS activities? Integrated solutions from SAP consolidate information and processes on a scalable, flexible platform that empowers stakeholders to anticipate and avoid incidents that could harm people, assets, and the environment. With solutions that help align and communicate risks to all workers and provide the enterprise-level visibility and control to proactively address operational risks, your employees can make informed asset and safety decisions and respond swiftly to threats.

The software supports consistent implementation of your management systems to provide:

- Insight into the highest risks that merit mitigation on a priority basis
- Closed-loop risk management, including risk mitigation and prevention
- Visibility into operational performance metrics, complete with the ability to drill down into specific data

Once deployed, these solutions enable you to better track your results against your objectives so you optimize your resources for risk reduction. This in turn will improve operational continuity and save time and money that would otherwise be spent on ad hoc activities (so-called firefighting), which often leads to poor results.

FOR MORE INFORMATION

For more information about solutions for operational risk management, contact your SAP representative or visit www.sap.com/lines-of-business/sustainability/risk-health-safety-software.epx.