





 $Enterprise\ risk\ has\ traditionally\ been\ managed\ in\ department\ silos.\ Structured\ this\ way,\ collaboration\ or\ coordination\ among\ working\ groups\ is\ limited.$

This is the third installment in a series exploring the evolving landscape of the environment, health and safety (EHS) function.

Operational risk management (ORM) is rapidly evolving. Technological and operational innovations are disrupting industries, and societal and market changes are pressuring leadership to rethink how they structure and operate to mitigate risk. Organizations that are slow to adapt to the changing ORM environment may not recognize the breadth of risks their organizations face, or have the proper controls in place to mitigate specific risks. Worse still, organizations could suffer significant loss. Leaders today must look at their overall value chain — from sourcing to production to customers, and across their internal functions — to better understand and manage the interconnected risks.

Traditionally, enterprise risk has been managed within departmental silos with little collaboration or coordination between working groups. Subject matter experts in EHS, security, asset protection, quality, sustainability, human

resources and real estate manage their own areas of risk. But this traditional approach is showing its limitations as corporate leadership and markets become more sensitive to sustainability and reputational risk.

This siloed view also is leaving unrealized value on the table. Companies are collecting more risk-related data (operational and production data, EHS data, HR data, asset health data, facility and security data) than ever, yet risk managers are reporting their lowest level of readiness in 12 years. Insights that could reduce corporate risk profiles, lower costs and strengthen resilience are going undiscovered.

This paper explores how more collaboration and engagement across organizational functions can drive a more effective and efficient operational risk management program. EHS leaders can help lead this transformation, while ensuring their future programs and systems align with corporate needs and goals.

Organizations that leave EHS and other working teams in silos must accept that this approach comes with an inherent level of risk. This risk only adds to today's threats and will be exacerbated by new potential disruptions beyond the horizon. According to Aon's 2019 Global Risk Management Survey report, "Broad macro-economic risks, combined with the speed of technological change, are contributing to the growing prominence of new threats, which can disrupt supply chains and overall business operations."

Key drivers of change

- Organizations are looking for more value and efficiency
- Increasing regulations are creating a more complex EHS environment
- Maturing technology tools, such as enterprise EHS data management and data analytics
- Societal trends such as aging workforce and social media
- An increased focus on sustainability, both investor-driven and reputational

When threats are seen through a combined lens developed by subject matter experts coordinating across departments, they can be more effectively assessed and mitigated. This approach also helps leaders improve the efficiency of their overall risk management programs. Many companies are already seeking ways to drive this next risk management evolution as advances in data management, integration and visualization have made it easier to see the potential value. The biggest question is how and where to begin.

This evolution can be driven and led by any work group that manages an aspect of risk, but the EHS function is perhaps the most logical. EHS workgroups and EHS leaders are in a position where they already work closely with multiple departments and often are tasked with achieving their objectives through influence and collaboration. EHS leaders often have perspectives on operations, functional processes, raw materials, products and risk that equip them to engage across functions and manage increasing complexity while keeping a lid on costs.

Deeper EHS collaboration into the broader strategic risk management framework can create business benefits outside of the typical EHS scope, and best-in-class organizations are already moving in that direction. An Arcadis survey found that more than 75% of EHS teams are focusing on the enterprise value and strategic advantage of the EHS function, a notable shift away from the traditionally narrow focus on just environmental and safety compliance.

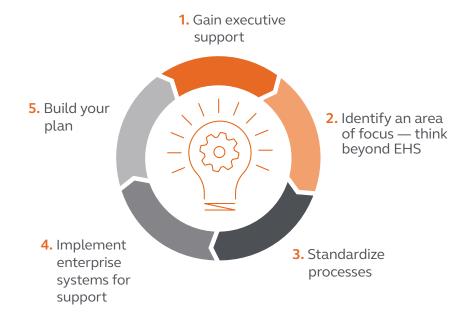
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CREATE A COLLABORATION CYCLE, NOT A ROADMAP

Wherever your organization is currently, it's vital to note that a fully integrated, proactive risk management approach doesn't begin or end. It's an ongoing cycle for continually optimizing multiple core functions.

Implementing a program that increasingly integrates siloed risk management functions comes with many organizational change considerations, such as the impact on working and communication styles, organizational structures, and processes and outcomes.

Leaders must take the time to understand the impact integration will have on these areas and plan accordingly. Incorporating staff from across the organization into planning efforts can help align the integration with organizational needs and goals.



Leadership Expectations	Why?
Integrated and consistent processes and metrics	Improved cost and process efficiencies
Integrated compliance and audit programs	Reduced operational disruption and cost
Contractor rationalization and improved contracting	Reduced overall contractor spend
Integrated dashboards to spot trends early and recognize dependencies between functions	Better insight into regional and facility performance and ris
Moving from lagging to leading metrics	Reduced unplanned event or incident spend
Soft-Cost Benefits:	
Reduced operational risk	Improved plant and corporate efficiency
Improved sustainability performance	 Moving from risk-based process RIGOR
Improved employee engagement with EHS	

THE STRATEGIC PROGRAM INTEGRATOR



Strategic Program Integrator

- Standardization of functions
- Process and protocol harmonization
- Task management and corrective actions
- Audit efficacy and learning
- Data management and analytics
- Master schedule
- Dashboard reporting, trend analysis and lessons learned

When the Strategic Program Integrator is used, it blends commonly repeated and siloed activities across departments, increasing process management efficiencies.

Arcadis has developed a best-practice methodology that enables companies to start and evolve their operational risk management collaboration, resulting in an increased ability to recognize and mitigate multi-dimensional risks while at the same time reducing the cost of the overall risk management function. Arcadis' Strategic Program Integrator is a digitally enabled methodology that takes into consideration the communication and coordination required to effectively implement a more integrated risk management process. It is chartered to provide governance and performance certainty throughout the process integration that occurs across multiple functions, sites and projects.

The methodology blends commonly repeated and siloed activities to find efficiencies and synergies in process management through application of common digital tools, templates and data tracking frameworks. The integrator program increases organizations' portfolio visibility and control while driving down risk and the cost of governance. The accompanying Digital Powerpack, a low-cost but high-value digital and analytics toolkit, enhances efficiency and customer experience.

Digital Powerpack

The Digital Powerpack provides a plug-and-play way to input data in multiple formats, transforming it to highlight trends and anomalies and tell a story around critical information that would typically not be seen with data silos. Outputs from the Powerpack provide insight into the organization's process/policy revision needs, strengths and risks, and they serve as a decision-support mechanism.





Automated

workflows

Ensure standard



Automated,

Compliance

entry

mobile data





Automated

triggers and

notification

Early warnings and



Data quality &

verifiability

Assure critical

metrics



Integrating third party data New insights

Text recognition using AI tools identification

ENTERPRISE EHS DATA MANAGEMENT

Enterprise data management systems, or EMIS systems, can enable and facilitate improved risk management through increased collaboration or implementation of the Strategic Program Integrator methodology. While EMIS systems are not required for success, having an enterprise "single version of the truth" around EHS and risk data greatly enhances an organization's ability to collaborate, communicate and visualize the risk management function.

An EMIS also will increase the reliability and speed of information that can then be used in the Digital Powerpack. All of the companies Arcadis has worked with implementing forms of the Strategic Program Integrator have been at some stage of maturity in their implementation of an EMIS. Some have only implemented a portion, while others have a more mature implementation. Regardless, they all realized the symbiotic benefits of an EMIS in conjunction with the Strategic Program Integrator and Digital Powerpack.

CONCLUSION

Many organizations are responding to new pressures by increasing collaboration and coordination to drive improvements in enterprise risk management. For the EHS function, that often means being elevated to a more strategic role in the company beyond compliance.

To create a world-class risk management framework, organizations should implement operational risk management programs that achieve:

- Collaboration and communication among the various functions managing risk
- People in the functional teams understand the process and benefits of improved risk management collaboration
- Aligned and rationalized processes
- The integration and communication of information across functions
- A leveraging of the organization's strengths



CASE STUDY

This case study is an amalgamation of Strategic Program Integrator implementations across three global companies: A consumer products and services company; a financial services company; and an integrated raw materials production and distribution company.

Duration

Ongoing (5 years projected)

Challenges

- Lack of consistent core processes and standards
- Excessive disruption at the facility level
- Audit programs operated in silos and resources were not consistently trained or coordinated
- Inconsistent use of the enterprise systems

Program Integrator

• Too many reports and dashboards, creating information overload

Solution

Arcadis is providing Strategic Program Integration services to improve the risk management performance of the organizations. We have worked with the organizations' audit, inspection, testing and maintenance functions at approximately 200 business units for multiple business functions (e.g., EHS, security and sustainability). Through the Digital Powerpack, we are working to provide holistic and robust understanding of the organizations' enterprise and facility risks, issues, and priorities, while also minimizing facility disruptions and reducing costs.

Outcome

Operational risk has been reduced and increased efficiencies have been realized (up to 20-25% cost savings) across multiple functions and project portfolios. Corporate functions and business leaders have new performance oversight, certainty and control. The organization has been able to optimize processes, schedules and costs to manage their portfolios in a data-driven manner.

Business function needs

Holistic and robust understanding of enterprise and facility risks, compliance, issues and priorities

Alignment of Operation Management Systems (OMS) approach

Standards that set expectations for facilities

Consistent audit protocols and processes for self and independent assurance

Schedule and cost efficiencies: "Touch the asset once"

Visibility of CAPEX and OPEX priorities

Portfolio view of risks and opportunities

Facility needs

Robust risk and compliance management for the facility

Clarity of system and processes

Facility level procedures that are fit for purpose

Continual improvement and best practice sharing

Minimal disruption and burden from audit processes

Strive toward certainty in facility CAPEX and OPEX

Facility-level view of risk and opportunity

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The changing paradigm:
EHS information-driven performance
A benefits-driven mindset is
generating a new playbook for the
EHS landscape. Access the report:
http://arcad.is/DigitalEHS_2017



The price of silence is growing: The multi-billion dollar problem EHS data alone can't solve

True insights and proactive risk management are being lost or overlooked due to the volumes of data being collected. Access the report: http://arcad.is/DigitalEHS_2018

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About Arcadis

Arcadis is the leading global design and consultancy firm for natural and built assets. Applying our deep market sector insights and collective design, consultancy, engineering, project and management services we work in partnership with our clients to deliver exceptional and sustainable outcomes throughout the lifecycle of their natural and built assets. We are 27,000 people, active in over 70 countries that generate \$3.5 billion in revenues.

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SOURCES

¹ Aon's 2019 Global Risk Management Survey. Accessed May 1, 2019 at: https://www.aon.com/2019-top-global-risks-management-economics-geopolitics-brand-damage-insights/index.html