



SOCIETY OF ACTUARIES

Article from:

The Actuary Magazine

June/July – Volume 12, Issue 3

INTEGRATION OF ERM IN

CAPITAL AND STRATEGY DE

THE CHALLENGES PREVENTING A GREATER UPTAKE OF ERM AS A STRATEGIC PARTNER, TECHNIQUES TO OVERCOME THESE CHALLENGES, AND BENEFITS OFFERED BY FURTHER INTEGRATING ERM PROGRAMS ARE EXPLORED. **BY VIKAS SHAH, MARK STEPHENS, JIM STOLTZFUS AND FIONA NG**



CISIONS



Trendsetter companies continue to develop enterprise risk management (ERM) programs that are strongly integrated with major strategic decision-making. However, organizations across many industries continue to struggle with how to optimize the structure and span of scope for their ERM programs. Many of these firms benefit from their annual process of assessing, aggregating and reporting top risk exposures; however, these same companies often find the results lacking with respect to top- or bottom-line impact.

Organizations are looking for a more realistic reflection of uncertainty in the corporate plan/budget, better collaboration between the business and finance, and greater adaptability of the plan in the face of an extremely dynamic environment.

Though risk reports provide good qualitative information on the key risk exposures, they fail to provide enough insight into strategic opportunities for improvement.

There are a few industries where both the nature of the industry and new regulations have accelerated the development of a strategic ERM program. In insurance and banking, domestic and international financial services regulators responded to the 2008 financial crisis by putting forth new regulations that both qualitatively assess existing ERM capabilities and mandate a quantitative comparison of capital to a company's risk profile. In health care, providers have been concerned about expansive new regulations, a greater

retention of population health risks, and drastic shifts in operational success drivers. Accordingly, many in these industries are upgrading their ERM frameworks, introducing additional quantitative risk assessment techniques, developing more thorough capital modeling, and pushing for greater integration of these insights into decision-making.

Learning largely from these industries, this article explores the challenges preventing from a greater uptake of ERM as a strategic partner, techniques to overcome these challenges,

benefits offered by further integrating ERM programs, and some current trends illustrated by a health insurance spotlight.

BACKGROUND FROM ERM

For a number of years, senior executives have grown wary of ERM deployments that are more process-oriented and that translate into too few meaningful business insights. It's no surprise that many recently surveyed executives view their ERM process as a compliance exercise and suggest the costs of an ERM program may outweigh its benefits.^{1,2} These costs range from the time and expense spent on an ERM program to the intangible cultural shock a well-intentioned process may achieve if it is perceived as a policing exercise. Today, many organizations

that are maturing ERM implementations are demanding further embedded programs that produce far more institutional value. A key aspect of this value proposition is the level of insight that the ERM program provides to improve capital decisions and strategies¹.

BACKGROUND FROM FP&A

In a similar fashion, financial planning and analysis (FP&A) is in a state of flux. C-suite executives are concerned about lengthy cycle times, uncertainty regarding conservatism, lack of consideration of operational/strategic risks, insensitivity of plans to evolving business conditions, and disconnects between the finance function and the business.^{3,4}

Organizations are looking for a more realistic reflection of uncertainty in the corporate plan/budget, better collaboration between the business and finance, and greater adaptability of the plan in the face of an extremely dynamic environment. One important avenue for the facilitation of this evolution is through an ERM program that collaborates with finance to integrate risk and opportunity information into annual processes.

Repeatedly, organizations that implement this interaction realize greater value from their ERM efforts and have their ERM program garner favor as a strategic partner.

CHALLENGES

Initial Implementation

Many organizations struggle to move beyond the initial implementation of an ERM process. In quite a few cases, the initial ERM structure is put in place with a charter to identify, qualitatively assess, prioritize and report key risk exposures. This more tactical approach to ERM misses the critical organizational faculty underpinning the execution; that is, ERM programs should deploy best practice tactics in pursuit of



the higher goal of better risk insights. Too often, ERM implementations view it the other way around, where initiatives and processes are instituted without clear vision of the finish line. Due to a lack of clarity, the program is resourced as a side job for a member from audit, actuarial, compliance, risk management or legal. The output report is channeled up through a de facto ERM director to senior management; oftentimes, the report makes its way into the hands of the board of directors. Although the process produces what is at first welcome new insight for the organization, a lack of foresight into a more robust end goal leads the program to iterate without much progress; little by little, enthusiasm for the effort begins to wane, and the process becomes much more driven by a desire to maintain vigilance and risk oversight. While a welcome goal, this objective is only but a small part of the value proposition offered by an ERM program.

ERM Leadership

One of the most influential ways to drive an ERM program deeper into an organization is through strong ERM leadership; this can be facilitated through a championing executive sponsor, but it must be owned and executed by the lead member of the ERM function. Namedropping a senior executive as a way to instill buy-in only creates an interest to satisfy requirements rather than an advocacy for the full possibilities. At the same time, senior executive support for the program is table stakes for giving a new ERM implementation a chance at integration success.⁵

Quite a few ERM efforts continue to be staffed as side jobs or through employees without direct access to the top levels of management. Without dedicated

resource or authority, ERM directors struggle to build momentum, attract business-side advocates, or receive enough budget allocations to build out a more effective process. This combination of a lack of authority and excitement about the program leads to simplified implementations, long development cycles, and an internal sense that the return on investment (ROI) is not commensurate. For the same reasons, the ERM director will struggle to receive acceptance for a broader ERM scope that includes integration into corporate processes such as FP&A.

Risk Quantification

Many ERM directors struggle to evolve their programs beyond a qualitative state due to an inability to quantify risk exposures, which is a critical interim step before ERM efforts can be integrated into capital and strategy analytics. Regardless the functional background of the ERM director (actuarial, audit, finance), there is a lack of familiarity and a lack of comfort with generating quantitative risk exposure translations due to insufficient historical precedent. This is particularly applicable to operational and strategic risk exposures, for which there is usually little historical data or risk assessment templates. Furthermore, the translation of risk exposures into an FP&A model requires complex considerations of how to introduce the risk exposures, how to

manage the risks of double-counting against existing information reflected in the model, and how to model the timing considerations of risks with multiple-pronged impacts.

OPPORTUNITIES FOR IMPROVEMENT

Initial Implementation

The upward reporting of key risk exposures is but one of the overall objectives for an ERM process. The key value propositions of an ERM implementation include better capital efficiency, more informed decision-making, reduced surprises, and a more active risk conversation with stakeholders. Many of these are not achieved until the ERM effort is collaborative with functional stakeholders and integrated with management processes. The best way to change initial scopes for ERM charters in order to include an expanded scope is to clearly demonstrate the missing insights that would be available through a more aligned linkage. Specifically, many organizations are able to admit that several key risk exposures are not considered as part of the FP&A process; furthermore, compliance officers will readily admit that there are some risk exposures that do not lend themselves well to a typical compliance



consideration. Understanding that these two missing opportunities can really enlighten capital considerations becomes a powerful motivator for expanding ERM charters, and many Fortune 500 companies have used a version of this approach to more deeply embed ERM programs.

Actuaries with the Chartered Enterprise Risk Analyst (CERA) designation have a role here, as many organizations struggle finding subject matter experts when launching ERM efforts. Those with the CERA training and designation are often approached to be a part of the process, and they can have a significant influence in ensuring initial plans for an ERM program include a vision for strategic integration with the business.

ERM Leadership

More and more, organizations are realizing the value in employing a wholly dedicated chief risk officer (CRO). This senior leadership position has the access to senior brass to influence the purview of the ERM program and attends CEO Direct Report meetings to foster better awareness of the ERM function across the firm. The leadership skills of the CRO would greatly increase the likelihood of a successful relationship with business segment leaders. Furthermore, this position would be filled with an officer-level candidate, who would have the resources and clout to complete a fully functioning ERM unit. Elevating ERM to a C-suite functional group greatly increases the ability for an

organization to understand risk considerations when deliberating strategies or capital alternatives.

Unfortunately, there is a greater demand for qualified CROs than there is a current supply of candidates. Actuaries should continue to take the opportunity to broaden their softer skillsets, familiarize themselves with non-actuarial risk concepts, and identify opportunities to gain relevant ERM experience. Actuaries with strong leadership skills have always had a role beyond the actuarial function. The ERM program, and its ability to influence major corporate decisions, should be no exception.

Risk Quantification

Establishing initial risk quantification is a very important step toward gaining additional buy-in for the ERM process. Regularly reporting the results of a risk quantification exercise leads to a better understanding of the process and great feedback from business segment leaders. Quite often, these segment leaders can offer data sources or existing analysis that can support the ERM quantification effort. Equally important, these segment leaders become invested in the process and begin to use the ERM effort to further inform decision-making processes. As has been experienced by many insurers as they deploy initial capital models, this virtuous cycle toward ERM progress is an effective way to integrate ERM into the organization.⁶

Without question, actuaries can play a critical role here. With the most keenly refined skillset to model uncertain risk exposures, actuaries are the most capable group of professionals to develop quantitative risk assessments. However, the profession should bear in mind the additional challenges and additional rigor





required when quantifying risk exposures with little historical data. It is important to consider the entire nature of the risk, including multiple possible drivers of onset, multiple manifestations of impact, and the timing of the risk impact over different reporting periods.

BENEFITS

Integrating a fuller spectrum of risk exposures into capital and strategic decision-making offers many competitive advantages. Organizations become better equipped to answer questions regarding capital adequacy, working capital strategies, capital investment alternatives, and additional mitigation or controls.

Capital planning is an integral part of board, CEO and CFO decision-making. With all organizations, a key uncertainty exists in determining the amount of capital or working capital necessary to protect against performance variation or risk. Regulatory capital assessment frameworks struggle to identify and capture the idiosyncratic operational or strategic risks that would require an additional capital buffer. Integrating ERM into capital decision-making can help resolve this critical uncertainty, and many organizations benefiting from this capability find the capital conversation much more tangible.

At the capital committee, hundreds, if not thousands, of requests for funding come in during a given year. Many times, the requests are submitted in an ad hoc fashion and lack a presentation of risk exposures. Without a standardized approach to the assessment of the opportunity and risk, normalizing the investment candidates becomes impossible. By introducing risk exposures into a capital

investment analysis, organizations can be much better equipped to evaluate investment alternatives and optimize capital expenditures.

Finally, organizations struggle to compare between capital requests for maintenance, investments, research, and additional

Integrating a fuller spectrum of risk exposures into capital and strategic decision-making offers many competitive advantages.

mitigation and controls. Identifying risk exposures and translating them through an economic capital model can provide a framework for these types of considerations. Introducing different types of capital expenditures into an economic capital model allows for a better understanding of the effect of each on the mean value or on variation for a key performance metric.

CONCLUSION

ERM is becoming a bigger part of decision-making in organizations covering the industry spectrum. In response to regulatory requirements, demands from the board for better risk oversight, industry volatilities, and pursuits of greater competitive advantages, companies continue to develop strong ERM frameworks that provide insights into decision-making. Every year, more companies are adopting the integration of ERM into strategy and capital decisions, with quite a few even expanding risk considerations into performance measurement.

However, many are still struggling with how to drive the effort through to completion, and quite a few ERM processes are in need

of some substantial improvement to deliver a more appealing ERM value proposition. Two underdeveloped steps necessary to bridge this gap are the appropriate appointment for ownership of the ERM process and the creation of quantitative risk assessments for all key risk exposures. Organizations that

fulfill these requirements are able to promote the alignment of ERM initiatives into business processes and deliver meaningful insights in consideration of alternative strategies or capital plans.

Health Insurance Spotlight

Like many insurance entities, risk management has been a cornerstone of health insurers' success. Although these insurers traditionally focused on risks related to pricing, operations, business strategies and financial reporting, they often failed to analyze all of these risks quantitatively or as a combination. While there are certainly health insurers who have developed more mature processes and techniques in gauging risks on an enterprise level, many are still establishing a company-wide ERM program.

There are some trends emerging with respect to health insurer ERM practices. More insurers are appointing risk management frameworks by creating ERM committees, designating a dedicated CRO, or assigning risks to individual risk

owners. In the absence of a dedicated CRO, some smaller health insurance companies are adding the CRO title to the responsibilities of current executives. Several ERM committees are being formed without the inclusion from a member of the actuarial team. This is particularly surprising given the strong skillset the actuarial profession would offer, particularly with respect to risk quantification and risk-based capital considerations.

Many firms are also identifying challenges around developing a risk-aware culture across the organization and maintaining a fluid risk conversation through all levels. One tactic that some organizations are deploying to tackle the cultural transformation is to merge risk-adjusted performance into incentive compensation structures. Although this level of sophistication is not common practice in the industry, it will change as health insurers gain additional comfort with the ERM value proposition.

Motivated by the financial crisis and new regulatory requirements, health insurers are increasingly migrating from a standard annual budgeting process to a multiyear projection where various components of the budget are stressed vs. a mean estimate. This enhanced process allows stakeholders to understand the current and future impact of risks under various economic, regulatory, or competitive environments.

Insurers are also adopting more sophisticated data analysis tools and techniques to help them monitor Key Risk Indicators (KRIs). While traditional metrics such as claim costs and medical trends are still critical, some health insurers (mostly larger ones) have started to explore the possibilities of using additional data sources to monitor risk exposure levels. This allows insurers to both reduce operational

setbacks and discover new opportunities for growth or innovation.

One common area of weakness among health insurers is in analyzing how risks correlate and interact with one another. Quantifying the correlations between risks and measuring the impact across departments remain a challenge when integrating ERM into decision-making. As data analytics capabilities mature, correlations and cross-effects between risk exposures are becoming more quantifiable, resulting in the ability to understand aggregate impact of risk combinations on a company's profit, surplus and capital.

Health insurers are beginning to utilize results from ERM programs to help them make better decisions. The advent of the Own Risk and Solvency Assessment (ORSA) regulatory requirements prompted many insurers to develop or enhance ERM programs. As these organizations continue to seek ways to implement an evolving ERM process into relevant aspects of the firm, they will begin to benefit from more thorough and complete insights to support business planning and decision-making. **A**

MARKET INSIGHTS

Milliman's Risk Advisory Services practice is wholly devoted to ERM advisory services and engages in ERM conversations with over a hundred organizations annually. Its "Market Insights" offers the composite stories from past experiences, conversations and research; commentary

provided in this article should not be taken as reflective of the ERM efforts for any individual organization or industry.

BIBLIOGRAPHY

- ¹ **Milliman Risk Institute.** Risk Advisory Services. Milliman. [Online] August 2014. <http://us.milliman.com/insight/2014/Creating-value-through-enterprise-risk-management/>.
- ² **American Institute of CPAs.** AICPA: Enterprise Risk Management. American Institute of CPAs. [Online] February 2015. http://www.aicpa.org/interestareas/businessindustryandgovernment/resources/erm/downloadabledocuments/aicpa_erm_research_study_2015.pdf.
- ³ **PwC.** PwC: Increasing Finance Function Effectiveness. PwC. [Online] 03 2010. http://www.pwc.com/en_US/us/increasing-finance-function-effectiveness/assets/financial-planning-realizing-the-value-of-budgeting-and-forecasting.pdf.
- ⁴ **Harvard Business Review.** Analytics. Harvard Business Review. [Online] 10 2014. https://hbr.org/resources/pdfs/analytics/18936_HBR_Report_Tidemark_Oct2014_webview.pdf.
- ⁵ **Milliman Risk Institute.** Risk Advisory Services. Milliman. [Online] 10 2014. <http://us.milliman.com/insight/Periodicals/risk-institute/The-role-of-top-management-and-the-board-in-ERM/>.
- ⁶ **Milliman Risk Institute.** Risk Advisory Services. Milliman. [Online] 11 2014. <http://us.milliman.com/>





ADVERTISEMENT

insight/Periodicals/risk-institute/Creating-a-virtuous-circle-with-leading-edge-risk-processes-and-tools/.

Vikas Shah, FSA, CERA, FCAS, MAAA, is a consulting actuary with Milliman's Risk Advisory Services consulting practice. He can be reached at vikas.shah@milliman.com.

Mark Stephens, CCSA, is managing director of Milliman's Risk Advisory Services consulting practice and executive director of the Milliman Risk Institute. He can be reached at mark.stephens@milliman.com.

Jim Stoltzfus, FSA, CERA, MAAA, is principal and consulting actuary at Milliman, Inc. He can be reached at Jim.Stoltzfus@milliman.com.

Fiona Ng, FSA, CERA, CFA, MAAA, is a consulting actuary at Milliman. She can be reached at Fiona.Ng@milliman.com.

Work is fun.

...or it should be. Life is too short to dread going to work each day. We are offering a *marvelous* job... at least if you are the right person for it. We need a people person with an actuarial brain. The job involves writing and testing abstract computer software, logical reasoning, technical writing, teaching, persuading, managing, entrepreneurial thinking, and a fearless drive to succeed. Please do not apply if you are unemployed, as the right person will already have a job (or two). If interested, call us at:

- __ Bits in a byte
- __ Sum of digits of sum of digits of reciprocal of probability of club ace, then club king
- __ As denominator, is undefined
- __ Bytes per address in 64-bit system
- __ $2200/\text{Area of circle with diameter } 20$ (approx)
- __ $\log, \text{ base } c, \text{ of } E/m$, where m is mass
- __ Ten dozen, in hex
- __ Are any of the apples in an empty barrel green?
- __ Second derivative of $3X^2$



theVPAGroup.com

