

Leveraging bank risk management practices for the insurance industry

Executing disciplined risk and compliance programs that deliver sustained compliance



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Executive overview

It may be tempting to dismiss the AIG financial meltdown as an atypical example of an insurance company acting more like a bank and suffering the consequences of risky financial practices. But many of the operational risks that have humbled giant financial institutions are increasingly relevant as the asset side of insurers more closely resembles that of banks.

The reality today is that few insurers have sufficient historical data to adequately model operational risk in the same way that they do for financial risks. Insurance risk management has typically focused on known risks and associated historical data. But while this historical data is critical to the aggressive pricing of certain products such as life insurance, it is woefully inadequate at addressing serious and potentially devastating operational risks. In fact these risks are often not isolated at all in existing risk management practices even though they may represent 20 percent of an institution's risk exposure.

Operational risks include such factors as business practice violation, financial disclosure violation, asset pricing/modeling risks, transaction integrity risks and so forth, all of which have factored heavily into the systemic exposures that have roiled the world's banking giants. Management traditionally believed these operational exposures to be significantly lower than underwriting risks and credit risks. In reality, as demonstrated by the regulatory capital disclosures at the large banks and the cataclysmic failure of AIG, operational risks including unknown/un-modeled credit risks can be fatal.

The banking industry, notwithstanding the management issues that have surfaced in recent times, has acquired at the behest of regulators a maturing tool kit to deal with operational risk. Insurers can take advantage of automated solutions that have been developed to:

- Automate risk and control self assessments
- Track loss events and near misses
- Categorize risk and losses



Embedding risk management

The financial services industry has only recently begun to tackle in earnest the issues of operational risk and it is proving a difficult challenge to deal with, especially through the lens of quantitative experts. These risks require a focus on controls and on establishing the right trade-off between the cost of cost-control and reducing these risks and uncertainties across an increasingly broad array of operational issues ranging from IT, to compliance to human resources, to political and environmental variables.

Companies must embed a culture of risk management throughout the organization, which requires a risk focus across all functions, taking into consideration regulatory requirements and guidance, and establishing an effective framework in light of overarching enterprise objectives. While managing these risks independently has proven to be very effective in reducing earnings volatility, there are many interdependencies that can be missed when risk management occurs in silos. The silo approach can lead to lack of accountability and misalignment with business strategy and appetite statements.

Given the complex nature of the insurance industry, presenting a clear, coherent view of the risk profile of an organization generates substantial benefits, even beyond optimal internal decision making. Commitment to enterprise risk management (ERM) programs enables companies to take a portfolio view of all types of risks, including financial risk, operational risk inclusive of technology risk and compliance risk. This enterprise view helps to optimize risk transfer strategies and increase efficiency, while breaking down the silos of risk management that are typically dotted throughout the organization.

Finally, successful ERM integrates risk management activities into the day-to-day business processes of the company. These ERM programs optimize business performance by supporting and influencing pricing, assisting in determining resource allocation, influencing compensation and affecting many other business decisions.

Regulators and ratings agencies

Insurers are facing growing regulatory requirements and associated scrutiny around the risk management practices within the insurance industry. From the National Association of Insurance Companies (NAIC) in the United States, to the Financial Services Authority

(FSA) and the European Commission, the heat is being turned up on industry participants. There is every indication that insurers will be increasingly treated alongside banks in terms of supervision and regulatory requirements.

Regulators are primarily concerned that enough reserves, even in very adverse circumstances, are built up and maintained in order to settle, at least in theory, all outstanding claims at all times. Indirectly, some form of operational risk is already dealt with in the calculation of reserves – this is especially true for capturing model errors or reserve calculation methods based on actuarial methods.

Still, there is a general lack of clarity as to what else operational risk should capture in this industry. In general, insurance regulators are observing what banking regulators are doing and are looking to leverage where this makes sense. The insurance industry has the advantage of learning from the banking industry's movement towards ERM in general and operational risk in particular. Insurance companies have the opportunity to learn from the bankers' methodologies and implementation experiences and to apply the emerging best practices within the unique context of the insurance environment. This cross pollination would ultimately aid insurers in their quest to determine the capital requirement for operational risk.

The FSA introduced an Individual Capital Adequacy Standard (ICAS) for insurance companies in the Prudential Sourcebook (PSB). The Individual Capital Assessment, ICA, covered in PRU 1.2 and 2.3, requires a firm to:

“...identify and assess risks to its being able to meet its liabilities as they fall due, to assess how it intends to deal with those risks and to quantify the financial resources it considers necessary to mitigate those risks. To meet these requirements, a firm should consider the extent to which capital is an appropriate mitigant for the risks identified and assess the amount and quality of capital required.”¹

Operational Risk is one of the six risk categories in the PSB, along with credit risk, market risk, liquidity risk, group risk and insurance risk. It is described as “the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events.”

A focus on Operational Risk is also spelled out in the Solvency II regulation issued by the European Commission. Solvency II requires, on top of the calculation of risk capital for market,

credit and insurance risk, an additional add-on for operational risk. In the standard model, this amount is based on the level of technical reserves or on a fraction of annual premiums.

The NAIC in the United States developed a risk based capital (RBC) requirement for life and non-life insurers in the 1990s. The RBC framework deals with market, credit, underwriting and business risk and has a ladder of intervention to proactively manage companies that falls below certain percentages of the RBC.

Model audit rule compliance

The NAIC Annual Financial Reporting Model Regulation (Model Audit Rule) was introduced in 2004 in response to CPA firms citing significant deficiencies in internal controls for insurance companies looking to achieve Sarbanes Oxley compliance.

Effective January 1, 2010, in addition to annual audited financial statements, accountants will be required to report “significant deficiencies” that arise as part of a financial statement audit under the Model Audit Rule.

IBM® OpenPages® works with insurers to meet new and evolving regulations such as the Model Audit Rule and enables insurers to execute disciplined risk and compliance programs that deliver sustained compliance.

Ratings agencies

In the face of increasing pressure from ratings agencies and investors, the challenges of implementing an enterprise wide risk framework, which are significant, may seem less challenging than the likely alternatives of constant crisis management and reaction.

The ratings agencies have recently taken a much more formal stance on the specific requirements for an organization’s ERM framework and the potential for using internal models for capital calculations. Standard and Poor’s (S&P) introduced an additional evaluation component specifically focused on ERM. Since performing the ERM evaluations, very few companies have received strong ratings and even fewer have received excellent ratings. This means that S&P will evaluate internal capital models for only a small group of insurers.

Definitions of ERM classifications

Classification definition

Excellent	Insurer has extremely strong capabilities to consistently identify, measure, and manage risk exposures and losses within the company’s predetermined tolerance guidelines. There is consistent evidence of the enterprise’s practice of optimizing risk-adjusted returns. Risk and risk management are always important considerations in the insurer’s corporate decision making.
Strong	Insurer has strong capabilities to consistently identify, measure, and manage risk exposures and losses within the enterprise’s predetermined tolerance guidelines. A strong ERM insurer is somewhat more likely to experience unexpected losses that are outside of its tolerance level than an excellent ERM insurer. There is some evidence of the enterprise’s practice of optimizing risk-adjusted returns, though it is not as well developed as those of leading industry practitioners. Risk and risk management are usually important considerations in the insurer’s corporate decision making.
Adequate	Insurer has capabilities to identify, measure, and manage most major risk exposures and losses, but the process has not been comprehensively extended to all significant risks facing the enterprise. Insurer loss/risk tolerance guidelines are less developed. Execution of its existing risk-management programs is sufficient, albeit less comprehensive, than are strong and excellent ERM practices. Unexpected losses are more likely to occur, especially in areas beyond the scope of the existing ERM practices. Risk and risk management are often important considerations in the insurer’s corporate decision making.
Weak	Insurer has limited capabilities to consistently identify, measure, and manage risk exposures across the company and, thereby, limit losses. Execution of its risk-management program is sporadic, and losses cannot be expected to be limited in accordance with a set of predetermined risk/loss tolerance guidelines. Risk and risk management are sometimes considered in the insurer’s corporate decision making. Business managers have yet to adopt a riskmanagement framework, are satisfying regulatory minimums without regularly applying risk management to their business decisions, or have very recently adopted a risk-management system that has yet to be tested.

Figure 1: S&P ERM ratings definitions

AM Best and Moody's have also expressed their intent to apply a more structured evaluation of ERM practices. AM Best's Capital Adequacy Ratio (BCAR) provides a quantitative measure of the risks inherent in a company's investment and insurance profile, relative to its adjusted capital. Strong performers in the eyes of ratings agencies typically benefit from higher ratings and lower capital requirements.

A potential way forward

Instilling the right ethos for taking risk while minimizing exposure, requires direction from the top and accountability throughout the ranks. It is difficult to create a risk management culture when an organization exhibits "3 Ring Binder syndrome" (3RBS). In essence, this is a mindset that we live in a technology based world, so creating policies and procedures that sit on a shelf in a 3-ring binder have little value for culture creation.

Policies and procedures need to be living, breathing, tangible tools to help drive company behavior and daily practice. Those tools need to be supported with a common language, or taxonomy, for operational risk related information and a framework to integrate risk data elements, such as loss event data, risk assessments, key risk indicators and scenario analyses.

It is not enough simply to turn convert policies and procedures into electronic 3-ring binders, though that is a needed first step for sustainable policy creation and communication. Organizations must find a way to embed risk management activities, based on policy, into the day to day business practices of every employee. The right technology can enable this behavior if the right incentives are present.

With the right policy development and communication structure in place, the company must have a clear chain of responsibility when it comes to managing risks, so that decisions are made when needed and by the appropriate personnel. This chain of responsibility must act within an environment where silos are transparent at least and absent at best, and everyone is applying consistent approaches/methods to their slice of the ERM process, and communicating using a common risk language.

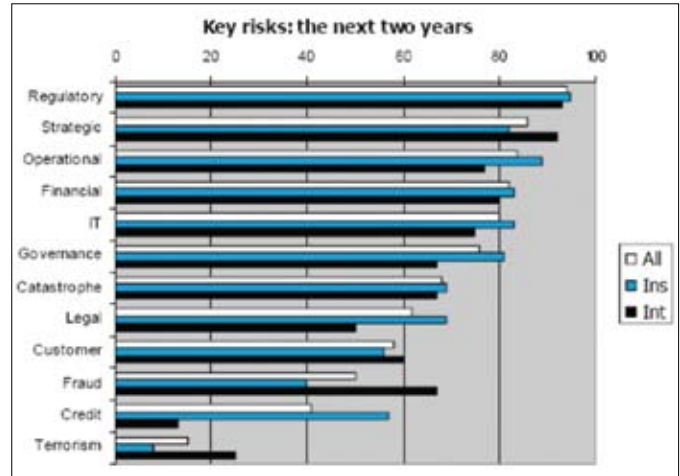


Figure 2: (Ins= Insurers; Int= Intermediaries) Source: "Managing risks in the insurance industry" March 2007, Moore Stephens.

Technology

Getting people to participate, collecting the right data in the right format and analyzing that data in a meaningful way are the fundamental pre-requisites for driving business value from the risk management framework. The data collected must be aggregated, processed and presented in a timely manner. It does too little good to spend weeks, or months, formatting data if its ends up being too dated to act upon.

Providing line managers and people at all levels with the tools to identify the risk they are responsible for will install a sense of ownership. The right technology solution can also serve as an internal marketing and educational tool to help everyone think about and manage risk according to the methodology, framework and lexicon driven from the top.

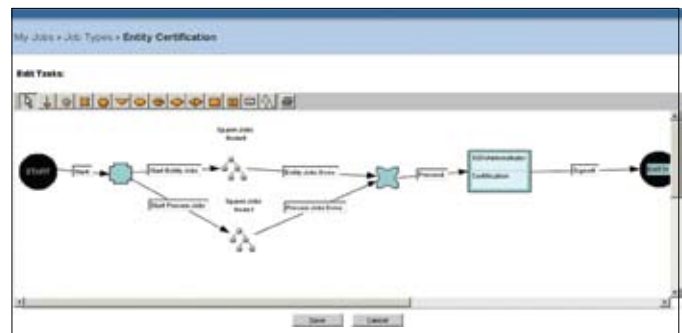


Figure 3: Rules-based, event-driven workflow design-example of process automation.

Once the business comprehends the methodology and has access to easy-to-use risk management tools at their fingertips, an organization can migrate from a periodic, exercise-based risk management paradigm to an ad-hoc, continuous and real time effort where managers update their risk profile based on the reality of the dynamics they deal with on a daily basis.

The right technology is available today to successfully deploy operational risk management throughout the organization. IBM® OpenPages® Operational Risk Management provides enhanced visibility into the risk landscape, enabling business managers to make smarter decisions that maximize value, reduce costs and balance risk and returns. With IBM OpenPages Operational Risk Management, insurers can execute solid risk and compliance management activities to reduce the impact of problems when they do occur and to try to anticipate small problems becoming large ones.

RiskBusiness has developed sophisticated risk based taxonomies for both the banking and insurance sectors that enable data to be leveraged across the various risk and compliance disciplines and enable business management to communicate effectively the risks they manage.

IBM OpenPages Operational Risk Management and RiskBusiness technologies help with insurers across the globe to eliminate risk and compliance silos, manage risk across the business, sustain compliance across multiple regulations, and embed these activities into their core business practices.

Conclusion

Leading insurance companies are beginning to recognize the potential value in deploying and putting into practice a robust operational risk management framework and integrating it into their ERM efforts. They want to minimize surprises and decrease volatility; they want to be proactive in order to seize opportunities.

The business environment has changed forever. The focus on risk will continue to accelerate and the need for quick and sound decision making will be critical to growth and survival for insurance companies. Those organizations that lead the charge will find themselves best equipped to capitalize on emerging opportunities and generate shareholder value.

About IBM Business Analytics

IBM Business Analytics software delivers complete, consistent and accurate information that decision-makers trust to improve business performance. A comprehensive portfolio of business intelligence, predictive analytics, financial performance and strategy management, and analytic applications provides clear, immediate and actionable insights into current performance and the ability to predict future outcomes. Combined with rich industry solutions, proven practices and professional services, organizations of every size can drive the highest productivity, confidently automate decisions and deliver better results.



Figure 4: Graphical decision support dashboards



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1 FSA. (April 2008). FSA Handbook: Release 076. Retrieved March 11, 2011, from <http://www.fsa.gov.uk/pubs/hb-releases/rel76/rel76inspru.pdf>.



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