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A Look Into ERM

MAKING RISK MODELS COLLABORATIVE

BY DAVE INGRAM

STUDIES TELL US that business managers believe their actions make a difference in the success of their firms. That statement does not seem very controversial. It is hard to imagine a situation where you would not want that to be true.

But in fact, with our risk models, we make that contribution disappear into the mist of probabilities. And then we wonder why so many managers are opposed to "letting a model run the company."

Take out the documentation of your assumptions. Now think about it. Are there any people in that documentation? Or is it a cold recitation of disembodied numbers? For the most part, models are usually "net" of some difficult risk management actions; the assumptions are set by analyzing the result of difficult decisions that had to be made by someone.

Our risk models might be treated more as the "tool" rather than "the answer" so that we can work out how to let managers add their judgment—and their ability to improve the results of the company—to the model. This would require treating the modeling process as a dialog and collaboration, rather than as a stone tablet brought down from the mountain by the modeling team who wrestled with the fates to create it.

But making a complex stochastic risk model into an interactive process seems to be fantastically difficult. Perhaps it is similar to an attempt to track the exact position of a single spoke on a bicycle in a race. The spoke is moving and the bike is moving. One is tempted to create a model of the model to solve the problem. For the bike, that would be a good answer, as the movement of the spokes and the bike are predictable. And with enough insight into the rules of the models we create, we would recognize that we can track individual elements without jabbing a stick into the spokes.

We can provide a story with our recitation of numerical assumptions. The story would include some basic ideas about the past and continuing (or changing) strategy regarding risk and the efforts needed to achieve that strategy. For most insurers, the first statement about that strategy would be a declaration about whether the firm intends to grow risks faster than capital, capital faster than risks or to manage to keep them in about the same balance as they were in the recent past. That declaration can be followed by statements

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about management actions undertaken to make that happen. Then, that can be followed by the assumptions that flow from those prior statements and the degree to which those assumptions might change if that part of the story changes. This story might also mention the revenue and profit expectations that are often a motivation.

The same sort of statements can be made about the makeup of risk within any individual risk category. Is the plan to maintain the riskiness of a unit of activity (risk as percent of premium or percent of assets, for example), to allow it to grow or to restrict its growth? Again, this is followed by discussion of the management actions needed to achieve that goal. Then you can present the numeric assumptions and discuss the dependency of those assumptions of management's effectiveness in achieving the goals.

The above are just two examples of the stories and the people embedded within the assumptions of our risk models. The new Actuarial Standard of Practice (ASOP) 46, "Risk Evaluation in Enterprise Risk Management," seems to put an enormous burden on actuarial risk managers. It suggests that actuarial risk managers should consider a very wide range of "information about the financial strength, risk profile and risk environment of the organization" in performing a risk evaluation.

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But if we view this broad requirement in the context of involving and communicating with the rest of management about how vital their continuing work is to the viability of the organization, then we can use that requirement as an outline for the story which needs to be told about what we are modeling. A

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