Decision Analysis

Vol. 4, No. 4, December 2007, pp. 173–175 ISSN 1545-8490 | EISSN 1545-8504 | 07 | 0404 | 0173



DOI 10.1287/deca.1070.0103 © 2007 INFORMS

From the Editors...

L. Robin Keller

Operations and Decision Technologies, The Paul Merage School of Business, University of California, Irvine, Irvine, California 92697, lrkeller@uci.edu

Manel Baucells

Universidad de Navarra, Barcelona, Spain 08034, mbaucells@iese.edu

Kevin F. McCardle

Anderson School of Management, University of California, Los Angeles, Los Angeles, California 90095, kevin.mccardle@anderson.ucla.edu

Gregory S. Parnell

Department of Systems Engineering, United States Military Academy, West Point, New York 10996, gregory.parnell@usma.edu

Ahti Salo

Systems Analysis Laboratory, Helsinki University of Technology, Espoo 02015 HUT, Finland, ahti.salo@tkk.fi

For this final issue of the year, our "From the Editors" column is co-authored with the associate editors, to highlight their editorial leadership of our journal. The issue begins with an article by Markus Glaser, Thomas Langer, and Martin Weber, "On the Trend Recognition and Forecasting Ability of Professional Traders." Next is an article by Sarah K. Jacobi and Benjamin F. Hobbs, "Quantifying and Mitigating the Splitting Bias and Other Value Tree-Induced Weighting Biases." Simon French, David Rios Insua, and Fabrizio Ruggeri advise us all to pay attention to "e-Participation and Decision Analysis." Martin S. Schilling, Nadine Oeser, and Cornelius Schaub then present "How Effective are Decision Analyses? Assessing Decision Process and Group Alignment Effects." The annual thank you to reviewers ends the issue. At the beginning of 2008, we will begin using the online manuscript submission system, Manuscript Central, for new submissions.

Key words: decision analysis; probability: elicitation; forecasting; overconfidence; financial modeling; debiasing; splitting bias; anchor-and-adjustment heuristic; multiattribute decision analysis; value trees; additive value function; objectives: structuring of; weight elicitation; decision quality; process effectiveness; output effectiveness; outcome effectiveness; e-democracy; e-participation; public participation; stakeholder workshops; editorial

As we near the end of my first year as Editor-in-Chief of *Decision Analysis*, I am pleased to co-author this "From the Editors" column with our outstanding team of associate editors, Manel Baucells, Kevin F. McCardle, Gregory S. Parnell, and Ahti Salo. The end of the year is a good time to pause and give thanks to our Editorial Board, referees and authors for all their contributions to our journal. Thank you!

At the beginning of 2008, we will announce some new members of our editorial team. In January, we will also begin to use the online manuscript submission and reviewing system, Manuscript Central, for all new submissions. Special thanks to our Managing Editor Ms. Kelly M. Kophazi (kmkophazi@earthlink.net), who, on top of her regular role, has been working to launch the system. Please check our journal website (http://da.pubs.informs.org/) for the latest information on the submission process. To submit or review a new paper submitted after January 2, 2008, use this website: http://mc.manuscriptcentral.com/deca.

Thinking about next year leads us to this issue's *trivia question*: The author of "Decision Theory: The Next 100 Years?" is (a) one of the first four Ramsey award winners, (b) professionally linked with

telephones, (c) has an Erdös number of one, (d) all of the above, or (e) none of the above.¹

Confucius advised that you should "Study the past if you would define the future." In our first paper, "On the Trend Recognition and Forecasting Ability of Professional Traders," Markus Glaser, Thomas Langer, and Martin Weber studied professional traders, who work in the trading room of a large bank, and students, to examine their ability to recognize trends and to forecast what will happen in the future. They conducted an experimental study to examine two methods of predicting a trend. They observed that underconfidence (in probability estimates) and overconfidence (in confidence intervals) can be observed in the same trend prediction setting based on the same information. These results contribute to the literature on biases in probability judgments, and thus will be of interest for both decision analysis practitioners and researchers. Last year in Decision Analysis, Yechiam and Budescu (2006) examined the sensitivity of probability assessments to time units and performer characteristics. Martin Weber's previous paper in *Decision Analysis*, Weber and Zuchel (2005), examined how prior outcomes affect risk attitude.

Our next paper would perhaps have interested Thomas Jefferson, the third United States President, who aimed to specify his tradeoff between two objectives when he said: "Health is worth more than learning." Sarah K. Jacobi and Benjamin F. Hobbs examine methods for overcoming biases in specifying tradeoffs in "Quantifying and Mitigating the Splitting Bias and Other Value Tree-Induced Weighting Biases." They develop a model for estimating and correcting attribute weighting biases, such as the splitting bias. The model assumes that attribute weights are influenced by the value tree structure, with a

person starting with an equal allocation of weight among attributes in each tree partition and then insufficiently adjusting the weights to reflect preferences. Environmental and economic attribute weights for electric system expansion alternatives were elicited from employees of an electric utility to illustrate the existence and correction of weighting biases. Prior papers presenting multiple objective decision analyses in Decision Analysis include Merrick et al. (2005) for watershed improvements, Klimack and Kloeber (2006) on army basic training, Ewing et al. (2006) on military base closures, and Feng and Keller (2006) on terrorism protection. Butler et al. (2006) describe a method for predicting objectives from attributes. For a different approach to determine attribute tradeoffs, see Mustajoki and Hämäläinen's (2005) work in Decision Analysis on the even swaps approach as described in Smart Choices by Hammond et al. (1999, see also 1998).

Our next paper, by Simon French, David Rios Insua, and Fabrizio Ruggeri, would also have been appreciated by Thomas Jefferson, who said "The will of the people is the only legitimate foundation of any government, and to protect its free expression should be our first object." Decision analytic methods can aid in the determination of the will of the people, by assisting in structuring debate and deliberations among citizens and stakeholders in societal decisions. When the interactions are conducted via the World Wide Web, these can be labeled e-participation. In "e-Participation and Decision Analysis," the authors present challenges for e-participation to become a valid tool within a modern democracy. They challenge decision analysts to engage in a program of research and debate on this topic. In earlier papers in Decision Analysis, Gregory et al. (2005) described the use of decision analysis to guide public policy deliberations, and Danielson et al. (2007) showed how public municipality decisions were aided with the use of a decision analysis software tool.

We end the issue with an article by Martin S. Schilling, Nadine Oeser, and Cornelius Schaub who present "How Effective are Decision Analyses? Assessing Decision Process and Group Alignment Effects." The authors analyze approaches to assess the effectiveness of decision analyses. Using six case studies from an applied research project, they present and

¹ Trivia answer: (d) all of the above. Peter C. Fishburn (1991) published "Decision Theory: The Next 100 Years?" in *The Economic Journal*. (a) He is the third winner of the Ramsey Medal, the highest honor of the Decision Analysis Society of INFORMS, http://decision-analysis.society.informs.org/Activities/ActivitiesAwards.html. (b) His telephone connection is through his employment at AT&T Labs. (c) He has published a number of papers with Paul Erdös (http://www.oakland.edu/enp/), including Erdös et al. (1991).

² In a letter to his cousin John Garland Jefferson, June 11, 1790.

test two measures of effectiveness. Their new process effectiveness approach compares the effectiveness of decision analyses to existing decision processes. They assess output effectiveness with a before/after preference measurement design. The role of decision analyses in decision support, particularly in decisions involving risk, was addressed previously in *Decision Analysis* by Paté-Cornell and Dillon (2006). As Aristotle said, "We are what we repeatedly do. Excellence then is not an act, but a habit." We hope that Shilling et al. have moved us closer to being able to form habits of effective decision analyses.

Our *Decision Analysis* editorial objectives and audience are printed on the inside back cover of every issue. We strongly encourage submissions of manuscripts from the wide array of decision research fields. Whenever topics from a broadly related field are aimed for the journal, the focus should be on potential contributions to prescriptive decision analysis. Such manuscripts should include a discussion of implications of the work for aiding decision making, and a literature review to demonstrate how the manuscript's field relates to the decision analysis literature.

Along with other journals published by INFORMS, *Decision Analysis* is now available online through HighWire Press at http://da.journal.informs.org/. Abstracts of all papers are available at this site, and full articles are available through this portal via your subscription to INFORMS Online, a library subscription, or via payment for an individual article. Through HighWire Press you are able to register to receive tables of contents for *Decision Analysis* via email, and to be notified when new issues of *Decision Analysis* are published online (http://da.journal.informs.org/cgi/alerts/etoc).

References

- Butler, J. C., J. S. Dyer, J. Jia. 2006. Using attributes to predict objectives in preference models. *Decision Anal.* **3**(2) 100–116.
- Danielson, M., L. Ekenberg, J. Idefeldt, A. Larsson. 2007. Using a software tool for public decision analysis: The case of Nacka municipality. *Decision Anal.* 4(2) 76–90.
- Erdös, P., P. C. Fishburn, Z. Füred. 1991. Midpoints of diagonals of convex *n*-gons. *SIAM J. Discrete Math.* **4**(3) 329–341.
- Ewing, Jr., P. L., W. Tarantino, G. S. Parnell. 2006. Use of decision analysis in the army base realignment and closure (BRAC) 2005 military value analysis. *Decision Anal.* **3**(1) 33–49.
- Feng, T., L. R. Keller. 2006. A multiple-objective decision analysis for terrorism protection: Potassium iodide distribution in nuclear incidents. *Decision Anal.* 3(2) 76–93.
- Fishburn, P. C. 1991. Decision theory: The next 100 years? *Econom. J.* **101**(404) 27–32.
- Gregory, R., B. Fischhoff, T. McDaniels. 2005. Acceptable input: Using decision analysis to guide public policy deliberations. *Decision Anal.* 2(1) 4–16.
- Hammond, III, J. S., R. L. Keeney, H. Raiffa. 1998. Even swaps: A rational method for making trade-offs. *Harvard Bus. Rev.* 76(2, March–April) 137–138, 143–148, 150. [Reprinted (2001) in *Harvard Business Review on Decision Making*. Harvard Business School Press, Boston, 143–167.]
- Hammond, III, J. S., R. L. Keeney, H. Raiffa. 1999. Smart Choices: A Practical Guide to Making Better Decisions. Harvard Business School Press, Boston.
- Klimack, W. K., J. M. Kloeber, Jr. 2006. Multiobjective value analysis of army basic training. *Decision Anal.* **3**(1) 50–58.
- Merrick, J. R. W., G. S. Parnell, J. Barnett, M. Garcia. 2005. A multiple-objective decision analysis of stakeholder values to identify watershed improvement needs. *Decision Anal.* 2(1) 44–57.
- Mustajoki, J., R. P. Hämäläinen. 2005. A preference programming approach to make the even swaps method even easier. *Decision Anal.* **2**(2) 110–123.
- Paté-Cornell, M. E., R. L. Dillon. 2006. The respective roles of risk and decision analyses in decision support. *Decision Anal.* **3**(4) 220–232.
- Weber, M., H. Zuchel. 2005. How do prior outcomes affect risk attitude? Comparing escalation of commitment and the house-money effect. *Decision Anal.* 2(1) 30–43.
- Yechiam, E., D. V. Budescu. 2006. The sensitivity of probability assessments to time units and performer characteristics. *Decision Anal.* 3(3) 177–193.