

## **Abstract**

### ***Strategy and Planning for Deeply Uncertain Futures*** **Steven Popper, Senior Economist, RAND Corporation, and Co-Founder and Chief Operating Officer, Evolving Logic, United States**

Horizon scanning may provide early warning – or not. In the face of deep uncertainty prediction is not credible. Therefore, to better prepare we need not only employ means to discern the patterns in the developing future but to engage in deliberative courses of shaping and hedging action as well. In these cases we need non-predictive means to characterize uncertainty in ways that help us better understand how to choose wisely among strategic alternatives.

When uncertainty is profound, most efforts to determine appropriate strategy by using analytical means raise troubling questions for model builders and the consumers of analytical output. Yet, the root of their problem lies not in the models themselves but in the way in which models are used. Too often we ask “what will happen”, thus trapping us into the need for prediction, instead of the question we really would like to have answered: “Given that we cannot predict, what is our best course of action today?” The subtle shift in focus from model forecasts to our true interest – informing decisions – resolves many paradoxes. Instead of determining the “best” model and solving for the strategy that is optimal (but fragily dependent upon assumptions) we should instead seek among our choices those actions that are most “robust” – that achieve a given level of “goodness” across the myriad models and assumptions consistent with known facts. This is closer to the actual executive reasoning process.

A robust decisions approach often succeeds in addressing heretofore intractable strategic issues fraught with irresolvable arguments over which model is “right”, what assumptions are valid and how we should evaluate outcomes across the various measures of our interest. This method, both iterative and transparent, makes the decision to be informed part of the analysis itself. The results are, therefore, more easily accepted by decision makers and planners than the outputs from traditional analyses. A robust decision analysis provides direct support to the difficult decision choices that policy makers face with increasing frequency in the realms of our public as well as our private enterprise.