

# **Destinations and Directions for Decision Analysis**

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*What will decision analysis look like in 2040?*

## **Scenario 1:** *Decision analysis emerges as a profession.*

- Gregory Keeney II becomes the 100,000<sup>th</sup> professional decision analyst (PDA); Passes exam to join profession his grandfather helped create.
- Clyman-Noonan opens Philadelphia office: World's largest decision analysis practice now has offices in 20 cities.
  - In unrelated news, CN to pay \$100 million to Ford shareholders: Panel of arbitrators calls CN analysis "sloppy and short-sighted"
- Second Business Week poll rates the Winkler School at Duke top Decision Analysis School; Newcomer Harvard catapults to No. 5.
  - No Bad Choices: Big companies are matching private practice salaries in their pursuit of PDAs.
  - Seeing Green: Environmental DA specialists earning top dollar.
- IBM ships DecisionSuite<sup>®</sup> 5.0 to rave reviews from PDAs; \$10,000 price tag dissuades few.

## **Scenario 2:** *Decision analysis is everywhere and nowhere.*

- PCWeek rates Microsoft Excel40<sup>®</sup> simulation/decision tool as tops:
  - Excel40 influence diagram interface rated #1
  - Library of templates is the largest available
  - Sales expected to top 70 million copies as loyal corporate users upgrade
- SmartChoice<sup>®</sup> leads ever-expanding pack of personal counseling platforms
  - SmartChoice aggressively defends its patented use of pricing-out methods; accurate method cited as key competitive advantage
  - SmartChoice share grows to 50% of personal counselor market; WellSpring<sup>®</sup> leads in key medical counseling market
- SEC requires firms to report probability distributions for future cash flows: at last, giving the investing public the info they need.
- US Environmental Protection Agency publishes new value function; with economy weakening, agency gives greater emphasis to costs
- What is decision analysis?

*Which scenario is preferred? Which is more likely?*

- The tools and ideas that we associate with decision analysis are good ones:
  - Some will not disappear, though "decision analysis" may.
  - Others are too subtle to survive unless we institutionalize them.
- *Which scenario is preferred?*
  - Many have written about the goal of growing the profession of DA; starting a DA journal serves this goal.
  - Scenario #1 would lead to higher quality analyses, but fewer of them.
  - I would argue that scenario #2 is preferred, even though there is no natural home for "decision analysts."
- *Which is more likely?* In many respects, the evolution towards scenario #2 is already underway.
  - Monte Carlo simulation tools are widely available
  - Decision aids are available on the web
  - "Value at risk" movement gaining momentum
  - "What is decision analysis?" is already asked

*Some suggested near-term directions:*

- Empower students and clients by putting software tools/systems in their hands – if we don't, someone else will.
- Invest academic energy and scrutiny in developing software platforms
  - Work to ensure that high quality methods/tools set the standard in the marketplace
  - Balance ease-of-use with rigor ("effort" vs. "accuracy")
  - Begin building and publishing libraries of analytic templates for specific domains
- Become an expert in some substantive area as well as "process experts"
- Increasing technical sophistication in DA consulting – we need to be able to do something the client can't:
  - Modeling dynamic decision problems
  - Modeling competitive ("strategic") interactions