

## From the Editors...

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This issue's "From the Editors..." column is coauthored with Managing Editor Kelly Kophazi. In addition to introducing our articles, we report here on the past year from the perspective of the editorial office. The authors of the first three articles conducted laboratory experiments to examine decision behavior in financial investment decisions, bidding in auctions, and inventory ordering decisions. First, Dennis Vrecko, Alexander Klos, and Thomas Langer report on the "Impact of Presentation Format and Self-Reported Risk Aversion on Revealed Skewness Preferences." Our second article is "A Direct Test of Risk Aversion and Regret in First Price Sealed-Bid Auctions," by Richard Engelbrecht-Wiggans and Elena Katok. The third article, by Srinagesh Gavirneni and Yusen Xia, is on "Anchor Selection and Group Dynamics in Newsvendor Decisions—A Note." Our final article, describing the application of decision analysis for an Italian waste processing decision, is "Resource-Limited Multiattribute Value Analysis of Alternatives for Immobilizing Radioactive Liquid Process Waste Stored in Saluggia, Italy," by Alan J. Brothers, Shas V. Mattigod, Denis M. Strachan, Gordon H. Beeman, Paul K. Kearns, Angelo Papa, and Carlo Monti.

*Key words:* alternatives; anchoring; applications: energy; applications: nuclear waste; auctions; behavioral decision theory; behavioral finance; behavioral operations management; competitive bidding; decision analysis; decision making; experimental economics; group decisions; multiattribute value analysis; newsvendor models; presentation formats; regret; risk aversion; skewness preferences; utility-preference: applications; utility-preference: multiattribute; editorial

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*It's a small world after all*

*It's a small, small world.*

Partial refrain of song on Disneyland theme park ride  
Written by Richard M. Sherman and Robert B. Sherman

In the *Decision Analysis* editorial office, we are reminded daily of how small a world it is because we have readers, subscribers, authors, editorial board members,<sup>1</sup> and referees throughout the world. We receive electronic mail and submissions of material to our online peer review system, Manuscript Central, at all hours of the day and night. In some sense, the editorial team of *Decision Analysis* never sleeps, because someone on our team of editorial board members is always awake and on the Internet. We have subscriptions to *Decision Analysis* from readers in diverse arenas, from academics to investment firms to chemical companies to government. *Decision Analysis* is

quite well represented among subscribers in Japan and western Europe (Italy, Germany, United Kingdom, etc.), as well as in the United States. Plus, as part of INFORMS' suite of publications, *Decision Analysis* is provided to consortia in China, Brazil, Pakistan, Tanzania, Ecuador, Lesotho, Rwanda, and Mozambique.<sup>2</sup> In another indication of the worldwide awareness of the journal, our recent corresponding authors represented 16 different countries (among papers submitted via Manuscript Central in 2008 or 2009, which completed the review process by April 3, 2009). Adding in all the coauthors on the submitted papers increases the number of countries represented.

Descriptions of the papers published in the last year are in each issue's "From the Editor..." column. The full text versions of these editorials are available, along with the newly instituted author biographies

<sup>1</sup> For the Editorial Board members, see <http://www.informs.org/site/DA/index.php?c=7&kat=Editorial+Board>.

<sup>2</sup> We were reminded of our global reach when our editorial office received an e-mail from a subscriber in Sao Paulo, Brazil, asking when she would receive her December 2008 issue.

and photos section from our journal's online site.<sup>3</sup> By chance, all the papers in the September 2008 issue were on the value of information, so this became a *focused issue* on a single unifying topic.

Overall, the journal has consistently published articles of high quality, from a mixture of senior and junior decision analysts, as well as authors from related fields. A broad variety of papers have appeared in *Decision Analysis*, spanning theory, application, assessment methodologies, experiments, and surveys.<sup>4</sup> We continue to have good turnaround times for our reviews. The average turnaround time to a one-round decision (of reject, revise, or accept) is 30.39 days.<sup>5</sup> The average number of days until the final decision is 67.67 days. The median is 30 days, with the minimum of 0 days and the maximum of 331 days.

We widely disseminate information about papers published in the journal. For each issue, we announce the authors and paper titles with a brief description via e-mails to Decision Analysis Society members and by posting on the Decision Analysis Web forum.<sup>6</sup> This year, Managing Editor Kelly Kophazi worked with the INFORMS publications relations staff to generate a press release on Mort Webster's June 2008 paper on climate change.<sup>7</sup> Journal news articles are also routinely placed in the *Decision Analysis Newsletter*.<sup>8</sup> The

Decision Analysis Society's website home page<sup>9</sup> has a link<sup>10</sup> to the journal flyer and to the journal site. Associate editor Jason Merrick developed the flyer with Christina Werner and he continually updates the flyer.

We also work to enhance the reputation of the journal by sponsoring information sessions and events at conferences run by INFORMS (e.g., at the INFORMS Practice Conference in Phoenix we hosted the snacks during the DA track) and related societies (e.g., we co-sponsored the opening reception of the Society for Judgment and Decision Making Annual Conference in Long Beach), where we distribute copies of the journal and journal flyers.

To address potential authors' concerns about taking a perceived risk of submitting to a relatively new journal, we set up a committee (including Thomas Langer, Jason Merrick, and Ahti Salo) to look into this issue. Based on their work, we have added the section to the journal website called "Why Publish in *Decision Analysis*?"<sup>11</sup> In addition, we are pleased to be under review for inclusion in the Social Sciences Citation Index (SSCI) of Thomson Reuters. The review takes at least eight months and covers at least three issues.

We also are undergoing the standard third-year review of the third and final year of the first term of the Editor-in-Chief. Greg Parnell is chairing the review committee. *Decision Analysis* was launched with Volume 1 in 2004, under the leadership of Editors-in-Chief Bob Clemen and Don Kleinmuntz. L. Robin Keller was appointed Editor-in-Chief for a three-year term beginning with Volume 4, effective January 1, 2007. Simultaneously, Ms. Kelly Kophazi was appointed as the Managing Editor. The current Production Editor (since Fall 2008) is Ms. Kimberly Anoweck, and Ms. Miranda Walker was the Production Editor at the beginning of this term.<sup>12</sup>

INFORMS is now working (among Editors and the Publications Committee) on a plagiarism policy (to develop sanctions against INFORMS journal-

<sup>3</sup> See <http://da.journal.informs.org/> from HighWire Press®, which also offers readers the option to sign up for *Decision Analysis* eTOCs (e-mailed Table of Contents) alerts. For the June issue, the "From the Editors..." column was coauthored with Managing Editor Kelly Kophazi (Keller and Kophazi 2008). Similarly, the December "From the Editors..." column was coauthored with all the associate editors (Keller et al. 2008), to emphasize their important role in the journal. The September (Keller 2008) and March (Keller 2009) columns are sole-authored.

<sup>4</sup> We are particularly pleased to publish practical applications of decision analysis. Over the years, we have successfully managed to have teams who have been honored with Decision Analysis Society Practice Awards prepare papers for the journal.

<sup>5</sup> This includes papers under all associate editors (both the official ones and the ad hoc ones) and includes some papers rejected without going to referees. This data covers papers submitted in 2008 and 2009, for which decisions were made by April 3, 2009.

<sup>6</sup> <http://www.syncopation.com/forums/viewforum.php?f=7>.

<sup>7</sup> For the July 1, 2008, press release, see <http://www.informs.org/article.php?id=1398>.

<sup>8</sup> <http://decision-analysis.society.informs.org/Publications/PublicationsArchive.html>.

<sup>9</sup> <http://decision-analysis.society.informs.org/>.

<sup>10</sup> <http://decision-analysis.society.informs.org/PDFfiles/DecisionAnalysisFlyer.pdf>.

<sup>11</sup> <http://www.informs.org/site/DA/article.php?id=6>.

<sup>12</sup> See the journal site at <http://www.informs.org/site/DA/article.php?id=2> for contact information and photos of the editorial office team.

submitters found to have plagiarized) and has beta-tested the CrossCheck software within a link in Manuscript Central to check if an article has plagiarized material.

Now we move on to the articles in this issue. According to the late physicist Richard P. Feynman, “It doesn’t matter how beautiful your theory is, it doesn’t matter how smart you are. If it doesn’t agree with experiment, it’s wrong.” In physics and in behavioral decision theory, the aim is to correctly describe how things actually work or how people actually make judgments and decisions. Our first three articles are experimental studies on financial investment decisions, bidding in auctions, and inventory ordering decisions.

In our first article, Dennis Vrecko, Alexander Klos, and Thomas Langer report on the “Impact of Presentation Format and Self-Reported Risk Aversion on Revealed Skewness Preferences.” They presented experiment participants with continuous financial asset return distributions varying in the degree of skewness in the distribution. Vrecko et al. (2009) found that preferences were highly sensitive to the way asset risks were communicated; when shown probability density functions, people showed a preference for left-skewed distributions, but the opposite was seen for cumulative distribution functions. They also found that people who were more risk averse (based on their own self descriptions) showed a stronger preference for right skewness.

Decision analysts (and economists) have not paid enough attention to studying whether the way information is displayed can affect people’s decisions, so Vrecko et al. (2009) makes a valuable contribution. Thomas Langer previously contributed to *Decision Analysis* in Glaser et al. (2007), reporting on an experiment examining the ability of professional traders in a trading room in a large bank and novices to recognize trends.

Our second article is “A Direct Test of Risk Aversion and Regret in First Price Sealed-Bid Auctions,” by Richard Engelbrecht-Wiggans and Elena Katok. Prior sealed-bid first price auction experiments have shown that bidders tend to bid higher than the risk-neutral Nash equilibrium. Engelbrecht-Wiggans and Katok (2009) conducted an experiment to separate

constant relative risk aversion from regret as explanations of such bidding behavior.

Prior papers on auctions in *Decision Analysis* include the late Michael Rothkopf’s (2007) paper arguing that decision analysis is the right tool for analyzing auctions, and Gerchak’s (2008) paper using Rothkopf’s advice to analyze knockout auctions. Elena Katok is currently serving as a Guest Editor (along with Guest Editor Robert Bordley) for the forthcoming “Michael Rothkopf Memorial” Special Issue of *Decision Analysis*, which will have a number of papers on auctions.

This is an apropos time for our *Trivia question*: Who wrote a poem on decision trees and published it in an INFORMS journal? *Bonus question*: Give the poem’s title.<sup>13</sup>

Euripides said “Joint undertakings stand a better chance when they benefit both sides.” Our third article, by Srinagesh Gavirneni and Yusen Xia on “Anchor Selection and Group Dynamics in Newsvendor Decisions—A Note,” finds that group decisions on ordering decisions can benefit the group members by leading to a tendency to make fewer errors. Contributing to the emerging field of behavioral operations management, Gavirneni and Xia (2009) conducted a “newsvendor” experiment in which individual participants or groups of three participants made decisions on the amount of a product to order when faced with uncertainty about the demand and the need to sell the product in just one selling period (called a “newsvendor” decision because a daily newspaper can be sold for just one day). They examined which potential piece of information people might anchor on in an “anchoring and adjustment” process to determine their order quantity.

Studies previously appearing in *Decision Analysis* addressing group decisions and processes include Schilling et al. (2007) on the effectiveness of decision analyses and Pennock and Wellman (2005) on using graphical models for groups. Baucells and Rata (2006) conducted a survey on a variety of real-world decisions under uncertainty.

Our final article, describing the application of decision analysis for an Italian nuclear waste processing

<sup>13</sup> *Trivia answer*: Michael Rothkopf published the poem “Trees—A Decision Maker’s Lament” in Rothkopf (1980) in *Operations Research*.

decision, is “Resource-Limited Multiattribute Value Analysis of Alternatives for Immobilizing Radioactive Liquid Process Waste Stored in Saluggia, Italy,” by Alan J. Brothers, Shas V. Mattigod, Denis M. Strachan, Gordon H. Beeman, Paul K. Kearns, Angelo Papa, and Carlo Monti. Società Gestione Impianti Nucleari (Sogin), the Italian authority with the responsibility to decommission four nuclear power plants, was considering three alternatives for processing nuclear waste, and asked Batelle to provide an independent assessment. Using existing engineering data and expert judgment, a multiattribute value assessment was developed to examine the alternatives from both an engineering and a public stakeholder perspective.

Prior papers in decision analysis addressing nuclear waste include ones by Eppel and von Winterfeldt (2008), who proposed a value-of-information analysis for sampling from nuclear waste storage tanks, and Brown (2009), which discusses policy decisions, including nuclear waste disposition. Bana e Costa et al. (2008) developed bid evaluation models for the Portuguese Electric Transmission Company, and Bakir (2008) evaluated border security for cargo. Keefer et al. (2004) contains additional decision analysis applications.

## References

- Bakir, N. O. 2008. A decision tree model for evaluating countermeasures to secure cargo at United States southwestern ports of entry. *Decision Anal.* 5(4) 230–248.
- Bana e Costa, C. A., J. C. Lourenço, M. P. Chagas, J. C. Bana e Costa. 2008. Development of reusable bid evaluation models for the Portuguese Electric Transmission Company. *Decision Anal.* 5(1) 22–42.
- Baucells, M., C. Rata. 2006. A survey study of factors influencing risk-taking behavior in real-world decisions under uncertainty. *Decision Anal.* 3(3) 163–176.
- Brothers, A. J., S. V. Mattigod, D. M. Strachan, G. H. Beeman, P. K. Kearns, A. Papa, C. Monti. 2009. Resource-limited multiattribute value analysis of alternatives for immobilizing radioactive liquid process waste stored in Saluggia, Italy. *Decision Anal.* 6(2) 98–114.
- Brown, R. V. 2009. Working with policy makers on their choices: A decision analyst reminisces. *Decision Anal.* 6(1) 14–24.
- Engelbrecht-Wiggans, R., E. Katok. 2009. A direct test of risk aversion and regret in first price sealed-bid auctions. *Decision Anal.* 6(2) 75–86.
- Eppel, T., D. von Winterfeldt. 2008. Value-of-information analysis for nuclear waste storage tanks. *Decision Anal.* 5(3) 157–167.
- Gavirneni, S., Y. Xia. 2009. Anchor selection and group dynamics in newsvendor decisions—A note. *Decision Anal.* 6(2) 87–97.
- Gerchak, Y. 2008. Decision-analytic approach to knockout auctions. *Decision Anal.* 5(1) 19–21.
- Glaser, M., T. Langer, M. Weber. 2007. On the trend recognition and forecasting ability of professional traders. *Decision Anal.* 4(4) 176–193.
- Keefer, D. L., C. W. Kirkwood, J. L. Corner. 2004. Perspective on decision analysis applications, 1990–2001. *Decision Anal.* 1(1) 4–22.
- Keller, L. R. 2008. From the editor. *Decision Anal.* 5(3) 113–115.
- Keller, L. R. 2009. From the editor. *Decision Anal.* 6(1) 1–3.
- Keller, L. R., K. M. Kophazi. 2008. From the editors. *Decision Anal.* 5(2) 57–59.
- Keller, L. R., M. Baucells, J. C. Butler, P. Delquié, J. R. W. Merrick, G. S. Parnell, A. Salo. 2008. From the editors. *Decision Anal.* 5(4) 173–176.
- Pennock, D. M., M. P. Wellman. 2005. Graphical models for groups: Belief aggregation and risk sharing. *Decision Anal.* 2(3) 148–164.
- Rothkopf, M. H. 1980. Trees—A decision maker’s lament. *Oper. Res.* 28(1) 3.
- Rothkopf, M. H. 2007. Decision analysis: The right tool for auctions. *Decision Anal.* 4(3) 167–172.
- Schilling, M. S., N. Oeser, C. Schaub. 2007. How effective are decision analyses? Assessing decision process and group alignment effects. *Decision Anal.* 4(4) 227–242.
- Vrecko, D., A. Klos, T. Langer. 2009. Impact of presentation format and self-reported risk aversion on revealed skewness preferences. *Decision Anal.* 6(2) 57–74.