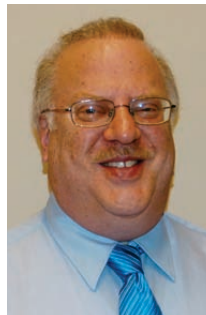


ANALYSIS PLACEBOS



THE DIFFERENCE BETWEEN PERCEIVED AND REAL BENEFITS OF RISK ANALYSIS AND DECISION MODELS.

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IN THE FIRST FEW YEARS of the 21st century, events like terrorist attacks, Hurricane Katrina and the financial crisis have focused much attention on risk management. Did risk analysis itself fail? Were the analyses right, but not heeded? Was the whole cascade of events beyond anyone's ability to predict? While the definitive answer may be years away, we can say, based on substantial evidence, that many methods

used in risk assessment do not work, even if they seem useful at the time they are applied. Of course, risk analysis is really just a subset of decision analysis and the same observations can apply.

How do we know what works? That depends on what we mean by "works." Suppose an organization is considering a new way to assess some critical set of decisions. Perhaps this decision process involves selecting from among several alternatives for major capital investments,

improved security measures, improving safety at a major chemical plant, or deciding whether to proceed with a risky surgical procedure. Now suppose we asked the users of this new method to select among the following objectives for this new decision analysis process:

1. The decisions will be better (i.e. observable outcomes over time will actually be improved)

OR

2. Users will *feel* better about the decision (i.e. there is high acceptance of the analysis process and the recommendation it produced)

Would the users of the decision process really think the second objective would be satisfactory? Would they really think that improved outcomes are not the primary criterion in choosing a decision analysis method – even if the decision process is known to be a “soft” method?

Just a few decades ago, a freezing mountain climber might have thought it was a good idea to drink brandy since it created a sensation of warmth (remember the image of the Saint Bernard carrying a flask of brandy on his collar to a freezing hiker?). We now know that the alcohol causes capillaries in the skin to expand and that the sensation of warmth is actually heat leaving the body faster.

The mountain climber felt better off but was actually worsening his hypothermia. If you are freezing and only care about *feeling* better, drink the brandy. If you care about your actual chance of survival, don't drink it.

Unfortunately, many popular decision analysis methods seem to confuse *feeling* better with *doing* better, or don't bother to include any measurements that would highlight this distinction. Of all the things that might be measured in organizations, all too often the actual effectiveness of decision analysis methods is among the least measured. Whether a method is soft and informal or rigorously quantitative, the question of whether it actually improves decisions in the long run is rarely even questioned much less quantified. This has led to what are probably a long list of unproven methods (even though they are touted as “proven”) being used for major, critical decisions that affect the financial well-being of organizations as well as health and safety of the public.

Recently, decision scientist Robert Clemen of Duke University made a call to action to measure the effectiveness of decision analysis methods (Clemen 2008). He would call a method “strongly effective” if it measurably increased desired outcomes such as higher returns on portfolios, reduced industrial accidents,

