

OPTIMIZING ORGANIZATIONAL PERFORMANCE WITH OPERATIONAL RISK MANAGEMENT

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Report Highlights

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The sole focus on personal safety is not enough to mitigate operational risk in manufacturing.

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Proper implementation requires the system framework to be tightly weaved with day-to-day business operations.

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Mitigating operational risk is highly dependent on several factors: company-wide policies and procedures, risk assessment, and operational data.

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Maintaining operational continuity and growth requires a company-wide goal of operational performance excellence, proper integration of operational risk management, accountability, and value of human capital.

This report discusses the process of achieving operational excellence and continuity with a standardized operational risk management program.

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Manufacturers can improve operational risk management, and consequently their operational continuity, but that requires employing the right skillset to establish and enforcing appropriate risk management strategies.

Definition: Operational Risk Management

A standard framework used to mitigate operational risk or the risk of loss resulting from inadequate or failed internal processes, people, systems, or external events. A risk that arises from the execution of an organization's business functions.

Operational risk management is used to prevent loss by identifying, evaluating, and controlling hazards associated with these risks.

For all manufacturers, risk is an inherent part of business. Operational risk comes in many forms. From personal injury, hazardous material handling, facility housekeeping, or equipment use, operational risk is not something that is willingly incurred or revenue driven. Unlike other types of risk, such as credit or market risk, operational risk is not diversifiable, and cannot be released. The bottom line being, as long as people, systems, and processes are imperfect, operational risk will exist.

Fortunately, operational risk is manageable. Losses will occur, but they can be kept at a manageable tolerance level.

Manufacturers can improve operational risk management, and consequently their operational continuity, but that requires employing the right skillset to establish and enforce appropriate risk management strategies.

The Challenges of Risk Management

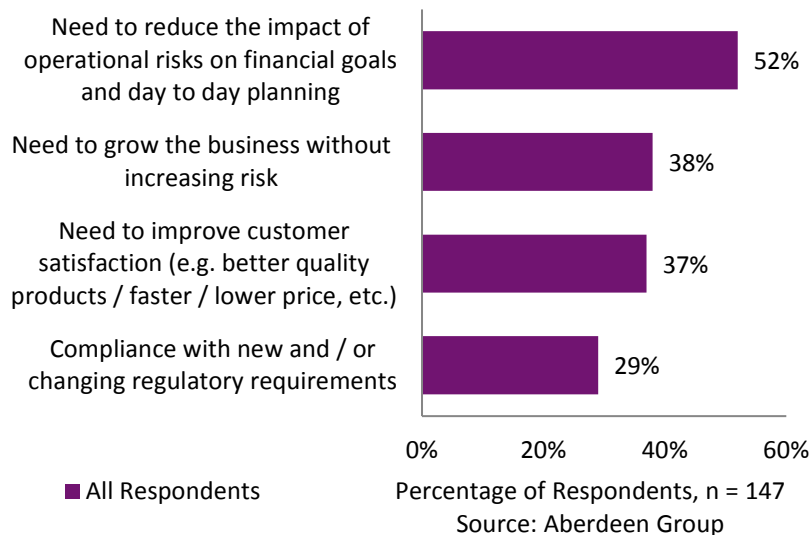
In the past decade, manufacturers have implemented various safety measures that have shown considerable success in reducing the incident rates of occupational injury and illness. Still, when considered in terms of manufacturing operations, the sole focus on personal safety is not enough to mitigate operational risk. Various high-profile disastrous events have demonstrated the necessity of concentrating on process safety and targeting the prevention of incidents such as hazardous chemical spill and leak prevention, machinery injury, extreme pressures and temperatures, corrosion, metal fatigue, and fires.

Outside of hazard prevention and workforce safety, the larger issue at hand is the goal of maintaining a productive business. The occurrence of hazards, whether it is one large event or hundreds of small incidents, eat away at the manufacturer's profitability. According to surveyed results, conducted by

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Aberdeen Group, manufacturers find that they must reduce the impact of operational risk as it hinders a company’s ability to achieve their financial goals (52%), grow the company business (38%) by improving customer satisfaction (37%), and through overall optimized compliance regulation (29%).

Figure 1: Operational Risks Impact the Bottom Line



The Drive to Mitigate Risk

What are the top three market pressures impacting your desire to mitigate risk in your operations?

- Unpredictable global economic environment / market instability: 28%
- Need to protect the organization and its brand equity: 27%
- Increasing complexity of global operations: 26%
- Operational Risk Management is a must-have capability of companies in our industry: 21%

Gaining Visibility into the Control of Operational Risk

Successful integration of an operational risk management system doesn’t happen overnight. Proper implementation requires the system framework to be tightly weaved with day-to-day business operations. Typically, this involves a collaborative approach across functional departments (47%) by establishing a framework for risk management activities (32%) that builds a culture of risk awareness across the organization (41%). In this manner, a company can create and improve the visibility of

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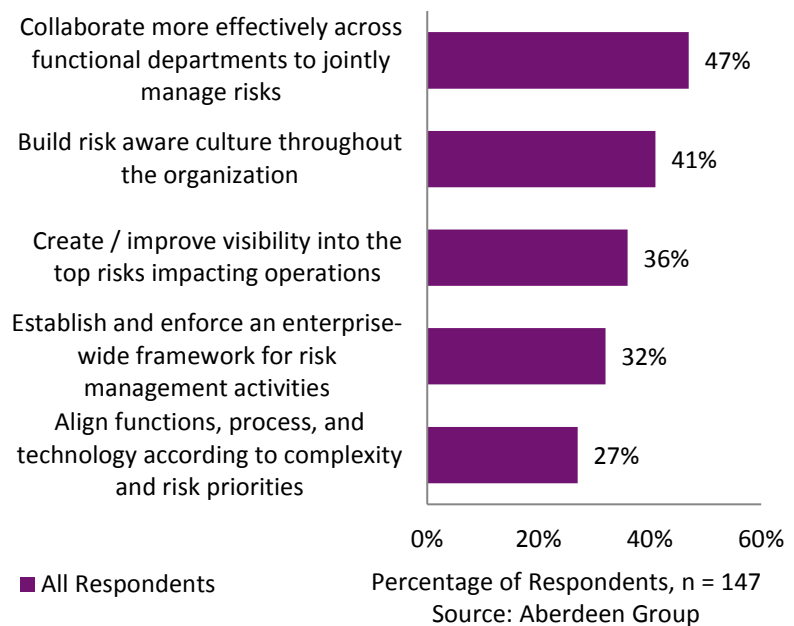
operational risk (36%) and help to align functions and processes according to the level of risk (27%).

How Do You Mitigate Risk?

What are the top four strategic actions your organization has implemented in response to risk?

- Connect financial, supply chain, and operational risks: 22%
- Establish real-time interoperability across enterprise systems: 22%
- Establish a formalized strategy to properly manage and communicate changes: 20%
- Include prioritization of safety and environment into maintenance planning: 16%

Figure 2: Building a Culture of Collaboration and Awareness



In many cases, the very same actions form the basis for execution of energy management and environmental sustainability initiatives. Moreover, they can help people-centered initiatives such as training and knowledge of safety in the workplace while creating a culturally aware community focused of safety.

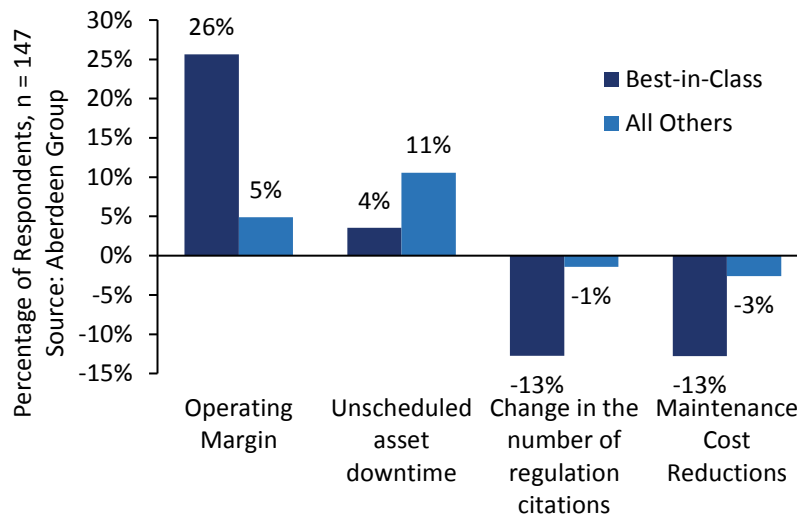
Defining the Best-in-Class

To distinguish Best-in-Class companies, survey respondents were divided into two maturity classes — Best-in-Class (top 20%) and All Others (bottom 80%). These classes were made based on

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five organizational performance metrics: estimated performance of the operating margin against the corporate plan, amount of unscheduled asset down time, increase or decrease in regulation citations, and increase or decrease in maintenance costs. Respondents were asked to identify the frequency at which products met these targets in the past two years. Figure 3 highlights the performance of the two maturity groups.

Figure 3: Best-in-Class Optimize Operations



Best-in-Class companies consistently outperformed their peers. Most importantly, they performed five times stronger in operating margin than All Others.

Successful Risk Management Starts with a Standard Process

The presence of operational risk in manufacturing comes with the territory. Consequently, risk management methods and techniques have evolved to support the existence of risk. Some fundamental steps can be applied more broadly than others,

The Best-in-Class Distinguish Themselves

Other performance metrics that separate the Best-in-Class from All Others:

- Recordable Injury Frequency Rate
 Best-in-Class: 1.43
 All Others: 1.15
- Change in number of compliance-related costs in the past 2 years
 Best-in-Class: -8%
 All Others: -1%
- Overall Equipment Effectiveness
 Best-in-Class: 89%
 All Others: 80%

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Change Your Operation

Which of the following capabilities does your company have to mitigate risk?

- Formal process to manage and communicate changes in operations
Best-in-Class: 67%
All Others: 60%
- Standardize process to formally request a change in operations
Best-in-Class: 64%
All Others: 55%
- Closed-loop processes for change related tasks to drive change processes and ensure change is adhered to
Best-in-Class: 58%
All Others: 32%

depending on the industry and manufacturer. However, most manufacturers have a process that involves planning for, monitoring, and controlling operational risk.

Mitigating operational risk is highly dependent on several factors: company-wide policy and procedures, risk assessment, and operational data. The issue that companies struggle with is in delivering on these objectives while maintaining profitability. Best-in-Class companies take these steps for implementing a risk management system that enhances organizational performance:

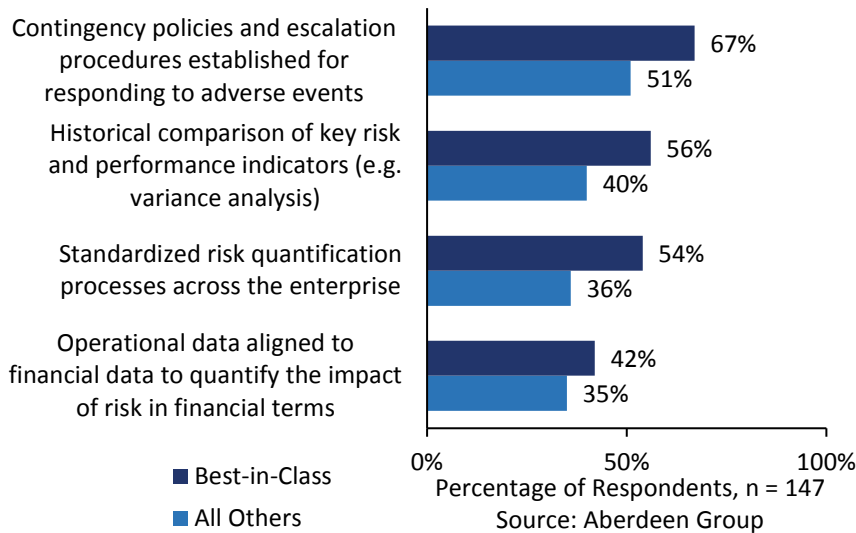
- ➔ **Establish contingency policies and escalation procedures.** Risk management is an ongoing process throughout the life of a manufacturer. As a part of documenting and preventing risk, lessening the probability of adverse events requires establishing a contingency plan through company policy, and a series of actions or escalation procedure. Best-in-Class manufacturers are 31% more likely to establish contingency policies and escalation procedures compared to All Others (see Figure 4).
- ➔ **Standardize risk assessment across the enterprise.** In assessing risk, the goal is calculating the probability and its resulting impact. Manufacturers must define their propensity for risk in a manner that accounts for workforce protection, asset management, environmental impact, and business implications. Once that risk is defined, a framework for risk assessment should be standardized for the entire enterprise.

To some extent, risk assessment is subjective depending on the individual view. Establishing a procedure that removes this bias will help the entire organization understand the severity of risk levels. Best-in-Class

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manufacturers are 50% more likely to standardize their risk quantification process across the enterprise compared to All Others.

Figure 4: Best-in-Class Standardize with Policies and Procedures



➔ **Align operational data with financial data.** Understand the financial impacts of adverse events by aligning operational and financial data. The bottom line for every manufacturer is to remain profitable. That means understanding the financial impact of various scenarios in order to prepare and hopefully prevent any financial damage. Best-in-Class companies are 20% more likely to align operational and financial data than All Others.

The realization of an operational risk management system requires carefully orchestrated collaboration across the

Where is Your Risk Management?

Where in your organization are risk strategies applied?

- Quality Management
Best-in-Class: 70%
All Others: 60%
- Asset Management/
Maintenance
Best-in-Class: 74%
All Others: 52%
- Environment, Health, and Safety
Best-in-Class: 63%
All Others: 53%
- Financial Management
Best-in-Class: 56%
All Others: 42%

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enterprise, where the procedures for handling these events are standardized company-wide. Most manufacturers have a risk management system in place. However, Best-in-Class companies focus on creating a business strategy that pursues operational continuity by gathering data to ensure processes are met, KPIs are clear, and goals are met.

Key Takeaways

Maintaining operational continuity and growth requires a company-wide goal of operational performance excellence, proper integration of operational risk management, accountability, and value of human capital. Most manufacturers have invested in these areas, but many have yet to implement solutions that directly address operational risk management. To achieve success in operational risk management, manufacturers should:

- **Empower departments to plan the mitigation of risk to people and operations.** Easily achieve this through the use of a core, company-wide solution. Document best practices for ease of adoption.
- **Be visible.** Provide visibility to the entire organization into business processes, risk analysis, incident analysis, and performance measurement.
- **Provide timely information.** Give operators, supervisors, and maintenance personnel access to information so that they can make quick decisions based on accurate and reliable process safety information.

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Related Research

[*Integrated Planning for Consumer Products: A Centralized Approach to Demand, Supply Chain, and Operations Planning*](#); April 2016
[*Incorporating Mobility on the Plant Floor to Improve EH&S Performance*](#); April 2016

[*ISO 45001: How to Prepare and What to Expect in Health & Safety \(H&S\)*](#); March 2016
[*Put Operational Excellence in the Palms of Your Hands with Mobile Workflows*](#); May 2016

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