IBM Institute for Business Value

Combating risk with predictive intelligence

An analytical approach to enterprise risk management

Overview

Complexity and risk define our business environment, yet executives must often look in the rearview mirror with reactive hindsight to sudden geo-political risks, tragic natural events, market disturbances and global economic swings. Even daily operational disruptions and interruptions are typically handled in a reactive – instead of a proactive, predictive – manner, with resultant financial consequences. But companies with leading risk management practices are looking forward, applying "predictive intelligence" to proactively mitigate and manage complexity-fraught risks, while bringing significant value to their bottom line and their brand.

These forward-thinking organizations see change as an opportunity, and they act on possibilities, not just react to problems. The question is how?

What risk factors keep executives awake at night, and what strategies do they employ to alleviate the effects of risk on the performance of their enterprises?

To learn the answers to these questions, the IBM Institute for Business Value polled 494 executives across a wide variety of industries and geographies. As might have been expected, understanding risk is the first step to managing it. Companies can begin by profiling risk factors so that they can be assessed quantitatively. They can model risk events with scenario analysis and apply "predictive intelligence" techniques to proactively mitigate and manage risk.

The ability to plan and implement innovative risk management strategies is becoming increasingly critical in today's volatile world – one in which a single, unplanned event can cripple even the strongest of enterprises. And as complexity in the business environment continues to mount, so, too, does the magnitude of risk factors companies must confront on a daily basis.

It is a riskier world

When asked to rank the three most important external forces impacting their organizations in the next three to five years, executives we interviewed cited market factors, macro-economic factors and regulatory concerns. Other key external forces included technological advances, talent/skill shortages, socio-economic concerns, globalization, environmental issues and geopolitical factors. An overwhelming 77 percent feel as though their risk exposure has increased year-to-year. Not a single respondent said risk is decreasing.

The volatility of today's global economic environment places intense pressure on enterprises, increasing risk exposure and impacting markets, customer demand, operations, brand and stability. Organizations often struggle to respond. Respondents to our survey cited market instability, customer demand/channel variability and impact on operations as their top areas of concern.

Many organizations are responding by increasing their focus on refining those sales and operations planning processes that combine sales and marketing, finance, operations and executive vision to develop enterprise-wide consensus plans. Companies are also reevaluating their distribution channel strategies and, in many cases, reconfiguring their global networks of assets and relationships. Enterprises concerned with brand value and growth strategies are responding with new product/service innovations, many of which are focused on growth markets.

Those forward thinkers that are establishing best practices in risk management are applying insights from customer data and risk indicators across products and geographies to integrate operational and financial performance. They are taking the following steps to gather intelligence to fight risk exposures.

1. Assess for value

Forward-thinking organizations act on possibilities, assessing risk factors while quantifying business value. They identify risk factors through consistent, objective and pervasive evaluation criteria of impact, likelihood and the effectiveness of controls to quantify the risk level.

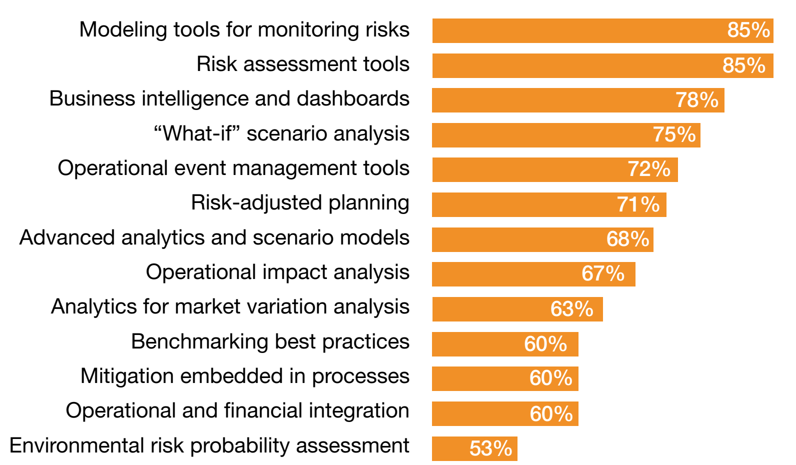
2. Model to mitigate

Scenario modeling with analytics can be used to formulate mitigation plans. Sales and operations consensus plans can be adjusted for the probability of various risk factors occurring. Sourcing and distribution networks can then be modeled and redesigned for resiliency.

3. Predict and act

Many companies with leading risk management practices predict with visibility into planned events and unexpected disruptions with a plan for proactive, network response. By analyzing patterns in data, companies can predict potential future outcomes and act with anticipation of either mitigating the risk exposure, or even capitalizing on opportunity.

Where is your company focusing its key risk management implementation efforts?



Source: IBM Institute for Business Value Risk Management Study

Executives are implementing a multitude of modeling tools, scenario planning tools and analytics to assess, determine impact and mitigate effects.

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How can IBM help?

IBM Program Work Center for Predictive Risk Management

The *Predictive Risk Manager* is an innovative collaborative risk program management solution, delivered as a SaaS application over the web, thereby providing access anywhere, anytime. The Predictive Risk Manager provides real-time, global visibility for teams and executive management across the enterprise, across the value chain and across the globe. It allows executives to focus on the outcomes of their complex, multi-faceted risk mitigation initiatives with assurance that the appropriate actions are communicated, monitored and that response objectives are being met. And most important, it allows direct participation of employees, suppliers, and providers – anyone involved in the initiative -- through a personalized portal. Tailored information and reports, with smart links among actions, issues, documents and impact scenarios, provide context and link action to strategies and plans.

To learn more, download the complete IBM Institute for Business Value executive report at: ibm.com/gbs/predictiverisk

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