Managing Risk Is Managing for Profit

"To trust everybody is as disastrous as to distrust everybody."
Hesiodus, ca 700BC, Greek epic poet

"Do not count your chickens before they stop breeding."
Aesopues, 550BC, Thracian poet

"The golden rule is that there are no golden rules."
G.B. Shaw, 1856-1950, Irish critic and poet

"Something unknown is doing we do not know what."
Sir Arthur Eddington, 1882-1944, Comment on the Uncertainty Principle in quantum physics, 1927

"Risk comes from not knowing what you're doing."
Warren Buffett, 1930-, American investment entrepreneur

Insurance is about managing risk across multiple risk types. In fact, the insurance company's "raison d'être" is to accept structured uncertainty and manage the associated risks with the goal of capitalizing on these risk differences to satisfy customers' needs for protection and earn profits. The skill with which the insurance carrier balances alternative risk/reward strategies and claims service will determine its ability to attract and retain customers through policies that deliver value on shareholder returns.

However, in a market environment where competition, globalization, market volatility, and structural change are increasing, insurance companies need to manage their risks and service even better and with greater transparency. In addition, reinsurance pricing and statutory requirements link institutions across the world to present their standards for managing underwriting risks and expenses with adequate reserves for excess losses.

At one level, insurance companies need to assess credit and operational risk and use empirical transaction data to confirm that reserves are set correctly for underwriting losses. Reinsurance decisions are an example of market risk management. Today there is great debate around the global parameters that monitor market risk and support or maintain market stability. Given the various risk parameters, the key is to identify where and how an insurance company proactively manages its risk indicators and associated assets—physical, financial, and human—to the mutual advantage of the risk carrier and the customer.

Enterprise risk management strategies for loss control are today a top concern for the board, senior executives, CFOs, and risk managers. However, while risk management is an accepted priority, it also represents an unenviable task that can become very political, depending upon the culture and aggregate claims experience. The challenge is implementing an integrated approach that can be ingrained across the insurance organization and in customer risk management practices. Without a coordinated risk management strategy, organizations will continue to struggle with unsatisfactory policy iterations before risk handling procedures and controls are efficiently aligned to stabilize productive relationships.

Insurance companies need to tackle three important barriers to ensure a successful, integrated risk management process:

Barrier 1: ***Lack of consistent measurement methodology***

Underwriting risk measurement is complex, and no methodology will accurately capture the full picture for forecasting losses. Any risk evaluation process will, by definition, be imprecise, and financial institutions need to remain open to new "learnings" as economic, demographic, market, climatic, or other conditions change. Over time and through experience, the insurance company will gradually hone in on methods that better identify risk sharing patterns and adapt its loss control and pricing procedures accordingly.

However, the issue of risk measurement is further complicated by the lack of consistency across various institutions' approaches for reporting losses and settling claims. This has a direct impact on financial risk and control decisions. For example, accounting methods may differ among insureds and reinsurers; a deductible amount that passes in one institution may be rejected in another. The more detailed and extensive the underlying loss control documentation, the more an insurance company can devise granular risk retention strategies based on informed insights into customer segmentation.

Another measurement challenge flows from the above example. By standardizing the risk rating evaluation process across the enterprise, insurance companies may lose their business flexibility and the ability of frontline "troops" to identify opportunities for future growth. The danger in underwriting standardization is reducing the options down to a common denominator that does not apply in every market sub-segment. As filed rates lock in underwriting decisions, more agile competitors can move in with finely tailored offerings for certain demographic groups or "micro-segments," posing a serious competitive threat. In such situations, an overly rigid and standardized methodology in determining risk profiles will lead to slow update cycles and lost opportunities. As market opportunities continue to fragment due to intense competition, insurance companies must balance risk minimization with commercial relevance.

Barrier 2: ***Hidden information gaps in the quantification of risk***

Three generic risk mitigation approaches exist:

1. Risks can be eliminated or avoided – e.g., hedging, asset-liability matching.
2. Risks can be transferred to other entities – e.g., ceded/assumed premium, treaty reinsurance, facultative reinsurance, or asset sales.
3. Risks can be actively managed.

To the extent that an institution has a good understanding of its portfolio risks and exposures—where, what, and how much—it can be proactive in its underwriting strategy. However, such transparency is not easy to come by without significant investment in systems, analytical tools, and sophisticated modeling techniques that can be applied at the customer relationship level. Frequently risk prevention measures are brought in after the event, in a reactive fashion. To what extent is the underwriting manager fully aware of the existing risks? Are business units still making decisions without coordinating and communicating exposures to the customer? These information gaps represent an unknown risk exposure, and the insurance company is not even in the position to decide how to mitigate these risks.

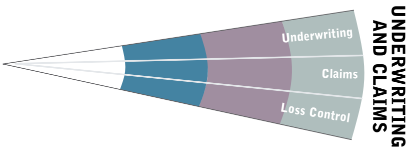
As coverage and service inter-relationships become more complex to address new market segments, the challenge is to enhance and keep up with the necessary risk information flow. Without serious management attention, investment, and effective execution, success is likely to remain elusive. This leads naturally to the next barrier:

Barrier 3: ***Lack of integrated risk procedures that are "owned" by specific functional roles and embedded in the organization***

Active risk management is also about ensuring that the full organization identifies with and takes ownership of its own risk mitigation responsibilities. Underwriting cannot sit in its organizational silo and be disconnected from risk management decisions across the business. Pushing risk awareness and loss control procedures down into various functional roles will help establish a coordinated and proactive approach to risk management. In fact, different functional roles are directly associated with certain types of risk, including operational risk. The greater their ability to communicate risk concerns, identify risk patterns, and support the development of appropriate risk controls, the more effective risk management capabilities will be for profitable long-term customer relationships. An effective risk management process that is embedded in the organization and well executed will deliver higher returns and a competitive advantage.

Enterprise risk management combines many types of risk, such as credit risk, operational risk, interest rate risk, and compliance risk. For the purpose of simplicity, this discussion will focus on three decision areas:

- **Underwriting** ➔ Financial protection from the possibility of a loss due to a defined hazard and risk event
- **Claims** ➔ Payment for losses adjusted for policy limits and self-insurance deductibles
- **Loss Control** ➔ The activities that reduce the frequency and severity of losses.



Underwriting

Underwriting is responsible for generating risk transfer contracts that specify loss events, limits, and exclusions for specific insurance coverages. Deductible levels are set to mark the boundaries between the customer's self-insurance exposure and the carrier's primary layer for coverage. Price is established by pooling losses for comparable exposures to determine the premium amounts that are adequate to maintain reserves for future loss events. The insurance carrier makes re-insurance underwriting decisions to cede premium to a reinsurer for excess loss amounts that would weaken balance sheet surplus. Reinsurance can be structured in treaties or defined on a facultative basis to cover specifically named risk events. When a carrier requires additional premium to balance actuarial exposure assumptions, risk can be assumed through reinsurance contracts. Internal control procedures coordination needs to be tested regularly with re-insurers to confirm operational agreements for the metrics calculations and payment processes referenced in treaties and facultative agreements.

GOALS	METRICS	DIMENSIONS	
Combined Ratio Underwriting Ratio Credit Rating Index Risk Controls Score Index Retention 1st Year Retention Renewal	Risks (#) Average Frequency Average Severity Credit Risk Score Business Risk Score Market Risk Score Operational Risk Score Environmental Risk Score Exposures at Risk Count Policies (#) Deductible ($) Excess ($) Exclusions (#) Endorsements (#) Riders (#) Amendments (#) Gross Written Premium Net Written Premium Letter of Credit Amount ($) Loss Events (#) Incurred Claims ($) IBNR ($) Reinsurance Attachment Point ($) Layer Max Gross ($) Layer Max Exposure ($) Underlying Coverage Limit ($) LAE Max Expense ($) Funds Withheld Amount on File ($) Funds Withheld Amount Computed ($)	Sales Organization Organization Code Underwriter Underwriter Agent – Broker Agent-Broker Customer Occupation Occupation Customer Credit Rating Credit Rating Insurance Hazards Hazards Customer Risk Controls Rating Risk Controls Rating Insurance Risk Locations Territories Geo Codes Risk Events Risk Types Risk Events Risk Frequency Frequency Risk Severity Severity Product - Coverage Product Line Coverage	Exclusions Exclusions Underwriting Layers Layers Reinsurance Type Reinsurance Type Reinsurer Reinsurer Reinsurance Pool Reinsurer Solvency Reinsurer Solvency Rating Policy Year Policy Year Accident Year Accident Year Reinsurance Treaty Date Treaty Cancel Date Contract - Treaty Facultative Re Contract Date Facultative Contract Date Facultative Contract

FUNCTION	DECISION ROLES	PRIMARY WORK	CONTRIBUTORY	STATUS
Underwriting	Executives	•		
	Managers	•		
	Professionals	•		
Finance	Executives			•
	Analysts	•		
	Professionals	•		
Audit	Executives			•
	Managers	•		
	Professionals	•		
Regulatory/Legal and Compliance	Executives			•
	Professionals		•	
Marketing	Executives		•	
	Analysts		•	
Loss Control	Analysts		•	
Claims and Sales	Executives		•	
	Managers		•	
	Professionals		•	
Actuarial	Executives			•
General Management	Executives			•

Claims

Claims is the public face of the insurance company, responsible for processing and settling claims against underwriting contracts. It is the operational center for managing loss expenses and generating input for setting case reserves. Claims reporting controls are the backbone of detecting fraud and assuring there is accurate information in place to adjudicate loss payment decisions. The claims organization must coordinate a network of relationships with services suppliers to assure rehabilitation work is performed in a timely and professional manner to fulfill contractual standards. Loss adjustment expenses are classified by service provider types to develop benchmark metrics that can be used reliably to plan and control claims fulfillment activities. Cases in litigation are aged to reconcile settlement value and timing estimates with the insurance portfolio's line of business reserves.

GOALS	METRICS	DIMENSIONS	
Loss Ratio Loss Adjustment Expense ($/%) Case Reserve ($/%) IBNR ($/%) Reinsurance Claims Payment Gaps (#/$)	Claim Cases (#) Claims Pending (#/$) Investigation Time Settlement Time Litigation Activity (#/$) Repair / Rehabilitation Activities (#/$) Claims Paid # Incurred Claims ($) Claims Paid (%) Subrogation ($)	Product-Coverage Coverage Exclusions Exclusions Claims Claim Types Claim Case Number Claim Location Claim Location Claim Geo code Adjudicator Claim Adjudicator Claims Documentation Documentation Types Documentation Time to Investigation Time to Investigation Litigation Litigation Types Legal Cases	Claim Service Providers Claim Service Types Claim Service Claim Service Providers Time to Settlement Time to Settlement Claim Status Claim Activity Status Reinsurance Type Reinsurance Type Reinsurer Reinsurer Reinsurance Pool Policy Year Policy Year Accident Year Accident Year

FUNCTION	DECISION RULES	PRIMARY WORK	CONTRIBUTORY	STATUS
Claims	Executives	•		
	Managers	•		
	Professionals	•		
Loss Control	Executives	•		
	Managers	•		
	Professionals	•		
Regulatory/Legal	Executives			•
	Analysts		•	
Actuarial	Executives		•	
	Analysts		•	
Underwriting	Executives		•	
	Managers		•	
	Professionals		•	
Sales	Executives		•	
	Managers		•	
	Professionals		•	
Finance	Executives			•
	Managers		•	
	Analysts		•	
Compliance	Executives			•
General Management	Executives			•

Loss Control

Effective loss control is the key to managing loss ratios that support profitable results and reinforce customer retention. Legal expense ratio analysis is the most revealing indicator for assessing how well specific lines of business have deployed detective and preventative controls that lead to prompt and fair claims settlement cycles. The best success is achieved when the insured has an internal controls process in place that maintains the documentation needed for litigation if responsibility for a loss event has to be resolved in the legal system.

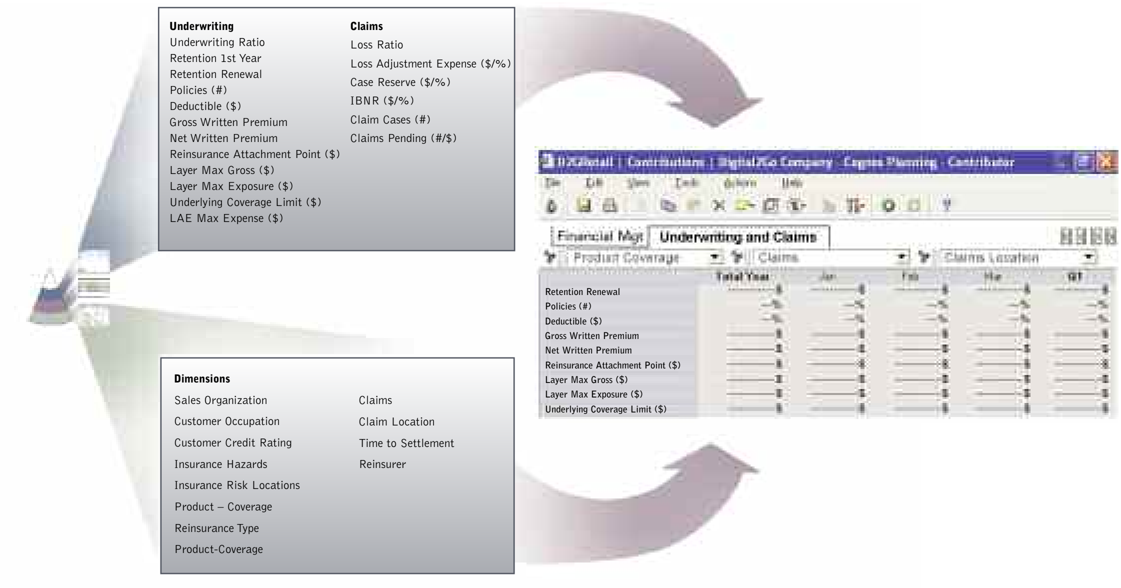
The key issue is not simply to identify risk exposures, but to define the cycles and processes where potential losses are monitored to develop approaches or strategies to address them. One common valuation methodology is "value at risk," which looks at the likelihood of an asset's value decreasing over a period of time. Others include shortfall probability, downside risk (semivariance), and volatility. Insurance executives need to be aware of the inherent strengths, weaknesses, and sensitivities associated with each method.

Whatever the method, managers need to have access to better information that equips them to identify and mitigate risk. Only by clearly understanding the various business streams and positions can managers implement an effective risk management strategy.

GOALS	METRICS	DIMENSIONS	

Risk Controls Assessment Score
Contingency Readiness Index
	Risk Events (#)
	Average Frequency
	Average Severity
	Potential Maximum Loss ($)
	Expected Loss ($)
	Expected Net Loss ($)
	Risk Controls (#)
	Contingency Plans (#)
	Controls Tests (#)
	Controls Test Scores
	Insurance Service Providers (#)
	Legal Cases (#)
	Repair - Rebuild Cases (#)
		Insured
		  Insured Name
		Agent / Broker
		  Agent Broker Name
		Product-Coverage
		  Coverage
		Insurance Risk Location
		  Geo Code
		Risk Events
		  Risk Types
		  Risk Events
		Risk Frequency
		  Frequency
		Risk Severity
		  Severity
			Regulatory Standards
			  Regulation Type
			  Reg Standard
			Control Activities
			  Processes
			  Control Activities
			Documentation
			  Documentation
			Contingency Tests
			  Test Types
			  Contingency Tests
			Insurance Services
			  Insurance Service Type
			  Insurance Service Provider
			Insurance Service Reps
			  Service Rep

FUNCTION	DECISION ROLES	PRIMARY WORK	CONTRIBUTORY	STATUS
Loss Control	Executives	•		
	Managers	•		
	Professionals	•		
Risk Management	Executives	•		
	Managers	•		
	Professionals	•		
Claims	Executives	•		
	Managers	•		
	Professionals	•		
Underwriting	Executives		•	
	Managers		•	
	Analysts		•	
	Professionals		•	
Customer Service	Executives		•	
	Analysts		•	
Compliance	Executives		•	
	Analysts		•	
IT/Systems	Executives			•
	Analysts		•	
Audit	Executives			•
Finance	Executives			•
Regulatory/Legal	Executives			•
Operations/Production	Executives			•
General Management	Executives			•



The Credit Risk and Operations decision areas illustrate how the Risk Management function in insurance companies can monitor risk exposure, allocate resources and set plans for future requirements to manage multiple risk types that cascade across the business.

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