Proactive Risk Management with SAP BusinessObjects

Leveraging Technology to Gain Enterprise Transparency and Rapid Insight into Changing Business Conditions
INTRODUCTION

“What is the totality of our enterprise risk?” That’s a question being raised more often in today’s boardrooms as organizational leadership comes to realize that effective enterprise risk management (ERM) entails more than just the monitoring of financial risk. While financial risk is still an ongoing concern, enterprises also must be vigilant about identifying and being prepared to respond proactively to a wide range of risk.

Depending on the organization and its industry, key risk areas may include:

- Strategic risk (e.g., losing market share due to industry transformation)
- Environmental- or health-related risk (e.g., an explosion at a facility)
- Political/geopolitical risk (e.g., terrorism or nationalization of international assets)
- Operational risk (e.g., aging equipment causing a major manufacturing disruption)
- Legal and compliance risk (e.g., insider fraud)

The practice of proactive risk management improves an organization’s ability to manage both existing and emerging risks. It requires understanding the effects of key assumptions about risks and being able to visualize how risks relate to each other. In addition, proactive ERM means thinking “outside of the box” when identifying emerging risks and having measures in place to prevent them, mitigate their effects and, perhaps, seize upon opportunities they may present.

It is important to recognize that proactive ERM is not a process motivated by a compliance effort or an audit – nor is it an activity performed in isolation. To understand the totality of risk to the business, and to manage known and emerging risks effectively and to the benefit of corporate strategy, risk management capability must be integrated within the organization. It should be an embedded process that ultimately becomes part of the company’s “DNA.”

ACHIEVING ALIGNMENT AND TRANSPARENCY AROUND RISK

While more organizations are recognizing the need to manage risk more proactively, especially in an uncertain business environment, most are not well equipped to do so. In fact, in the majority of organizations, risk management processes are relatively immature and ad hoc.

According to a recent study conducted by North Carolina State University, 63 percent of companies believe the volume and complexity of risks have changed “extensively” or “a great deal” over the past five years, yet at more than 75 percent of today’s organizations, key risks are discussed only on an ad hoc basis at management meetings. And at almost 70 percent of the companies surveyed by the university, management does not routinely report the entity’s top risk exposures to the board of directors.

This lack of communication can be attributed primarily to these factors: a lack of clarity around who “owns” risk in the organization, or the attitude that risk management is solely the risk manager’s or internal auditor’s job, and a lack of alignment among key stakeholders who have differing perspectives and agendas on risk. As a result, there is no transparency around risk, which leads to suboptimal decision-making throughout the organization and exposes the company unnecessarily to risk that otherwise could be avoided.

Following is the risk management scenario at most enterprises: Risk managers are focused on assessing the company’s current risk profile; as part of this process, they must constantly reach out to business line managers for information, often asking them to fill out surveys or attend workshops. However, the business owners view these manual, time-intensive activities as impediments to their ability to focus attention on achieving their strategic objectives. Meanwhile, company executives are left wondering why, when they ask for reports on the top risks the enterprise is facing, they cannot get a timely or accurate response.

In organizations where proactive risk management is practiced effectively, however, key stakeholders – risk managers, business owners and management/executives – are in alignment with their view of risk and understand that risk responsibility is shared throughout the enterprise (see Figure 1). In addition, key risk management activities, from planning to monitoring, are automated, so there is efficient transparency around risk. This transparency allows the organization to identify and respond immediately to changing business conditions.

With risk-adjusted, proactive management of enterprise performance:

- **Executives** are receiving the most up-to-date information via dashboards, reports and alerts, and view risk management as a critical part of performance management. When deciding which corporate strategies to pursue (e.g., acquiring a company, investing in a new product), risk is fully considered. Executives are able to see what the top risks are to meeting each of the company’s objectives successfully and can develop an appropriate action plan for responding proactively to those key risks – whether they pose a threat or present an opportunity.
• **Risk managers**, meanwhile, no longer need to spend all of their time begging for data from business owners and other sources and can instead become strategic advisors to the business units. Through a single platform, they can automate risk management processes across disparate systems and leverage all data currently in the enterprise systems so risks are monitored automatically. An open framework is used to integrate other systems, as well as manual processes, to provide an end-to-end risk process across the extended enterprise of customers, suppliers and partners.

• **Business owners** start to own and drive risk management for their specific lines of business. Once the discipline of risk management reaches those who make day-to-day decisions, better decision-making transpires as risk information is used strategically and tactically. In this environment, business owners are better able to identify the risks that often occur within their business activities, develop potential mitigation strategies, benchmark assumptions and establish more effective risk monitoring processes.

**BALANCING RISK WITH OPPORTUNITY USING SAP BusinessObjects RISK MANAGEMENT**

To evolve into an enterprise that practices proactive risk management and aligns key stakeholders around risk, many leading organizations are implementing the SAP BusinessObjects Risk Management solution. By using one system to drive visibility and awareness of risk throughout the enterprise, organizations can better protect value by preventing risk events from occurring and create value by incorporating risk into business strategy and planning.

SAP’s solution, which Protiviti has helped many of its clients to implement, allows organizations to automate their risk management activities in four “best practice” areas (see Figure 2):

**Plan** – The planning stage of risk management includes scoping activities, determining risk appetite and setting up thresholds for risk tolerance, creating a document classification system, and mapping risks to the business.

**Identify and Analyze** – In this phase, risks are documented, key risk indicators (KRIs) are assigned, assessments are conducted, and risk levels are analyzed. KRIs are essential to proactive risk management because they serve as “barometers” for alerting the enterprise to change – good or bad. Examples of leading indicators include customer complaints, service levels, near-miss injuries, failed controls and changes in inventory.

**Respond** – This includes identifying and documenting appropriate responses or controls, and performing an ongoing reassessment of enterprise risk. An enterprise using the SAP BusinessObjects Risk Management solution can make response plans to:

- **Avoid risk**: Change business plans to circumnavigate a risk.
- **Mitigate risk**: Incorporate procedures and practices to acknowledge that risk is going to occur and have a plan to control it.
- **Transfer a risk**: Hedging the risk by sharing its impact with another party, such as purchasing insurance or incorporating protections within supplier contracts.
- **Prevent a risk**: Implement an embedded control, usually automated, to detect and/or prevent a risk event from occurring. For example, an organization could have a restriction within the enterprise resource planning (ERP) system on placing orders from countries sanctioned by the local government in order to avoid fines and reputational exposure.
Monitor – Risk monitoring, the final phase, is an ongoing process. (Note: A successful risk management solution combines risk management with monitoring.) Enterprises should constantly reassess their risk levels, as indicated by their KRIs, and monitor their response effectiveness to those risks.

The SAP BusinessObjects Risk Management solution also allows for business risks to be owned by the operational and business line managers responsible for driving risk management in specific facilities or business units. While a “risk management advocate” should drive the proactive ERM process, business units ultimately own risk and are subject to periodic audit/compliance review.
The “risk heatmap” (see Figure 3) provides clear visibility into potential risk events and their relative current threat levels. In addition, the risk dashboards can display the projected dollar amount for both inherent total loss and residual total loss that can result from a specific risk event, such as adverse changes in capital and liquidity.

![Risk Heatmap]

<table>
<thead>
<tr>
<th>Risk Event</th>
<th>Person Responsible</th>
<th>Inherent Risk Level</th>
<th>Residual Risk Level</th>
<th>Inherent Total Loss</th>
<th>Residual Total Loss</th>
<th>Curr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse changes in capital and liquidity</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>750,000.00 USD</td>
<td>709,375.00 USD</td>
<td>USD</td>
</tr>
<tr>
<td>Knowledge capital deficit</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>800,000.00 USD</td>
<td>772,812.50 USD</td>
<td>USD</td>
</tr>
<tr>
<td>Major accident in facility</td>
<td>Very High</td>
<td>High</td>
<td></td>
<td>10,000,000.00 USD</td>
<td>9,925,000.00 USD</td>
<td>USD</td>
</tr>
<tr>
<td>Violation of emissions standards</td>
<td>Medium</td>
<td>Low</td>
<td>Low</td>
<td>5,000,000.00 USD</td>
<td>4,895,390.00 USD</td>
<td>USD</td>
</tr>
<tr>
<td>High risk in FAS 157 Level 3 designation</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td>3,375,000.00 USD</td>
<td>3,320,000.00 USD</td>
<td>USD</td>
</tr>
<tr>
<td>Failure to comply with FAS 133</td>
<td>High</td>
<td>Low</td>
<td></td>
<td>2,500,000.00 USD</td>
<td>2,225,000.00 USD</td>
<td>USD</td>
</tr>
<tr>
<td>Misallocation of royalty payments</td>
<td>High</td>
<td>Medium</td>
<td></td>
<td>3,125,000.00 USD</td>
<td>2,837,500.00 USD</td>
<td>USD</td>
</tr>
<tr>
<td>Illegal arrangement (FCPA)</td>
<td>High</td>
<td>Medium</td>
<td></td>
<td>3,000,000.00 USD</td>
<td>1,930,000.00 USD</td>
<td>USD</td>
</tr>
</tbody>
</table>

Figure 3: Example of a “risk heatmap” created in the SAP BusinessObjects Risk Management solution
CASE STUDY

Protiviti recently guided the implementation of the SAP BusinessObjects Risk Management solution for a new division of a top-tier oilfield service company that delivers solutions to oil and gas operators that help them maximize reservoirs. The company wanted to take advantage of a new trend in the oilfield services market toward turnkey drilling operations, so it formed a division to service outsourced contracts to perform drilling projects for operator clients.

Turnkey contracts can be very profitable, but they also can expose an enterprise to severe losses if bids are not forecast and managed with consideration of key risks. This new division needed a culture of contingency – ways to predict and contain the myriad risks related to their projects. Protiviti was brought in to introduce technology to help the business optimize its risk evaluation, analysis and response processes so as to make better decisions.

The initiative included a focus on:

- Establishing a clear understanding of risks and achievable rewards, including a common risk language and consensus on risk thresholds
- Increasing risk management competence through people, tools and more proactive risk management processes, as well as better documentation
- Delivering balanced risk/reward solutions to protect profits and provide confidence for expanding into this lucrative business

Initially, personnel for the oil and gas company’s new division maintained their risk registers in Microsoft Excel spreadsheets. However, this process was highly inefficient because it lacked any consolidated risk planning or exposure levels, and each project team and region identified and tracked risks in different ways. There also was no transparency, or “view from the top,” as to what the key risks to the enterprise were or how the organization should proactively manage them. In addition, there was no common language around risk and no sense of the potential financial loss a specific risk event posed to the business.

Protiviti’s team met with process owners and hosted a number of workshops to define internal and external risk categories, such as a well blowout or major weather event, which could lead to business disruption or financial loss. The implementation process for proactive risk management, supported by the SAP Business-Objects Risk Management solution, included the following phases:

- **Risk planning:** Master data elements were defined, including risk threshold levels (e.g., what would be considered a catastrophic event and what is an estimated dollar value), business activities to be assessed, risk categories, process owners, risk heatmaps and other reporting requirements.
- **Risk assessment:** Risks were categorized and prioritized, potential risk exposures were quantified, and the master data was put into the SAP system.
- **Risk response:** Risks that were to be managed proactively were selected, and risk mitigation plans for each specific risk were defined.
- **Deployment:** Deployment of the SAP system began with a pilot program (based on a current project) in one division, was expanded to several regions, and is now rolled out companywide via a defined plan structured by geography and function. Protiviti helped train the company’s “super users,” and solicited and responded to feedback from the field throughout the process.

As part of the process of implementing a more proactive risk management process, Protiviti worked with the oil and gas company’s division to develop risk “bow ties” (see Figure 4) to help all key stakeholders visualize the potential causes, effects and responses to a particular risk event.
At the center of the bow tie is the unwanted event – in this example, a well blowout – that the organization needs to monitor and, hopefully, prevent. On the left side of the bow tie are the risk drivers and KRIs measuring trends around root causes such as improper procedures, unstable well condition and poor manufacturing quality. On the right are the potential impacts, such as legal/regulatory fines, reputation, and revenue and earnings. This list helps the company to understand the breadth of damage if a particular risk event occurs. Underneath the bow tie are the proposed responses to reduce, avoid, transfer or accept – as well as recover from – the risk event.

Following the implementation of the SAP Risk Management solution and guidance from Protiviti, executives with the oil and gas company’s new division now have the insight they need for more informed decision-making based on a normalized risk equation rather than multiple interpretations. And with formatting and spreadsheet errors no longer an issue, there is greater focus on true analysis for exposure and profitability, as well as the creation of active response plans.

Management now has the ability to look at similar projects to understand the risk profiles that are being incorporated – and this visibility extends across the organization instead of on just one project. Depending on the role and interest of a stakeholder, risk information can be viewed according to risk category, drivers, impacts, exposure and more. Risk information also can be organized by region, project, or even by a specific well.

Protiviti helped the oil and gas company’s new division shift its various Microsoft Excel risk registers out of their siloed environments (i.e., individual laptops) and into the central SAP Risk Management database. The SAP system is promoting common language around risk, as well as standard interpretations for risks. In this standardized risk management framework, the company’s risks are automatically plotted in a risk heatmap, providing a transparent view of comprehensive risks for greater consistency and knowledge sharing across regions.

If the organization was still relying on Microsoft Excel to maintain its risk registers, which offers just a project-only view of risk, and management requested a report on the top 10 risks the enterprise was facing, the information would be outdated by the time all the risk registers were combined into one report. Now, with the SAP BusinessObjects platform, risk reporting is immediate and enterprise leadership can proactively investigate and intervene on risk events.

For more on the SAP BusinessObjects Risk Management solution, go to www.sap.com/grc.
CONCLUSION

Proactive risk management is a transformative process. For most companies, fully implementing a risk management culture takes time and occurs in phases, for example, by engaging in high-value pilot programs in just one group or a division before rolling out an effort companywide. And before beginning the journey toward enterprise risk management, organizations should understand clearly the problems the business must solve, and then work to identify risk interrelationships and assumptions.

By tying the organization’s effort to a specific issue or tangible threat from the start – and underscoring the potential for financial loss if certain risks are not avoided, mitigated or leveraged – the organization will be more likely to win buy-in from all stakeholders, including from executive management and the board. Implementing a leading technology solution that allows the organization to integrate and manage key risk management activities, and gives stakeholders a clear, full picture of enterprise risk, is also essential to the long-term success of a proactive ERM process.

ABOUT PROTIVITI

Protiviti (www.protiviti.com) is a global business consulting and internal audit firm composed of experts specializing in risk, advisory and transaction services. We help solve problems in finance and transactions, operations, technology, litigation, governance, risk, and compliance. Our highly trained, results-oriented professionals provide a unique perspective on a wide range of critical business issues for clients in the Americas, Asia-Pacific, Europe and the Middle East.

Protiviti has more than 60 locations worldwide and is a wholly owned subsidiary of Robert Half International Inc. (NYSE symbol: RHI). Founded in 1948, Robert Half International is a member of the S&P 500 index.

As the world’s leading provider of business software, SAP delivers products and services that enable enterprises of all sizes to improve their business operations. SAP facilitates a company’s effort to manage risk and compliance while optimizing efficiency, strategy and growth with a single integrated financial management platform. Addressing business processes in more than 25 industries, SAP has maintained its role as the authority on business software.

Protiviti and SAP are actively working together to help clients improve their capability in this important area by implementing and effectively utilizing the full SAP BusinessObjects suite of GRC and EPM solutions to enhance their integrated enterprisewide risk mitigation and compliance efforts. For more information, visit www.protiviti.com/en-US/Solutions/Information-Technology/Managing%20Applications.
OUR INFORMATION TECHNOLOGY EFFECTIVENESS & CONTROL SOLUTIONS

We partner with CIOs, CFOs and other executives to ensure their organizations maximize the return on information systems investments while at the same time minimizing their risks. Using strong IT governance to ensure alignment with business strategies, we drive excellence through the IT infrastructure and into the supporting applications, data analytics, and security. We also facilitate the selection and development of software, manage the risk of implementation, implement configurable controls on large ERP installations, and implement governance, risk and compliance (GRC) software applications.

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