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US and Canada: An Era of Value-added Enterprise Risk Management (Mini Report)

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Executive Summary

Enterprise risk management (ERM) is an orderly or guided conduct of an enterprise to deal with risks. For insurers, ERM requires full support and commitment of the senior management. It influences corporate decision making and ultimately becomes part of the insurer's risk culture. It is particularly relevant to the insurance industry, where it acts as a strategic decision-support framework for management. It improves decision making and risk mitigation at all levels of the organization.

ERM in the U.S. and Canada has evolved over the years into a complex ecosystem. About 30 years ago, it had five basic risk categories—underwriting, investment, credit, operational and strategic—which were mostly handled and reported in silos. Today, insurance companies have fine-tuned their ERM programs to work with a single enterprise framework or policy and a joint committee with representation of senior business risk heads across the insurance value chain. Now ERM includes additional risk categories (apart from those mentioned above), such as compliance, insurance, investment and regulatory. ERM is delivered with a divided approach of three lines of defense: risk owners (first line), risk oversight groups (second line) and internal auditors (third line). Practitioners in each of them are responsible, accountable, consulted and informed (RACI) about their specific sphere of action in the organization. In this report, we provide a detailed review of emerging key topics where ERM plays an important role and could bring opportunities as highlighted by practitioners surveyed online or interviewed virtually, particularly around the following issues.

State of innovation: Practitioners are rethinking how insurance products could cater to new cohorts of consumers (millennials and beyond), while developing or finding the right talent and skills (data scientists and risk experts-actuaries) and searching for opportunities to mitigate difficulties in performing business as usual activities and innovation simultaneously.

Business environment: Insurtechs, the entry of new insurance players such as Tesla Insurance, and rapid business transformation are the key topics driving the insurers' innovation agenda. Other market conditions such as inflation are not only impacting the cost of insurance claims but also increasing premiums, which may lead to policy lapse. The ongoing effort to improve consumer experience and the accelerated model change workflow/process emanating from adoption of artificial intelligence/machine learning (AI/ML), coupled with the prevailing focus on ethical use of AI/ML, are relevant topics to both insurers and ERM practitioners.

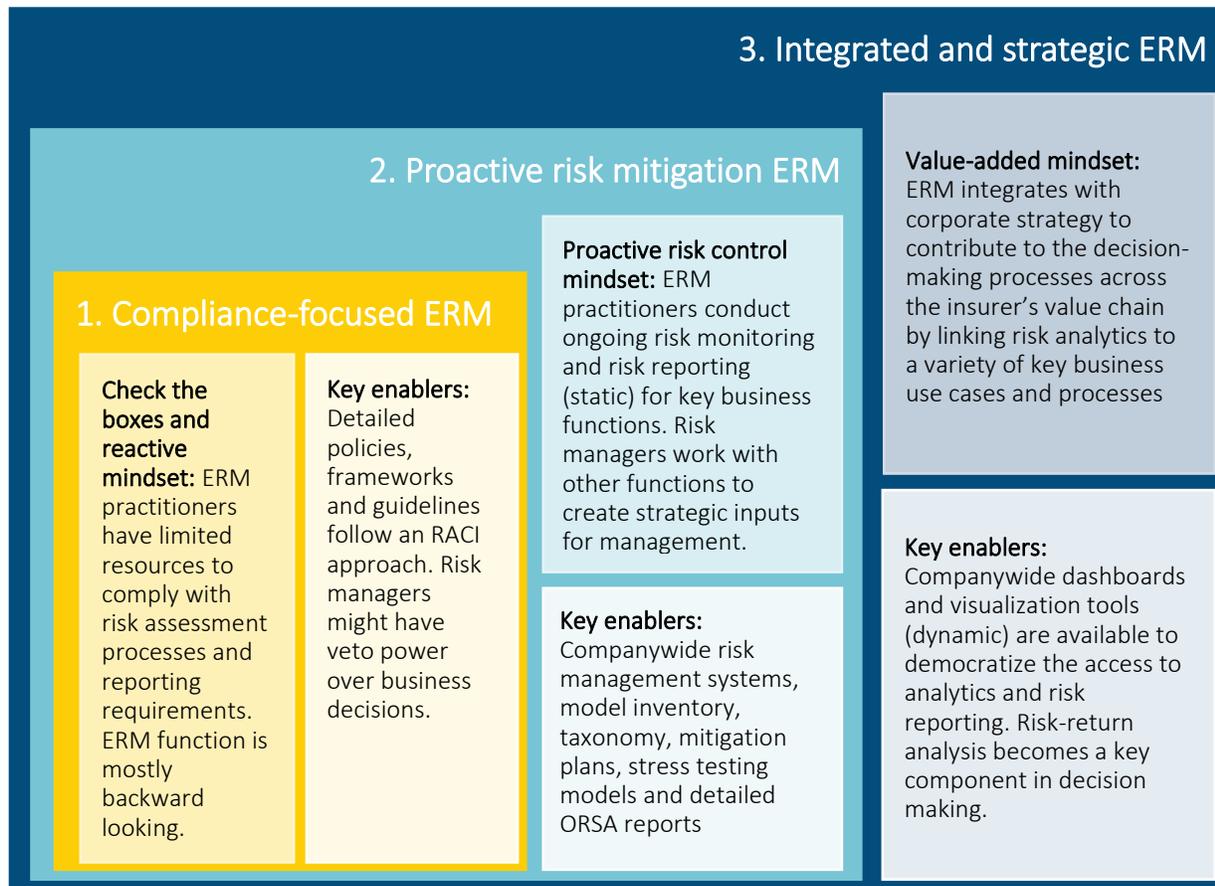
Insurance regulatory environment: Slow and complex adoption of regulations at the local entity level, reporting challenges at the corporate level (International Financial Reporting Standards, reporting and aggregation), and differences between federal and local (state/province) regulations, for example, in the New York State Department of Financial Services, already require regulated entities to look at climate change risk whereas other regulatory agencies may not.

The parts of this report land in the realm of ERM in multiple forms, ranging from self-contained projects (e.g., adoption of accelerated underwriting using AI/ML) to a major overhaul (e.g., financial impact of climate risk). To gain corporate-wide buy-in and increase value to deal with these initiatives, the ERM program must be built around the prevailing risk culture within the insurance company; controls, measurable risks, metrics and actionable data; and analyses and assessments that truly reflect the insurer's risk management. In other words, it must be commensurate with the strategy and operating model adopted by the senior management and Board of Directors.

Additionally, insurance companies are exposed to a variety of key risk factors; to perform a proper risk assessment, the ERM practitioners review that the organization's objectives and strategy remain on course and relevant to the market. The ERM function should not be taken by granted under the belief that three lines of defense would do the work automatically; ERM practitioners could take an active role to understand and manage the risk faced by the organization and create a strategic advantage to aid in effective decision making. The ERM views around insurance

risk categories may drive the companywide risk culture. More importantly, the availability and adoption of enablers play a key role to operationalize ERM policies. From this perspective, the steps toward an integrated and strategic ERM may be segmented as shown in Figure 1.

Figure 1:
STEPS TOWARD AN INTEGRATED AND STRATEGIC ERM FUNCTION



Source: Prepared by the authors from practitioners interviewed. "Transforming Enterprise Risk Management for Value in the Insurance Industry," McKinsey, July 22, 2016, <https://www.mckinsey.com/>; "Insurance Enterprise Risk Management Practices," American Academy of Actuaries, July 2013, <https://www.actuary.org/>.

There is no "one size fits all" approach toward achieving an integrated and strategic ERM function: approaches vary depending on factors such as the organization's size, type, complexity and risk culture. However, a highly integrated, enterprise-wide risk culture could be achieved through the adoption of best practices and enablers of the ERM function to transform the risk mindset to better serve the business strategy:

1. Compliance-focused ERM: Minimum approach toward the ERM practices.
2. Proactive risk mitigation ERM: Intermediate approach toward ERM practices where certain business functions have developed ongoing risk monitoring with static metrics and practitioners use companywide accessible risk systems, for example, model inventory systems and certain risk metrics.

3. Integrated and strategic ERM: Mature approach toward ERM practices where practitioners create and protect value¹ in the business decision-making and companywide strategy.

Some of the building blocks toward integrated and strategic ERM include the following.

Risk assessment: The ERM journey for the insurers includes focus on assessing compliance risk and setting up of an acceptable degree of readiness to react appropriately to new regulations. To respond to these regulations, the ERM policy set forth by the organization is both backward and forward looking; the ERM policy is set up to avoid repetition of previous incidents and the prevention of future ones. In some cases the risk functions may have the authority to veto a business decision if it violates a risk policy. For example, a business decision may conflict with prevailing risk policy practices around AI/ML or climate risk best practices; in such a situation the risk function can veto the business decisions.

Risk measurement: Once insurers establish a compliance-focused ERM policy framework to meet the internal needs of the organization and improve the ability to respond to the adoption of upcoming regulation and statutory requirements, the overreaching risk appetite statement, risk limits and governance help in the enhancement of the Own Risk and Solvency Assessment (ORSA) report to use it as an extension of the ERM objectives. In addition, risk functions can work with other business functions to help in the risk measurement of capital requirements and stress testing. For instance, key risk indicators or other important metrics are designed based on the insurers' level of maturity or the development of their risk management infrastructure to set limits/thresholds for emerging risks such as cyberrisk, climate risk and inflation risk. This is done to measure and understand the insurers' appetite for such risks.

Risk monitoring and reporting: Both static (point in time, e.g., quarterly) and dynamic (centralized and on-demand) risk monitoring is followed by insurers in the U.S. and Canada as they respond to emerging topics, for example, AI/ML and climate risk adoption. Some insurers have developed a cross-functional governance framework for AI/ML systems that addresses issues such as explainability, transparency, data quality, ethics, fairness and legal compliance (refer to Sec. 3.1.3). Many insurers have also included the legal and compliance team in their ERM and model risk management (MRM) committees to monitor the impact of increasing regulatory requirements, for example, new guidelines such as the disclosure of climate risk in line with the Task Force on Climate-Related Financial Disclosures framework. Climate risk can materially impact the insurers' ability to meet policyholder obligations. Hence, many insurers are integrating climate risk into internal processes for assessing effectiveness of their ERM monitoring and reporting capabilities.

Value addition process with ERM: Insurers with mature ERM functions have less difficulty in understanding emerging and unexpected uncertainties while protecting value for the organization, for example, included pandemic scenarios in their stress testing scenarios before the COVID-19 pandemic emerged. Also, they have a balanced focus in bringing value to identify events that are most likely to damage the organization (a curated list of risk factors by risk category)—in simple terms, thinking more about immediate risks such as crossing the street instead of being bitten by a shark at the beach. Once the risk limits and appetite are aligned with the business strategy and are finalized, an insurer's options to improve its risk and reward position include modifying exposure or coverage, changing prices or expense structure, and modifying claim management practices. The ERM function could develop an understanding of the corporate strategy and the ability to enhance the value to the organization.

¹ Christian Bongiovanni, Luca Pancaldi, Uwe Stegemann and Giambattista Taglioni, "Transforming Enterprise Risk Management for Value in the Insurance Industry," McKinsey, July 22, 2016, <https://www.mckinsey.com/business-functions/risk-and-resilience/our-insights/transforming-enterprise-risk-management-for-value-in-the-insurance-industry> (accessed on July 28, 2022).

- Value creation: The ERM function creates value by integrating ERM with the corporate strategy. The function becomes a sought-after thought partner, enabling business management to weigh risk-reward implications and potential risk trade-offs in strategic and operational decisions. To become a strategic thought partner, the ERM function must be able to create comprehensive solutions (e.g., economic-capital models) needed to drive business decisions and to link advanced risk analytics to key business processes. For an ERM program to obtain corporatwide buy-in and genuinely add value, it must be built around analysis and metrics that are truly reflective of the company's risk culture. In other words, it must be in line with how senior management wants to run the company. Insurers that embrace a continuous improvement cycle and establish an ERM process that is built on a best practice foundation will unlock value creation across their organization—helping them overcome many of the speed, data and process duplication challenges common at insurers.
- Value monitoring: ERM must quantify and manage the risk through rigorous risk response planning and ongoing risk monitoring using data and metrics. For instance, ERM must quantify risk exposures using scenario planning and stress testing to equip leadership with the data points needed to understand a range of potential outcomes (e.g., best case, expected case, worst case). In addition, ERM can then leverage risk-return analysis to understand where to make risk mitigation investments and how much to invest. Instead of telling leadership that a risk (e.g., a pandemic or cybersecurity) is a top risk, ERM should use a data- and analytics-driven narrative to support risk-informed decision-making by the top management on how much and where to employ or prioritize resources to manage risk exposures.
- Value protection: At this stage, enterprise risk tolerance and risk limit monitoring drive the ERM approach to incorporate the strategic treatment of risk, which involves the evaluation and effective management of the relationship between risk and reward (risk-return optimization) as the organization pursues its values and goals. The overall ERM policy is very advanced in the organization, which involves strong ongoing communication of risk function with other business functions. Risk managers are very proactive in setting up policies to effectively handle future risk incidents and the risk functions help other business functions to create strategic inputs for top management. Moreover, a transparent and structured risk management process directly aligned with the company's objectives brings a greater awareness of threats and opportunities and greater predictability of performance aligning with the top management objectives.

An additional aspect that has driven the relevance of ERM for insurers is the regulatory oversight and credit rating agencies' increased interest in insurers' ERM policies, practices and controls. For example, credit agencies' rating assessment may trigger a downgrade as part of their qualitative overlay if deficiencies are identified in the insurer's ERM practices. Furthermore, insurers are focusing on innovating their business models to ensure their ERM practices are aligned with the evolving market.

The insurance business will continue to evolve going forward, and its resiliency will hinge on ERM practices and practitioners' efforts toward formalizing their approach to successfully navigate the emerging risks and drivers, particularly around cybersecurity, inflation, AI/ML and climate risk. ERM, in the short term, will also have to respond to the new wave of models in which AI/ML play a crucial role, raising expectations of better MRM and enterprise-wide use of models. Insurers are looking to continue investing in talent, technology, cybersecurity defense and governance, and ERM will continue to be a facilitator/enabler to navigate innovation, business and regulatory environments.

Authors' note: The methodology employed in the preparation of this report combines literature review, independent research, practitioner interviews (virtual face-to-face sessions) and an online survey of respondents. The authors of this report have included in each section key opinions of the practitioners interviewed. A conclusions and supplemental sections are provided at the end of the report, particularly on the methodology used, along with an acknowledgement of the practitioners interviewed virtually. Finally, the results of the online survey of practitioners are presented, with additional details on the risks faced by the ERM function and its focus.



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Conclusions

The insurance industry in the U.S. and Canada is undergoing significant innovation, business and regulatory changes. This presents an opportunity for practitioners to deploy their expertise to add value to ERM policies, frameworks and controls, to anticipate and mitigate risks. Insurance companies operating in the U.S. and Canada also navigate differences related to risk culture practices and regulatory focus between the two countries. Furthermore, each insurer has its own unique business model, priorities, exposures and vulnerabilities. These specificities make the ERM function an active player in determining the unique aspects of insurers' strategies on emerging risks and drivers where practitioners could bring value-added inputs.

This report also highlights how trending topics such as blockchain technology, crypto and AI/ML are influencing and transforming the insurance industry. ERM is at the center of the adoption of these technologies in the insurance value chain. Hence, the ERM function, along with its practitioners in the three lines of defenses, will continue to be the facilitator or enabler to navigate innovation, business and regulatory environments.

The prevailing market conditions urge insurance companies to continue enhancing their competitiveness through a strategic focus on consumer experience and operational efficiency. To enhance their ERM function, practitioners are responding in the following areas:

- **Cybersecurity:** The increasing frequency and severity of cybersecurity attacks have caused some insurers to bear monetary loss and reputational damage. Insurers are involving cyberrisk experts to reduce exposure and vulnerability, where the ERM function provides ongoing oversight under the operational risk category.
- **Inflation:** Globally, inflation is affecting the way insurers conduct business, with policy lapsation and premium pricing at the center of ERM discussions today. Practitioners are performing assessments of inflation-linked products at the region, portfolio and product levels. Regulatory authorities may also see an influx of premium-update requests from insurers, so they can continue to respond to the increased cost of coverages included in policies, particularly in personal lines.
- **AI/ML:** New models and algorithms such as AI/ML are playing a key role in modern enterprises, bringing MRM and enterprise risk into the spotlight as oversight functions. Although regulations covering AI/ML have not been issued, practitioners are taking readiness steps by adopting an "information-gathering approach." Additionally, many insurers are developing ethical principles for the use of AI/ML, along with the corresponding policies overseen by ERM and MRM, in preparation for the expected AI/ML regulations.
- **Climate risk:** Although not introduced as another risk category in the ERM function, climate risk is bringing additional scrutiny by senior risk professionals to better understand the financial impact of climate change on governance, reporting and disclosure. Regulators in the U.S. and Canada are in the early stages of planning how regulated entities will need to assess exposure and respond to climate-change vulnerabilities for insurers.

Modernization of the actuarial function is in the opinion of practitioners, an area that can help insurance companies to bring more business efficiencies, for example, in the data transformation processes, systems and people. The modernization must have the right balance of centralized and decentralized operating models.

The insurance business will continue to evolve going forward, and its resiliency will hinge on ERM practices and practitioners' efforts toward formalizing their approach to successfully navigate the emerging risks and drivers, particularly around cybersecurity, inflation, AI/ML and climate risk, and around other difficult to predict extreme events such as the COVID-19 pandemic. Practitioners in the ERM space highlight the importance of continued investment in talent, cybersecurity defense and governance.

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Interviewees agreed to disclose the names of insurance companies associated with them at the time of the interview for this report:

Breach Insurance

CNA Insurance

Davies Insurance Services

Equitable Life of Canada

Economical

Farm Bureau Insurance of Michigan

Hannover Life Reassurance Company of America

Health New England

Intact

Pan-American Life Insurance Group

Protective Life Corporation

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- To establish and maintain standards of qualification for membership
- To promote and maintain high standards of conduct and competence
- To increase the awareness of actuarial science
- To contribute to the well-being of society as a whole

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