Analyst Insight

Aberdeen Group
A Harte-Hanks Company

January 2012

Best Practices in Managing Compliance in Environment, Health and Safety

Compliance continues to be top-of-mind for Environment, Health and Safety (EH&S) professionals - driven by the inherent risk of non-compliance, and the complexity of regulatory reporting, and of managing EH&S. Aberdeen surveyed 90 manufacturers on their EH&S compliance management strategy and how they have successfully overcome the challenges facing them. This Analyst Insight identifies the strategies, business processes, and technology enablers that are key to supporting EH&S compliance management.

Analyst Insight

Aberdeen's Insights provide the analyst perspective of the research as drawn from an aggregated view of the research surveys, interviews, and data analysis

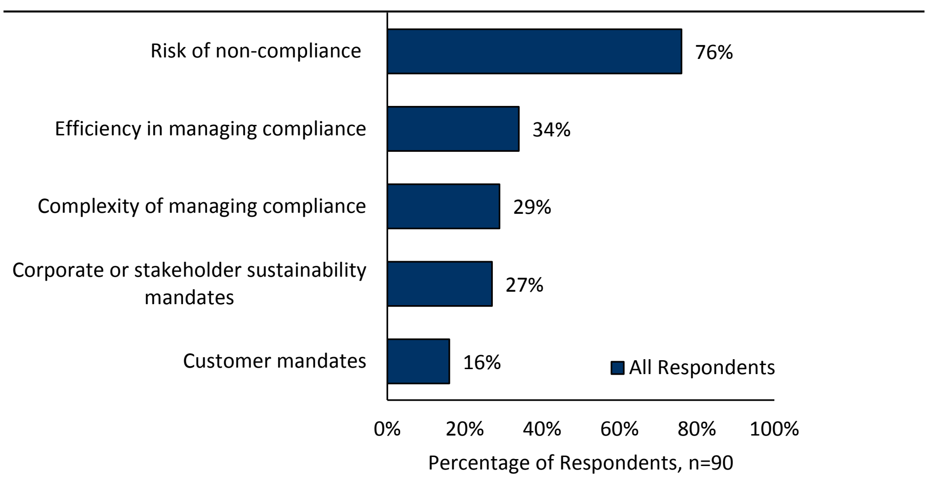
Business Context

As Environment, Health and Safety regulations evolve, internal and external stakeholders increasingly direct their attention to sustainable business practices and the need to stay in compliance. Aberdeen's April 2011 *Compliance Management in Environment, Health and Safety* showed that the top pressure driving companies to focus on EH&S is the need to ensure compliance with current and future regulations. This paper shows that a strategic approach to organizational structure, coupled with a comprehensive compliance management system, are critical to ensuring EH&S compliance. In this study we will explore how industry leaders use interconnected organizational structures, business capabilities, and technology solutions to improve their EH&S program and overall business sustainability.

Market Drivers

By definition, the top reason organizations focus on EH&S compliance management is to mitigate the risk of non-compliance.

Figure 1: Pressures Driving Focus on EH&S Compliance



Source: Aberdeen Group, December 2011

"One of the challenges that we faced was that we found that our Head Quarters (HQ) metrics were more lax in measuring incidents, leading us to believe we were better than we are. We're now keeping two sets of information (a locally more stringent measure) as well as the HQ required measure."

~Vice President, EH&S, Energy

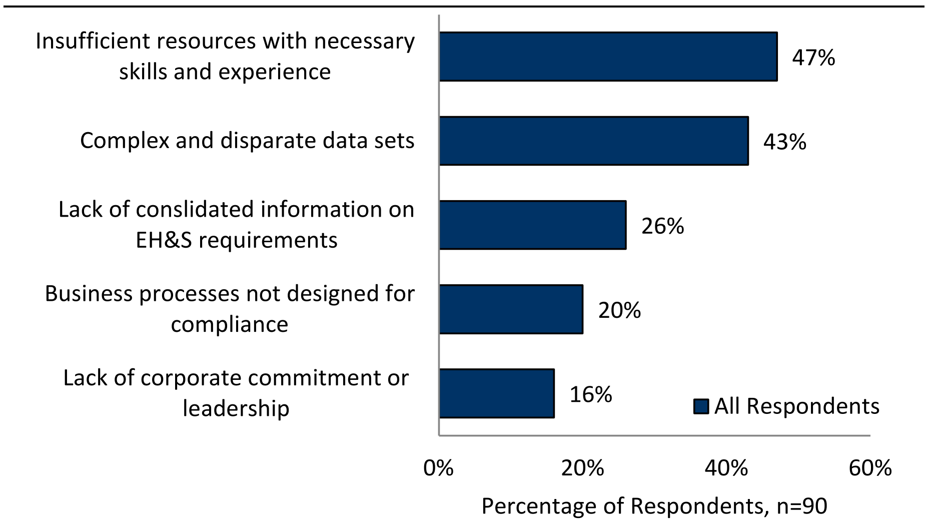
The consequences of not being in compliance with EH&S regulations can be drastic, including penalties, fines, damage to brand image, erosion of shareholder value, plant shutdowns, and, in some cases, even serious injury. EH&S risks threaten an organization's workers, and its bottom line. In addition to the basic need to reduce risk, respondents cited three additional drivers: the need to be more efficient, the increasing complexity of compliance management, and mandates from governments and customers. While the risk of non-compliance was the most commonly reported pressure (chosen by 76% of respondents), the selection of secondary pressures says much about the nature of an organization and its EH&S compliance program. The concern with efficiency and complexity indicates that respondents are concerned about how much compliance costs them. The pressure of government and customer mandates indicates the increasing role of market and public relations pressures in corporate decision-making.

Compliance is a broad and daunting topic, even when the discussion is limited to EH&S. When we asked executives to identify the top challenges to ensuring compliance, two major themes emerged from their answers (Figure 2):

- insufficient resources and skills in the organization
- lack of visibility into data related to EH&S compliance

Managing a compliance management system in EH&S is far from intuitive, and requires individuals with specialized skill sets, including subject matter experts, legal counsel, auditors and tool administrators. In addition, regulations vary from industry to industry. The pool of people with the right skill set for the job at hand is small, and the demand for these skilled laborers is high. Aberdeen found that, regardless of the maturity of an organization's EH&S program, companies find themselves challenged to assemble the right resources and skills to improve. Companies should focus their efforts on this area.

Figure 2: Visibility and Skill Challenge



Source: Aberdeen Group, December 2011

Achieving visibility into EH&S compliance data is another key challenge. In fact, half the challenges highlighted above are related to visibility into EH&S data. Lack of visibility into EH&S compliance data and EH&S requirements can hinder organizations' efforts to find critical information in a timely manner, and to report on their performance accurately. Improper reporting can result in penalties and fines.

Responding to the Demands of the Market

How then do manufacturers address both sets of pressures at the same time? Organizations need to improve the visibility into EH&S compliance data and reduce the risk of non-compliance, while maintaining competitive advantage in the marketplace. Some companies are accomplishing this, and their success is no accident. Aberdeen uses five key performance criteria to distinguish the Leaders (top 30% of performers) and Followers (remaining 70%) with regard to EH&S compliance (Table 1). The metrics used to determine Leader companies include important measures of a good EH&S compliance management program, taking into consideration workforce and workplace safety, the completion of audit action items, and compliance metrics such as NOVs and government reportables. We also considered how the EH&S program affected an organization's corporate metrics.

Table 1: Top Performers Earn Leader Status

Definition of Maturity Class	Mean Class Performance
Leaders Top 30% of aggregate performance scorers	▪ 91% Audit Action Items Completed On-Time ▪ 6% Year-over-Year (YOY) *decrease* in Government Reportables ▪ 9% YOY *decrease* in EH&S Notice of Violations ▪ +22 Operating Margin vs. Corporate Plan ▪ 0.39 Recordable Injury Frequency Rate
Followers: Remaining 70% of aggregate performance scorers	▪ 80% Audit Action Items Completed On-Time ▪ 1% YOY *increase* in Government Reportables ▪ 1.5% YOY *increase* in EH&S Notice of Violations ▪ +4 Operating Margin vs. Corporate Plan ▪ 1.47 Recordable Injury Frequency Rate

Source: Aberdeen Group, December 2011

Leader companies are not just good in one area. They effectively manage compliance, safety, audit action items and profitability. As shown in Table 1, the Leaders outperform the Followers on all five metrics. Top companies not only create a safer and more compliant working environment for their employees, but are also gain a competitive edge in the marketplace by overachieving their operating margins.

Followers lag behind the Leaders in these metrics, and need to take strong steps to improve their EH&S compliance management programs. These companies should use this research to identify the steps taken by Leaders

Definition

Government Reportables are EH&S compliance events or excursions that are legally required to be reported by the company to a regulatory or government agency.

EH&S Notices of Violation or Compliance Notices are written Notices of Violation (NOV) or Compliance Orders received by the company from a regulatory or government agency; i.e., that state an alleged EH&S non-compliance and/or set out EH&S or operations requirements which must be met in order to continue operation or avoid further enforcement action.

Definition for the Key Performance Indicators

√ **Operating Margin:** Defined as the difference between the actual operating margin and budgeted operating margin

√ **Recordable Injury Frequency Rate:** Expressed as the number of injuries recorded per 100 full time employees per year

√ **Audit Action Items Completed On-Time:** Defined as the percent of time audit action items are completed on time

√ **Government Reportables:** Defined as the percent change in the number of government reportables over 12 months

√ **Notice of Violations:** Defined as the percent change in the number of notice of violations over the last 12 months

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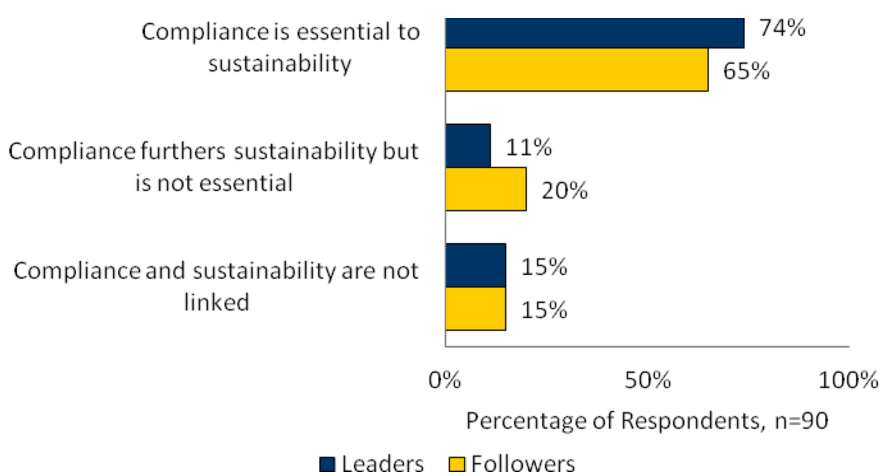
and implement these practices to improve their performance. It is important to note however, that there will be a lag time between reform and results for compliance metrics. This is particularly the case with NOVs, where, often, an organization may not receive an NOV until months or even years after the non-compliance event. Readers should keep in mind that changes to internal processes and technology may not result in improved compliance metrics for at least a year.

Key Business Capabilities

Sixty-Eight (68%) of all respondents understand that there is a connection between compliance and sustainability, and that compliance must be ensured if an organization is to be sustainable. However, Leaders hold different views from their competitors about the degree of connection between compliance and sustainability (Figure 3).

Figure 3: View on Sustainability



Source: Aberdeen Group, December 2011

"Recent sustainability initiatives have had major impact to get the organization to focus on EH&S compliance. However, the major challenge is to successfully compete for internal funding in order to avoid unfunded mandates."

~EH&S Manager
Chemical Manufacturer

Leaders are also more likely to have EH&S compliance engrained in their organization's culture, or as an integral part of the organization's operating management system (Figure 4).On the other hand, the Followers are more likely to view EH&S compliance as location-specific, less likely to adopt the Leaders' holistic perspective.

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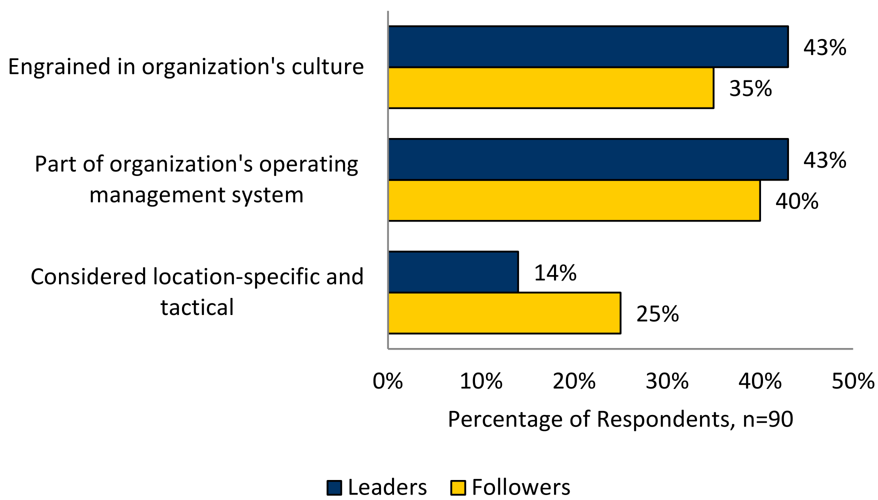
Figure 4: View on EH&S Compliance within the Organization



Source: Aberdeen Group, December 2011

How exactly are the Leaders engraining compliance into their culture? Aberdeen asked survey respondents to rate the level of engagement of their organization's leadership with EH&S compliance management, from a score ranging from 1-5. A rating of "1" meant "not very engaged", "3" meant "moderately engaged" and a score of "5" meant "highly engaged".

Table 2: Rating of "5-Highly Engaged" Leadership Engagement

Level of Leadership Engagement	Leaders	Followers
Visible commitment to continuous improvement/innovation	46%	25%
Knowledgeable on current EH&S compliance requirements/concerns	39%	33%
Frequency of EH&S compliance KPI reviews	25%	19%
Commitment and support of compliance management program	39%	31%

Source: Aberdeen Group, December 2011

As shown in Table 1, Leaders state that their upper management is highly engaged with their workforce on various aspects of EH&S compliance, from supporting the compliance management program to providing visible commitment, to driving continuous improvement to the EH&S compliance management program. Such engagement drives employee behavior and shows that compliance is key to the organization's success. To change an organization's culture, an example must be set from the top.

Existing Business Capabilities in Place

Table 3 identifies the distinguishing characteristics of the Leaders.

Table 3: Differentiating Business Capabilities

Business Capabilities	Leaders	Followers
Document accountability for individual compliance tasks	82%	66%
Processes to verify completion of compliance tasks	75%	57%
Standardized metrics (KPIs) to monitor success of compliance program	68%	50%
Central repository of relevant compliance laws and regulations	63%	58%
Scorecard for normalizing and benchmarking EH&S compliance performance across facilities	50%	47%

Source: Aberdeen Group, December 2011

Document Accountability for Individual Compliance Tasks

Documenting accountability for individual compliance tasks gives employees better visibility into and understanding of the impact of their roles on ensuring compliance. Documentation drives accountability from the plant floor to managers to executives. Leaders also have standardized processes to verify the completion of compliance tasks. While this may seem trivial, an audit-like system promotes accountability and ensures proper completion of compliance tasks.

"Our organization has expanded the use of Plan-Do-Check-Act to EH&S compliance. In doing so, we have therefore been able to connect compliance and operations."

~EH&S Manager
Oil and Gas

Central Repository of Relevant Compliance Laws and Regulations

Many organizations struggle with staying on top of current regulations and effectively report to external bodies. Leaders differentiate themselves by investing in a central repository for compliance laws and regulations. Unfortunately, many companies store compliance data in siloed systems, which makes accessing critical information difficult and time consuming. As a result of investing in a centralized system, Leaders can find relevant information about current regulations from a single source, rather than disparate avenues.

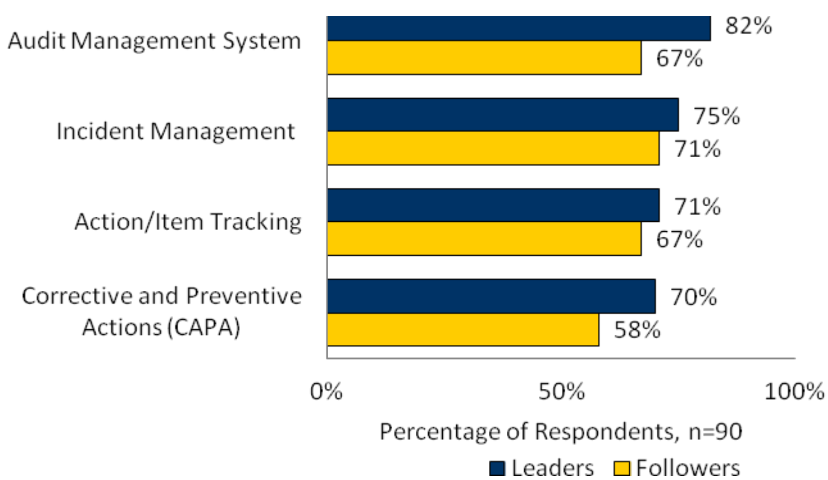
Standardized Metrics (KPIs) to Monitor Success of Compliance Program

Performance management is tightly coupled with knowledge management for Leaders. Large multinationals, especially those with manufacturing operations around the world, find it challenging to ensure performance is measured the same way across all areas. When executives have the same view of how operations are performing in each geography, location and product line, they can determine which steps will have the most overall impact in addressing any shortcomings. Leaders benchmark their facilities with standardized KPIs, and normalizing these scorecards across various facilities. Key decision-makers can use this information to identify best practices and adopt these practices across various operations and facilities.

Technology Enablers

Leaders invest in technology to gain access to critical information on the plant floor. Using these solutions (Figure 5) to manage EH&S compliance enables Leaders to gain more visibility into critical EH&S data and manage the massive amounts of EH&S data more effectively. By investing in these systems, an organization can gain centralized insight into, control of and accountability for operational processes and compliance. This level of control helps Leaders more efficiently collect, report, and audit their processes, ensuring greater consistency in their operations, and their management of compliance across a range of regulations.

Figure 5: Technology Enablers



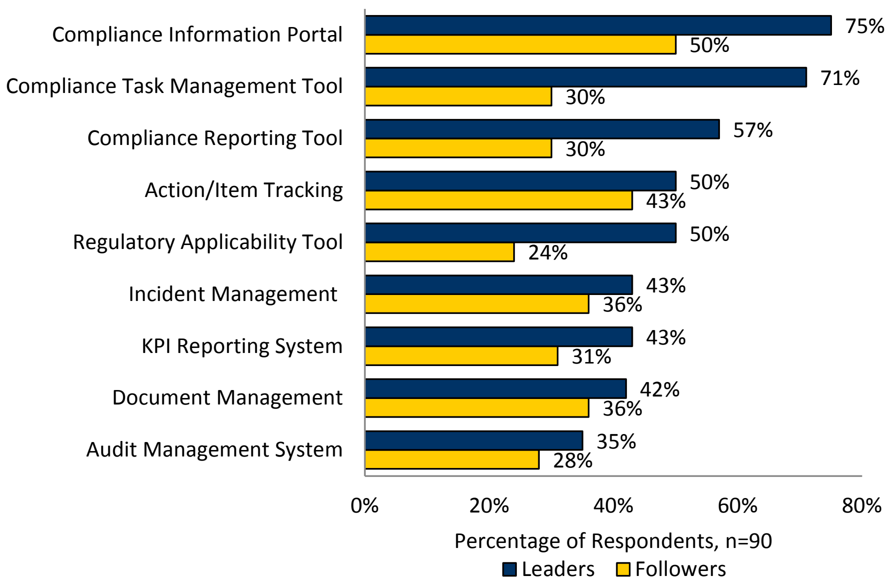
Source: Aberdeen Group, December 2011

"We recently centralized the regulatory reporting tasks of our global company. This program has been very successful. The challenges included of this program was implementing consistent methodologies at the different sites; and developing and retaining trained personnel to manage the system."

~EH&S Subject Matter Expert
Chemicals

Leaders differentiate themselves by their ability to automate the collection of their emissions, materials and substances, audit, product, waste, safety and other data (Figure 6). Automating the collection of EH&S data ensures that critical EH&S data is no longer collected in multiple systems and left isolated. Automation allows manufacturing to improve the validity of collected EH&S data, to use historical data more effectively to optimize decision making, and to deliver data to decision makers in real-time. In short, automation ensures greater visibility, better collaboration across functional teams, and more consistent data. This in turn increases the likelihood that the information is provided correctly, at the right time, in the right form and in front of the right decision maker to enable better compliance management decisions. In addition, Leaders have access to an automated central repository for key compliance laws and regulations, proper audit information, and the massive amounts of EH&S data, which lets them report properly against relevant compliance requirements.

Figure 6: Automation of Data Collection



Source: Aberdeen Group, December 2011

"EH&S compliance management is part of the culture here. All levels from top to bottom are indoctrinated."

~EH&S Manager
High-Tech Industry

EH&S compliance touches many parts of the business, from product development, to manufacturing, to the supply chain; it cannot be an afterthought. Leaders blend strategic business capabilities and technology to make EH&S compliance a focus of their business. To do this, Leaders have engrained EH&S compliance into their corporate culture, established standard measures to ensure compliance, and driven accountability across the organization.

While culture is key, technology is also vital to support EH&S compliance. Successfully using technology in every-day business can be challenging. However, Leaders have blended a range of tools together to help their employees and executives make connections between day-to-day tactical operations and strategic business goals.

For more information on this or other research topics, please visit www.aberdeen.com

Related Research	
Compliance Management in Environment, Health and Safety; April 2011 *Environment, Health and Safety*; April 2010 *Sustainable Production: Good for the Plant, Good for the Planet*; September 2009	*Energy Management: Driving value in Industrial Environments*; April 2009 *The ROI of Sustainability: Making the Business Case*; May 2009

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