Institute of Actuaries of Australia

Enterprise Risk Management and Exploring Best Practice in Commercial Insurance Pricing and Underwriting

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Introduction

"…I define an executive's job in 3 broad areas:

1. ***Communicating the Territory**, that is, the purpose, the vision, and goals of the organization to key constituencies, and outlining opportunities and challenges.*
2. ***Building relationships and facilitating interactions** that result in outstanding team performance.*
3. ***Producing results and outcomes**, more from direct efforts of others than from own efforts."*

Source - Mary Beth O'Neil, author of Executive Coaching with Backbone and Heart
- A Systems Approach to Engaging Leaders with their Challenges

Purpose of Paper:

The intention of this paper is to explore the landscape of Enterprise Risk Management (ERM) theory with a particular focus on application of ERM in the key risk area for general insurers of pricing and underwriting.

Outline:

The above quote defining an executive's job provides a simple three part framework for our discussion on enterprise risk management.

(1) ***The ERM Territory***: With an ERM focus, actuaries need to gain broader perspectives on the underlying business model and entire business processes. Aspects of the business model include the value proposition, product offering, target market segments, the firm's capital position and risk appetite. The steps of the business process include a chain of decisions from producing/distribution, to underwriting/pricing, to claims/reserving, to capital management and investment. The relative importance of each step of the process depends on the underlying business model and the opportunities presented by the market environment. This requires analysis of the value driver for different business model: personal versus commercial and a view of the whole business decision-making process: sales, underwriting, pricing, and reserving.

(2) ***Building Relationships and Facilitating Interactions*** - With broadened perspectives and responsibilities, actuarial skills and training can be applied to analyzing and projecting business lines financial performance, and can have even bigger impacts on the organization. Moreover, professional actuarial training and continuing education can be instrumental to the understanding and keeping up with new regulatory changes. However, to have real impact, technical skills need other essential ingredient such as communication and the ability to translate into languages that underwriters and managers are accustomed to and can apply. The new roles and responsibilities require actuaries to respond to multi-level demands: the competing pressures from top-line growth and bottom-line profitability, the balancing act from shareholder expectations and community responsibility. Given the multiple dimensions that demand for time and attention, there is a skill set for time management and priority setting with business line managers. Actuaries need to perform a high-level cost-benefit assessment and business impact analysis before embarking on any new initiatives.

One of the key issues and challenges here is having the right conversations to understand the reality of how good we are or are not and what is the gap to moving target of best practice.

(3) **Producing Results and Outcomes** - In these new roles and responsibilities, actuaries can better appreciate the differences between data and information. One example is to identify what level of detail of data is appropriate for business decision-making. Another example is to proactively seek leading indicators (such as tracking rate levels) for guiding business decisions, rather than relying on the rear-view mirror. In these new roles and responsibilities, actuaries can analyze the dynamics of the underlying business. For instance, how changes in rate level might affect the business volume, and conversely, how business growth as well as new versus renewal business can affect the loss ratios.

"It is obvious that to survive in the future, insurers need a major mind shift. Since the next evolution of the financial services sector has already begun, those that have not begun to make some progress are running a high risk of failure (which does not necessarily mean financial failure)." – Professor John Evans for Gen Re, Australian and New Zealand General Insurance Industry Best Practices v. Financial Performance, October 2006

1. The Enterprise Risk management (ERM) Territory – The context

> ***"The man who is tenacious of purpose in a rightful cause is not stricken by the frenzy of his fellow citizens" – Horace, 1st Century BC***

To describe ERM approaches, a good starting point is the value driver for the firm and the associated business model. By looking at the whole business decision-making process and the relative impacts on the financial performance, we can gain insights on which part of the process require more attention. To make the point, we can compare personal lines and commercial lines.

- Personal lines are almost perfectly defined, by driver, car, class, construction, geography, etc. In personal lines, there is little pricing discretion and underwriting input is minimal. For personal property, an emphasis should be given to monitoring of exposure accumulation to storms or other perils.

- Commercial lines (except for those light commercial lines that are similar to personal lines), however, can exhibit vary different characteristics from personal lines. Given the heterogeneity of risks, the very first step of risk-acceptance (underwriting and pricing decisions) has heightened importance. For commercial lines, the congruence or alignment of underwriting and pricing is an absolutely critical first step. No matter how tight you make the pricing reporting requirements, underwriters can damage the integrity of the system if they are not completely aligned and understanding of the goals of the project. Underwriters control the application of the pricing process. If they are not aligned, you may find in the commercial area a block of business that meets all of the pricing requirements, but is not of sufficient quality to support that pricing level.

In the context of business model for commercial lines, we can analyze the business processes.

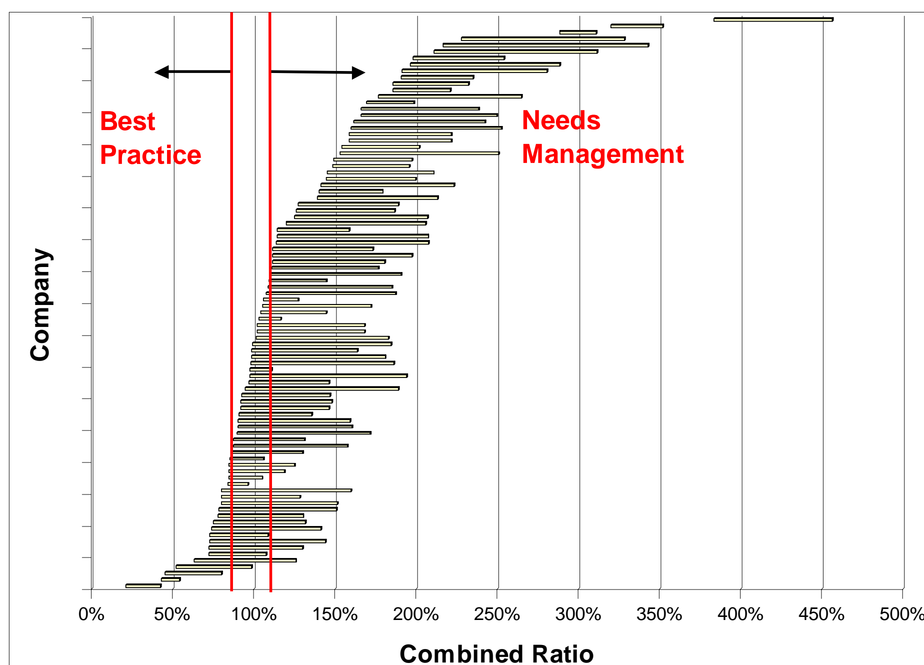
- For commercial lines, we recognize that successful risk management starts with the first step of risk acceptance. Although reserve often appears to be the largest "uncertain" item on an insurer's balance-sheet, the underwriting and pricing decisions were the root causes for reserve deficiencies. After all, underwriting and pricing are in the front line of the battle field (both offensive and defensive) for an insurer. Given the paramount importance of underwriting risk selection and risk-based pricing, it is critical that senior management is committed to a strong underwriting culture.

- One key driver for the underwriting and pricing risk is the estimation errors due to delayed emergence and recognition of loss ratios. The best weapon to equip the underwriters is to provide better management information (e.g., objective leading indicators) to guide pricing, underwriting, and reserve decisions

- Another insight we gained from analyzing the business decision-making process is the Head Office versus Branches. At the typical commercial insurer, the risk acceptance and underwriting are carried out at many of its branch offices. Effective management of many of the branches requires clear communication of goals, monitoring of key statistics, and technical assistance.

The Value of Change – Analysis of successful Australian and New Zealand Underwriters by Gen Re

Gen Re conducted a survey in August 2006 of 50 companies representing 50% of the Australian and New Zealand general insurance market. Their report provides the following chart showing the Combined Ratio distribution of Australian insurers over the last 10 years which we reproduce here with Gen Re's permission.



Gen Re highlight that only 40% of the industry has managed at any one time over the last 10 years to achieve an underwriting profit (combined ratio of 100% or less). Further few companies consistently achieved this result. Gen Re surmised that these poor historical results are related to the overall poor industry ERM capability.

The Value of Change - An Empirical US Analysis by Risk Lighthouse

Risk Lighthouse used the US NAIC database to analyze historical loss ratios, company by company for each line of business. Companies with at least 8 years written premiums that exceed 1 million in each year were selected for analysis. The 10-year historical average loss ratio and standard deviation of loss ratio was calculated for each company and compared to the 10-year average loss ratio across the sample of companies.

Figure 1. Personal Auto Liability: A sample of past 10-year average historical loss ratios and standard deviations, comparison across a sample of US insurers.

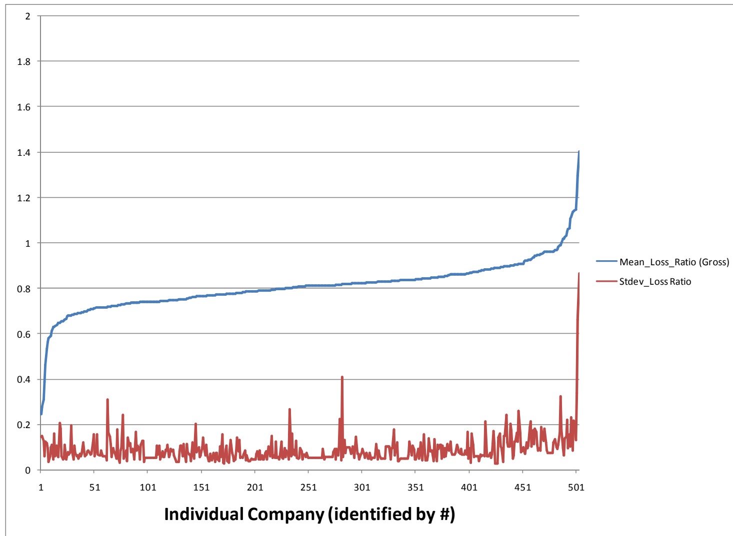
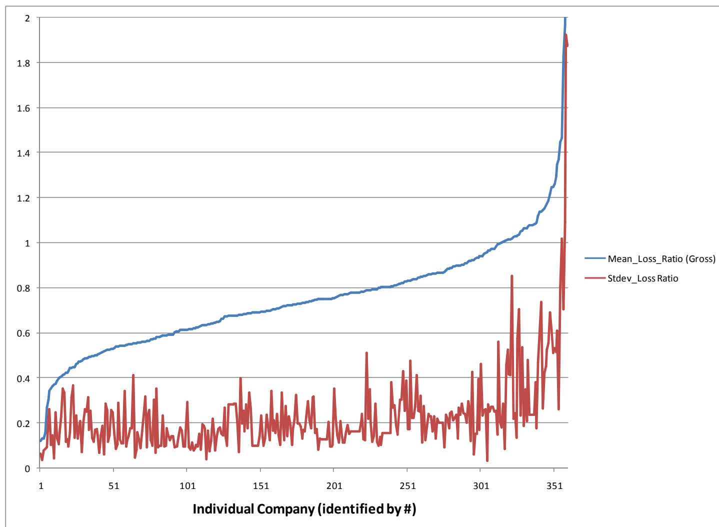


Figure 2. General Liability: A sample of past 10-year average historical loss ratios and standard deviations, comparison across a sample of US insurers.



By comparing Figure 1 and Figure 2, we can make the following observations:

Across all companies, the median past 10-year General Liability loss ratio volatility is 18.2%, while the median past 10-year personal auto liability loss ratio volatility is 7.3%.

There is significant variation in past 10-year average loss ratio across companies.

For General Liability, the standard deviation of past 10-year average loss ratios is 25.3%, which is higher than the median past 10-year General Liability loss ratio volatility of 18.2%.
For Personal Auto Liability, the standard deviation of past 10-year average loss ratios is 10.7%, which is higher than the median past 10-year personal auto liability loss ratio volatility of 7.3%.

What the results of these two studies from two independent insurance markets show is that the company to company variation tends to be greater than year-over-year variation for a representative company. This speaks loudly the importance of pricing and underwriting practice, and highlights the need to identify industry best practice.

2. Building Relationships and Facilitating Interactions

"The possibility conversation focuses on what we want our future to be opposed to problem solving in the past…This frees people to innovate, challenge the status quo and create new futures that make a difference" – Peter Block

Interaction, such as conversation and competition, expands our thinking and understanding. ERM is about learning so we can create the best possible outcome. This can be achieved by having the challenging conversations facilitated by ERM models to identify the possibilities that create the learning that is paramount to success.

Awareness of Best Practice as Part of ERM

An environment that facilitates the 'Right Conversations' enables a discussion and awareness of real issues. It is the questions from such conversation that help us ensure a firm is in a position to have awareness of best practice capability.

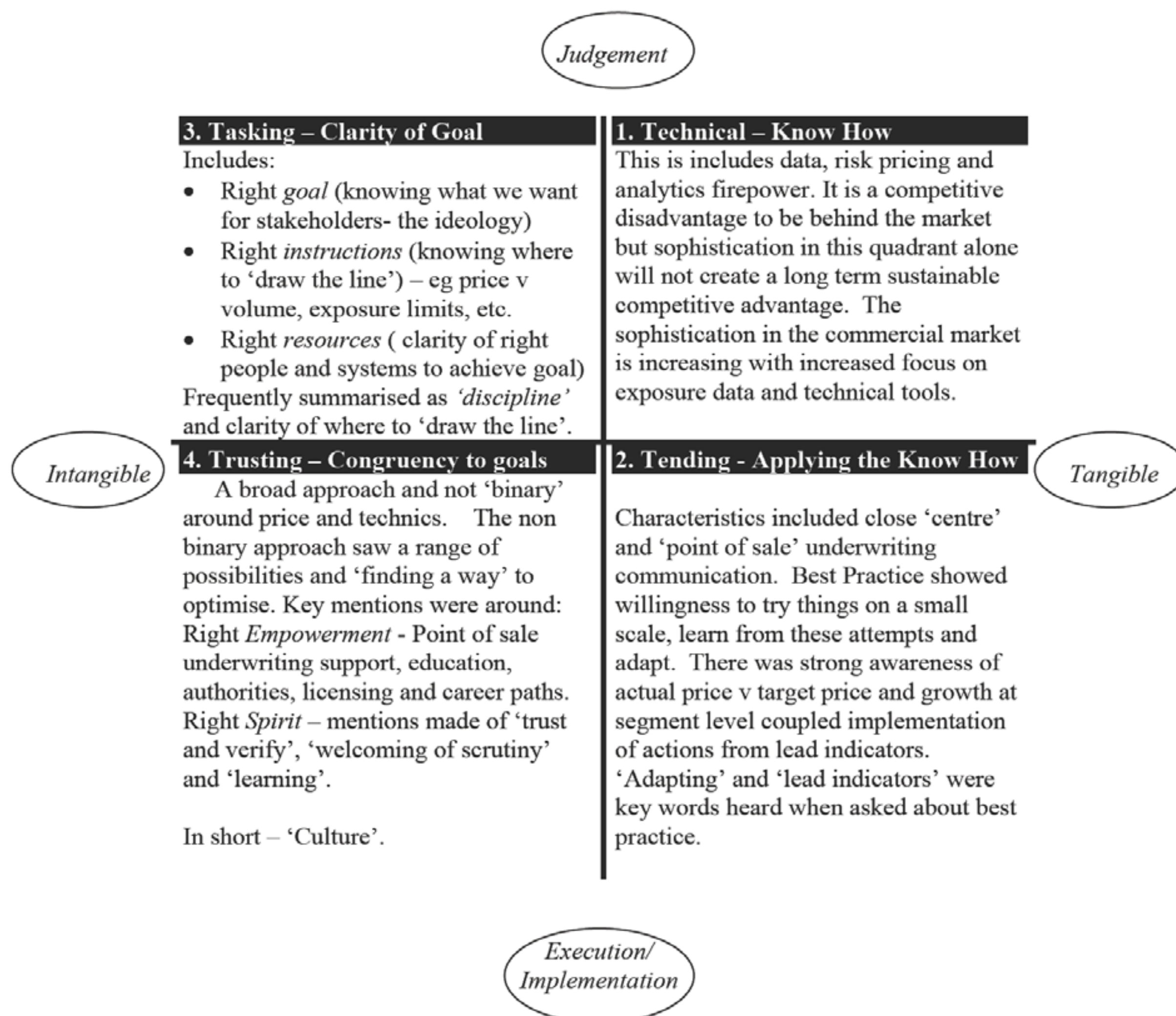
As an important ERM principle, various businesses exhibit different characteristics and require specific approaches. An essential part of an ERM approach is to adopt best in class practices. This endeavor arose from a question asked by Tony Coleman, Chief Risk Officer at IAG, around 'What are the possibilities around best practice and where should you be planning to be in 3 years time?' We looked at the following questions:

1. What is best practice in pricing and underwriting capability? How would we measure that?
2. What would be benefit, cost and risk of implementing identified best practice?

The approach so far has consisted of interviewing the parties summarized in the attachment to this paper. We are grateful for the responses of many industry participants and a summary list is attached.

One of our overall insights from the interviews was that achievement of best practice requires successful implementation across a wide range of diverse considerations. Technical pricing alone will not get you there. Indeed, best practices focus on achieving competitive advantage along the entire decision chain from producing/distribution, to underwriting/pricing, to claims/reserving, to capital management and investment.

To reflect this we adopted the following model framework to summarize issues raised:

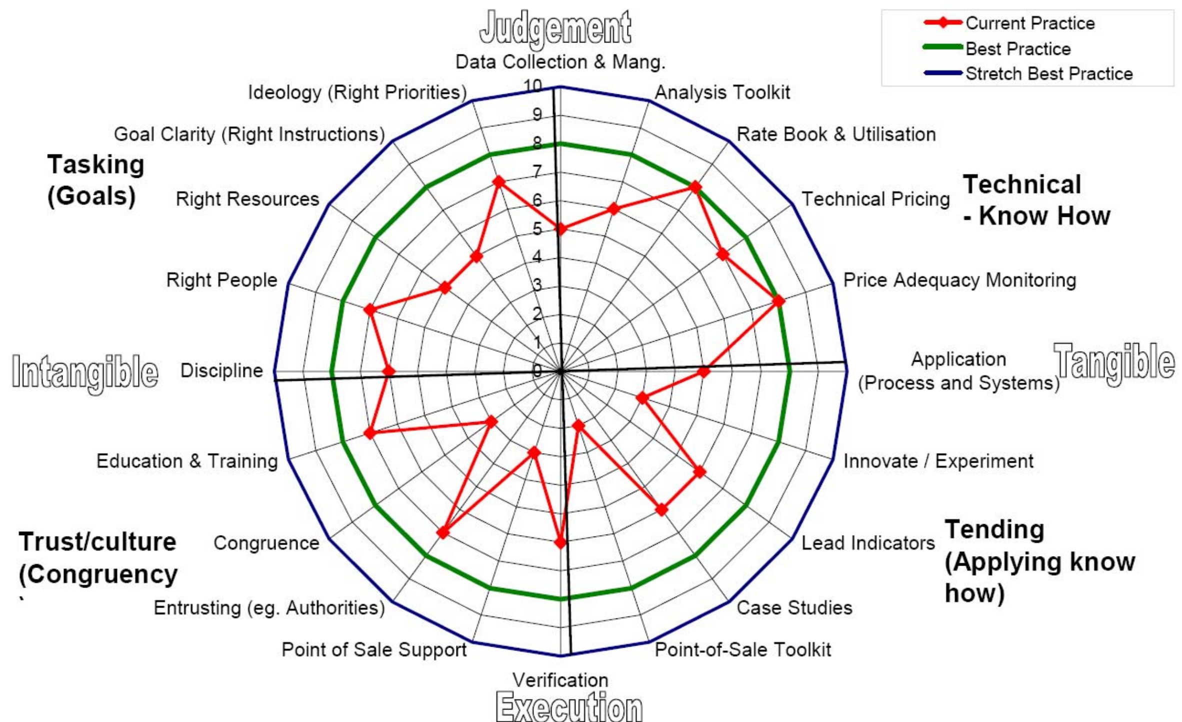


The T [4] model we adapted from some of the theory of Elliot Jaques and models of work based on conversations with Andrew Olivier of The Working Journey.

The two quadrants above the horizontal line represent judgment – (the technical know how and the goal clarity). The lower two quadrants represent the ability to implement and achieve results. The right hand side are the more tangible or observable aspects. The left hand quadrants are more intangible such as goals, purpose, values and culture.

Following is a signature Risk Radar approach we created a number of 'spokes' summarising the key themes emerging from the interviews.

Figure 1. An Illustrative Best Practice Pricing Risk Radar:



The diagram above shows a hypothetical result from a tool we built based on the insights of the interviews. Effectively the spokes represent areas for consideration with respect to best practice that emerged in our interviews and we have classified them into the four quadrants. A series of questions were developed resulting in a computer based self assessment tool that can be applied resulting in a rating for each area that provides a basis for disciplined discussion. The red line above shows a possible scenario resulting from working through a rating that can then be used as basis of conversation.

The tool enables different views of relative strength's and weaknesses to be expressed by different areas of our organization. This enables challenging conversations to be held that identify initiatives required to optimise the benefit, cost and risk of implementing change to move toward best practice.

A key insight for us is that actuaries naturally tend towards a deep focus on technical firepower as opposed to the full range of risk management issues. We debated whether a focus on technical sophistication alone would be successful over the long term. We had two observations: Firstly, it may not always be deployable (e.g. after acquisitions) and secondly, technical superiority in isolation is unlikely to deliver an optimum result.

The following is a summary of each of the 4 quadrants:

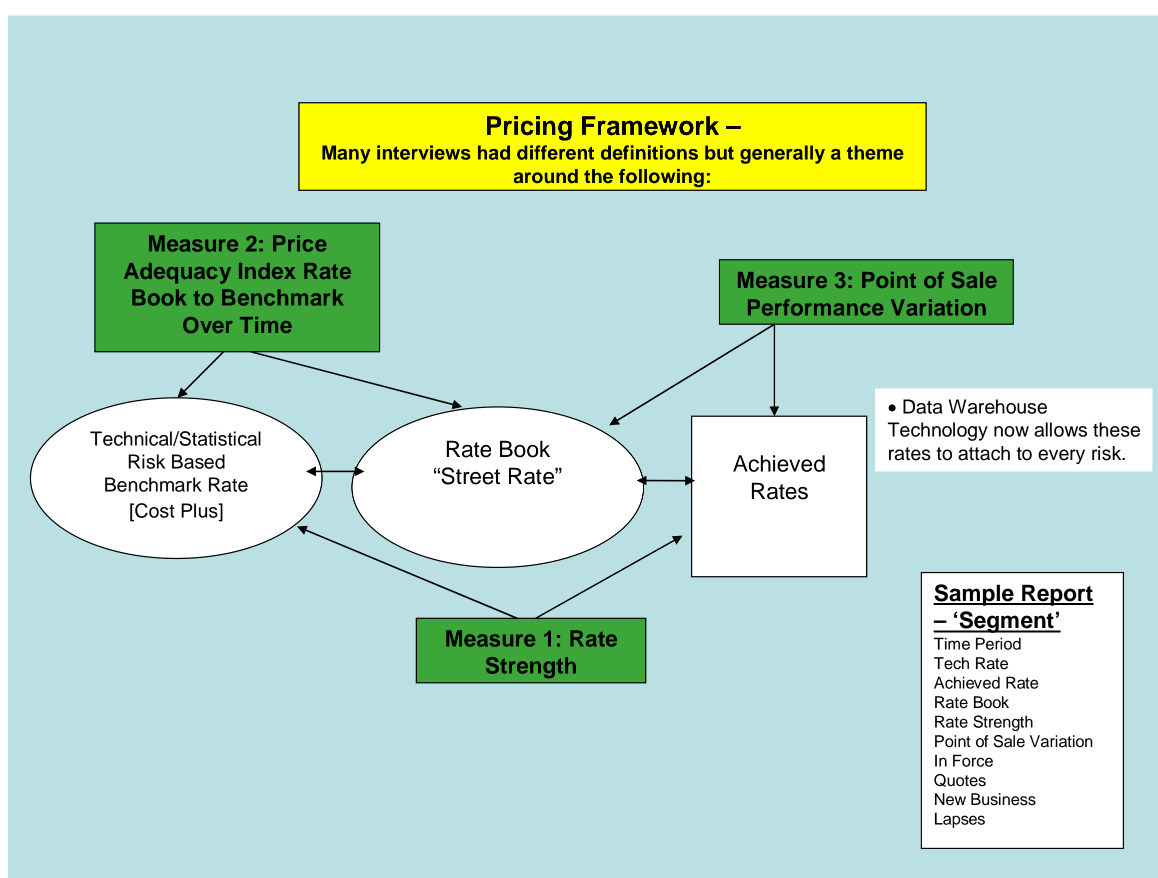
Quadrant 1 – Technical (know how)

'Must Haves' to be at Best Practice

i. Risk specific view of Expected Loss Costs – attritional, large and event
ii. Exposure information recorded – including location/risk specific data (e.g. geo coding)
iii. Growth and monitoring of exposure – clear reporting that shows what is growing and what is reducing that can be compared to pricing

Story 1:

There was generally a theme around a pricing framework involving – technical prices, achieved rates etc. One of the key themes to emerge was that technical sophistication in commercial lines is increasing. There was diversity in how it was described. Key elements differed but generally involved components of the following:



Measure 1 (Rate Strength): Assesses strength of achieved rates against absolute profit targets. Trend in measure indicates change in absolute or pure rates over time.

Measure 2 (Book Rate Adequacy): Assesses extent of cross subsidisation within target book rates. Trend in measure indicates extent to which cross subsidies are eroding rate adequacy over time.

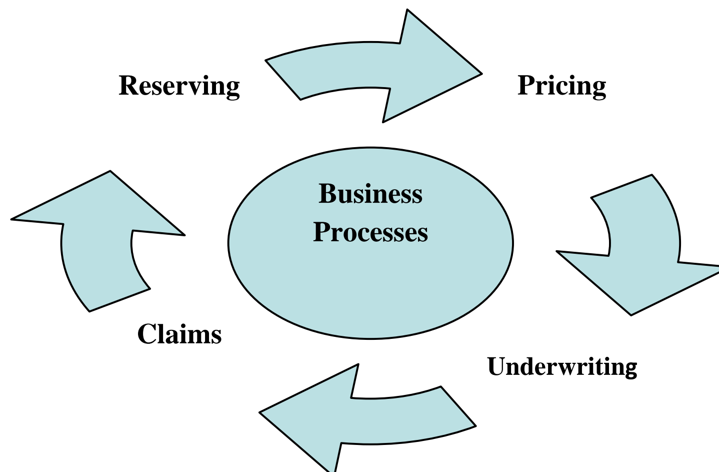
Measure 3 (Point of Sale Rate Adequacy): Assesses pricing discipline practiced by underwriters/development staff and extent of any leakage or discounting. Trend indicates extent of leakage emerging over time reflecting pressure on frontline staff from market competition.

Quadrant 2 – Tending (Applying the know how)

Key Possibilities Identified

i. Point of Sale – establish a direct link between underwriting decisions and likely future v's target outcomes,
ii. Application –consistent and robust framework for varying from targets in response to an individual underwriter's assessment of unique risk attributes.
iii. Adapt/innovate – respond to market opportunities based on lead not lag indicators

Here is an illustration of a lead indicator tracking of pricing data (achieved to book rate ratio) for most lines of business (by branch and distribution channel) that uses emerged loss ratios as feedback loop.



Analyse the dynamic interplay between pricing and volume

1) Rate Adequacy Monitoring: Track the achieved to book ratios on the one hand and the emerged loss ratio on the other hand. Loss ratio emergence can serve as feedback to the book rates; however, credibility of experience data needs some actuarial guidance.
2) Track rate strength indicators.
3) Analyze volume changes and its relationship with rate level strength
4) Analyze new versus renewal business

Another aspect supporting active utilization of price tracking is the communication of notion of risk.

Communicating the notion of risk to underwriters has faced a number of challenges.

- ✓ Underwriters are typically accustomed to tie their performance with top line production. Although they occasionally see reports on "Accounting/Calendar Year" loss ratios (as opposed to Accident Year) for their book of business, such loss ratio information typically does not receive due attention since they are subject to i) distortions by prior year release or strengthening, ii) incomplete loss development to ultimate, and iii) fortuitous claim experience.

- ✓ Underwriters may not readily equate the notion of risk with volatility. Instead, they can relate better to information such as where they are in relation to "achieved to book" ratio targets.

Story 2 – Best Practice Rate Monitoring

From our interviews observations emerged that Best practice operators are able to answer for any branch and underwriter the question of the business you wrote/quoted on this month how far were you from technical rate or benchmark required rate? An example was given where a branch was able to respond to this question with: "Last month I wrote $x business at 8.3% below book rate against my total allowable benchmark of 9% below.

Quadrant 3 – Task (Goal Clarity)

Key Possibilities Identified

i. Clear goals and priorities that are meaningful to underwriting and development staff (e.g. rate adequacy rather than return on capital targets)
ii. Clarity on where to draw the line and walk away
iii. Strong focus on recruiting staff with targeted capabilities and desired behaviours.

The best operations looked at:
- clear priorities
- clear instructions

Frequently we had stories of the difficult decisions around balancing profit and growth aspirations. Throughout our interviews, it was universally considered that communicating clear goals on the desired balance between the two contrasting priorities remained a key challenge.

Story 3 – Boundaries around where price can be negotiated

An observation in our interviews was that best practice tended to involve a pricing process based around risk price component – working losses, large losses, frequency, and size. This formed a based input that had criteria for varying. It did not have to be charged but there was a discipline for moving away.

In one instance there was little flexibility to vary expected loss costs but based on a process, flexibility was available in respect of loadings – profit margins, commission, expenses. This flexibility involved clear instructions in budget process with variations monitored.

Instructions were surprisingly simple with those in such companies saying that communication of priorities and instructions had 'repetitive similarity'. Observations included:

- Benchmark rates expected to be applied but variation also expected otherwise it indicates abdication of responsibility. In one case the level of variation monitored and questioned if not enough variation around mean benchmark rates

- Clear messages that walk away prices are to be respected. This results in non-binary focus on price with looking for all other levers/possibilities to win/retain business.

Quadrant 4 – Trusting

Key Possibilities Identified

i. Point of sale support - two way regular communications of emerging trends and issues between portfolio managers and branch staff is paramount.
ii. Commitment to training to enhance core capabilities across all required disciplines
iii. Collaborative authority and accountability approach - behave in way that promotes discussion and a real emphasis on 'trust and verify' not trust alone.

Story 4 – A culture to find a way or make a way!

In one case the technical system sophistication was not high and prevented a technical rate to be system generated from book rate rules to compare to achieved rates. This was adapted by insisting underwriters manually capture the technically assessed rate as well as the actual charged rate for every policy record at the point of sale. This enabled that every policy had a technical rate and actual rate recorded against it resulting in flexibility of reporting by segment and distribution on variations. To put some 'healthy tension' and verification into the technical rate a sample audit process was undertaken with discussion and feedback around learning. This demonstrated a high level of practice around the quadrants discussed even if there were some technical limitations.

Story 5 - The value of a strong underwriting culture

During their review of US industry performance, Risk Lighthouse identified that the better performing mid-size companies were located in secondary or even tertiary cites in the US. Examples of these locations included:

- Van Wert, Ohio;
- West Bend, Wisconsin
- Pekin, Illinois
- Fond du Lac, Wisconsin
- Lansing, Michigan
- Fairfield, Ohio
- Harleysville, Pennsylvania
- Pekin, Illinois

These companies seem to share lower turnover and employees in tune with the company's goals and expectations. Taking another insurance job could mean relocating their families, changing their children's

schools, etc. It is not like Chicago, where changing jobs means a slightly different commute. They are "selling" good jobs in a good family environment, with stable employment.

An anecdotal hypothesis (not statistically founded by any means) is that professional employees of these companies plan to stay with them for their entire careers at a much higher rate than employees of large city companies. As a result, these employees, particularly underwriters, tend to think in much longer time horizons and long term profitability. They do not, with the same frequency, add a marginal piece of business to meet a goal, since they understand the problems it can cause down the road. Besides, they have every expectation that they will be the one that has to fix that problem. They also knew that their job was not at risk if they failed to grow the book if rates were not right.

Meeting underwriters in the big cities like NY, LA, and Chicago, I was always impressed that they knew exactly what they had to do to get their bonus, and exactly when it would be paid. However, they were often at an impasse when trying to explain the company's goal or philosophy. In the smaller markets, they were in many ways company focused more and realized that their long term prospects were better if the company did better resulting in a more holistic connection between balancing goals, priorities and actions.

So what does this all mean? The practical challenge of implementing change is easily underestimated. In the next section we explore key examples of how to apply the theory.

3. Producing Results and Outcomes

"T.E. Lawrence (of Arabia)'s aphorism that 'Making war upon insurgents is messy and slow, like eating soup with a knife' is difficult to appreciate until you have done it…Knowing how to win is a different thing from implementing the measures required to do it" - John A Nagl.

This paper is not about being virtuous and preaching on successful ERM and pricing and underwriting techniques. Our aim was to explore the challenges and issues that may be faced attempting to implement ERM learning and theory in the operational area of commercial insurance pricing and underwriting.

Underwriting is the application of actuarially developed data (quantitative) to real world risk parameters (qualitative). Best practice underwriters employ similar decision making frameworks to actuaries. However unlike actuaries, the nature of the underwriting task means underwriters typically have neither the depth of data nor the time available to employ quantitative techniques at a transaction level. Despite this, underwriters can differentiate their performance by practicing ERM principles as the examples in this section illustrate.

In the paper "The Journey Revisited", McKinsey & Company (2004) set out four crucial areas for improving underwriting performance:

1. ERM – avoiding surprises that can impact a company's financial strength to the extent it affects the company's ability to execute its business plan.

2. Strategic Capital Allocation – in what markets and market segments will a company compete and how much capacity (capital) will it deploy?

3. Portfolio Management – includes pricing, underwriting, product development, performance management, distribution strategy etc.

4. Transactional Excellence – fundamental to achieving strong underwriting performance. The challenge in achieving excellence here is that decisions are complex, latitude is great and typical decision makers are relatively inexperienced.

We have already explored the principles of ERM applied to pricing and underwriting. This section takes a practical look at Portfolio Management and then explores a checklist of considerations that contribute towards achieving Transactional Excellence.

Portfolio Management

As already discussed, it is critical that commercial line underwriters align risk acceptance with the adopted pricing framework. This requires consistent and targeted risk selection.

It is often accepted that a quality risk is one where the risk is appropriately balanced by the return (premium). This is true in theory on the assumption that moral risk can be effectively avoided. However, the heterogeneity within commercial lines means it is practically very difficult to broadly apply this theory - underwriters would be required to thoroughly understand the drivers of risk and key uncertainties across all risk types. It is inherently more achievable if a commercial lines underwriter narrows its focus to market segments where it possesses competitive advantage.

Successful implementation of this targeted approach requires very clear goals around risk selection based on:

1. Its risk appetite – how much volatility is it prepared to wear?
2. A realistic assessment of its competitive advantage – in what classes/industries are its risk selection/management/control and/or distribution capability greatest?
3. Risk selection – What are preferred and non- preferred risks and the criteria for risk/return?
4. Profit targets – what is the rate adequacy and profitability requirement across the cycle?

Monitoring is a critical part of being able to adapt risk selection criteria in response to emerging experience. Some key possibilities for reporting that support a culture of learning and adapting are:

Lead Indicators: Is what we do Congruent with Goals?

Intent: Identify and measure the key indicators that:

- underwriting and development staff can directly influence, and
- provide a forward view of future performance

1. Portfolio Volume

- Where is business being written?
- Are volumes consistent with expectations? – unexpected changes are a valuable lead indicator of pricing issues.

  Renewals

  - Renewal retention rates
  - (mid term) cancellations rates

New Business

- Number of SUBMISSIONS received from intermediaries - assesses extent to which development staff are able to generate business leads.
- Number of QUOTES provided from these submissions - assesses quality of leads generated by development staff and reflects value of relationship they have with intermediaries.
- Number of QUOTES WON / DEALS CLOSED - assesses quality of quotes provided and strength of relationship with intermediary.

All Business

- Total growth rate (number policies/risks incepting divided by number policies/risks expiring).

2. ***Rate Adequacy – Two key measurements:***

- Achieved rate expressed as a percentage of target (book) rate
- Rate change – adjusted to reflect changes in exposure.

Some observations and possibilities from our interviews and research on this type of report were:

- Organizational self-awareness is needed to achieve cultural change. A key measure is a benchmark price by risk that disciplined reasons are required to support variations from the benchmark. Even when market is able to find quotes materially below benchmark in a soft cycle this measure will give strong awareness.

- Some players believe this can be drilled down to lowest level with transparency down to an individual underwriter promoting internal competition around a measure other than premium growth.

- Beware the 'Winners Curse' – An insurer is more likely to "win" under-priced business - 5% of quotes materially under-priced leads to 15% to 20% of portfolio being materially under-priced. Tracking rate adequacy on all quotes (not just closed business) provides valuable insight into underwriting behavior.

Stress Testing: Are assumptions emerging in practice?

Intent: Ensure assumptions that drive risk selection and pricing are justified by emerging experience.

3. ***Portfolio performance*** – actual v target:

- Claim frequencies (number of claims per unit of exposure)

- Average Claim Sizes (Severities)

- Loss Ratios

These should be subdivided into Large claims (greater than threshold equivalent to around 0.2% of claim numbers), Event claims (accumulated losses generated by single event, e.g. storm, bushfire etc) and working losses (all other losses).

Target figures used in these reports should be consistent with pricing parameters.

Transactional Excellence

The following considerations and possibilities contribute to achievement of transactional excellence:

1. ***Targeted Recruitment:***

   A best in class underwriter possesses a rare mix of multi-discipline technical capability, interpersonal skills and self confidence. The checklist of desired attributes includes:

   - Legal know-how to ensure contract certainty,
   - Mathematical aptitude to ensure concepts such as frequency, severity, loss distributions, correlation and credibility are considered in the context of risk selection and rating. They need to be able to understand, monitor and explain the implications of rate reductions on a portfolio of business.
   - An ability to factually communicate to brokers the reason for proposed terms and conditions, including rate. This will require an individual that draws personal gratification from having made factual, solid decisions rather than keeping all parties happy with the decision
   - Creativity to apply cover restrictions and/or use reinsurance to control the risk.
   - A teacher, mentor and human resource developer to ensure underwriters with target skills and capabilities are nurtured and trained.
   - External work experience in outside industries (mine, farm, construction, warehousing, etc). Someone who has spent their entire career in an office may not comprehend the real risks of the outside world. They are too abstract, and then the rate or premium needed becomes abstract.

   The general insurance industry has not been successful in encouraging sufficient numbers of these individuals to our industry. Such individuals need to be targeted early in their careers and retained through career development opportunities, training and competitive remuneration.

2. ***Training:***

   Formative Years

   - Formal tutorial based or online training of both product features and underwriting decision making - utilising case studies.
   - Link on job experience to formal learning – very frequent trips with surveyors / senior underwriters to gain first hand knowledge of how risk assessment practices covered during formal training are applied in the real world.
   - Impact of discounting on expected loss ratio and portfolio performance.
   - Understanding of frequency and severity on a risk level – 20% loss ratio is not low on a severity account. Incidence of claims not necessarily an indicator of a substandard risk on a frequency account.
   - Formal training with industry Institute should be required with consistent progress. Lack of adequate progress is an indication of lack of commitment or lack of understanding.
   - Mentoring by several senior underwriters that are held accountable for the training.
   - Job Rotation – across different underwriting roles (market segments, classes etc) and functions (claims, internal underwriting audits etc).

Advanced Training

- Basic understanding of credibility theory and credibility expectations of certain types and sizes of risks.
- Understanding of the concepts of large loss, loss curves and how to utilize claims experience in the underwriting process – including pricing of deductibles.
- Correlation/diversification – and its impact on cost of capital at an individual risk level
- Regular meetings in head office that cover technical topics such as ratemaking, reinsurance and reserves can be part of a regular training and communication program.

3. *Best Practice tools*

- Risk selection – robust frameworks that allow a structured and consistent approach to risk selection. Such a framework may consider quality of risk management/housekeeping, experience of insured's workforce, attitude of insured to risk transfer/retention, anticipated claim volatility, relationship with broker, capacity demanded by insured etc
- Rate tools – by peril- enable underwriter to understand how rate has been built up, where uncertainties are and where and for what he should deviate from target rates
- Data collection – enable testing of risk selection and pricing assumptions.

4. *Clear and transparent Constraints*

- Underwriting authorities – clear what they are, what skill set is required at each level, knowledge, skill and experience required to progress to higher levels, robust verification to ensure authorities are being followed.
- Pricing discretion – limits are required for inexperienced underwriters whereas senior underwriters can be given greater pricing flexibility subject to achievement of price adequacy goals.

5. *Communication*

- Regular dialogue – two way between head office and branches on emerging issues/trends.
- There is little point monitoring key indicators such as rate adequacy if it is not clear that senior management focus on them. Regular dialogue required by senior management and relevant branch staff in response to monitoring outcomes.
- Senior executives should focus on large losses, lost renewals, mis- priced accounts and having real conversations
- Ask questions – authority v accountability – underwriters should be expected to explain reasons supporting their actions.
- Underwriting audits – cross fertilization using staff from one branch to audit results of independent branch
- Build culture by consistently communicating goals and actions required to achieve them.

Summary

"The only secure relationship we can have with the future is on the footing that we cannot foresee it… If we cannot foresee the future then we cannot! No proliferation of polysyllables or multivariate analysis will succeed (other than in deceiving ourselves)…we should be able to home upon our targets with alertness and sensitivity. And that is all we can hope for." *– Frank Redington, UK Actuary*

ERM is an approach that is about maximum efficiency and minimum dissipation of effort towards achieving goals. This paper started from a question. ERM may well be more about asking questions and homing in on the goal.

Revisiting the framework from our introduction…

1. ***Communicating the Territory***: Goals ⇔ Acting Congruently

    Say: What is the goal? What do we really want? If we achieve that what will it mean?
    Do: What is the risk to manage along the way to ensure we act congruently with the goal?

2. ***Facilitating Interactions***: Possibilities ⇔ Best Fit for Purpose

    What are the possibilities? How do we evaluate and identify most fit for purpose possibility?

3. ***Producing Outcomes***: Measure ⇔ Adapt

    What are the lead indicators that will measure/mark performance?
    How will we achieve a 'speed to adapt' (homing) and be resilient rather than perfect?

We did not write this paper with a ready made solution to Enterprise Risk Management for commercial pricing and underwriting. We did have some great conversations and input from many underwriters and specialists in the industry that helped establish a useful framework for assessing the holistic range of best practice. We gained an insight much broader than technical sophistication that resulted in a holistic framework and model for testing and discussing best practice. We wrote this paper to put some of the lessons together and express our gratitude to those who contributed their insight and wisdom.

Best Practice Review Contributors/Interviewees

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Examples of Question Framework Used:

1. What are your observations on what the insurance industry does well in pricing and underwriting?
2. If you have a view what are examples that the industry does well?
3. What could improve to lift to a level that in your view is global best practice?
4. What is missing that if an insurer were doing would really make a difference?
5. In your view what are the barriers that prevent Insurance Company being at a level you would rate as best practice?
6. Can you give 2 examples of great practices in Commercial Insurance pricing and underwriting or regular reporting that you or your colleagues have observed that stand out to you?
7. What does best practice look like in your view?

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