Consultancy Companies: Innovative Decisions, Inc. (IDI)

Innovative Decisions, Inc., (IDI), in Vienna, Virginia, is one of a few firms that considers itself to be a "decision analysis" firm. IDI supports the needs of analysts, managers and senior decision-makers through its consulting, facilitation and training services. While IDI also delivers operations research, statistical, and systems engineering support, "helping people make decisions" is the common theme among these domains and is IDI's core business. Started in 2001 by Terry Bresnick and Dennis Buede, IDI now has twenty-seven people delivering decision analysis services. We are still a virtual company, operating primarily within client spaces. We go in and out of client sites, we operate from home offices, but we really have no base location. The vast majority of IDI's client base is in the public sector of the United States.

IDI focuses on four major business areas:

·   Decision Modeling and Analysis: Building models and conducting analyses that support solving a specific problem or making a decision.
·   Decision Conferencing: Facilitating project teams and working groups of decision-makers and other experts where solutions are based on group consensus.
·   Research in Decision-Making: Focusing on individual and group decision-making processes, decision-oriented methodologies, human factors, and cognitive biases.
·   Decision Analysis Training and Seminars: Providing tailored instruction and coaching on decision analysis topics pertinent to specific clients.

The nature of the consultancy practice at IDI is somewhat unique. Most of us are decision analysts by trade. Many of the people in the company came out of Ron Howard's program at Stanford in what used to be the Engineering- Economic Systems department. We also have several people with a business school background. More recently, we have added several folks with operations research backgrounds, with several coming from the Naval Postgraduate School and from the Information Technology program at George Mason University. Additionally, we have several social scientists who emphasize the cognitive side of decision making. When we bring the four aspects together, the engineering component, the business component, the operations research component, and the cognitive psychology component, it makes for a fairly powerful combination of perspectives to bring into an organization.

We can best describe our decision analysis practice in terms of the following questions:

What our clients are really buying? Are they buying our analysis where we represent some subset of expertise, or are they buying a process where the goal is to help their experts and their analysts have a process that they can use that they can repeat and they can solve the important problems of the day. For the most part, we sell processes – decision analysis processes that produce valued results in terms of insights into their decisions based upon inputs from key people in a cost-efficient time frame.

Are we selling subject matter expertise or just good advice? Very often people come to us because they trust us. We're objective, we don't have a stake in the decision and they're looking for someone to guide them along the correct path. They're not necessarily looking for sophisticated analytic models; they're not impressed by the fact that we can do large optimizations; they don't come to us because we can build huge probabilistic models. What they really need is good advice on how to look at their problem, how to structure their problem, how to solve their problem.

Are we providing consulting services or technology transfer? Sometimes, we help a client with a one-time application. The client has a specific problem and we help them solve it and we leave. Other times there is a series of problems that might feed into or build onto another. Frequently, what they really want is to learn how to do decision analysis themselves – the client is looking for technology transfer.

The most unique aspect of our practice is the decision conference. To use the words of Ron Howard to describe decision analysis in general, a decision conference is a structured conversation. Decision conferences were started by Decisions and Designs, Incorporated (DDI) in the late 1970s. They were developed by Dr. Cameron Peterson. The notion is to bring together the experts from the field and the experts on the process – the decision analysis experts. The field people provide the subject-matter expertise. The decision analysts are in the roles of decision process facilitators – often as a team of three. There is the lead facilitator who takes the group of the experts from the company or organization, walks them through the process and builds the models in real time; there is the person who would implement the decision models using computer-based decision tools; and there is the recorder who documents the rationale for the quantitative and qualitative judgments and writes the conference report as it proceeds. All three of the roles are filled by decision analysts and are interchangeable. At any time, any of the decision analysts can assume any of the roles. Collectively, IDI personnel have facilitated more than 2500 decision conferences and working sessions.

We use a wide range of analytical methods and tools. The analysis techniques that are finding the broadest application today include Bayesian networks and dynamic decision networks, decision trees and influence diagrams, multi-attribute utility analysis, benefit/cost analysis, social networks, and step-wise simulation. Specific tools that are used frequently include Logical Decisions, Hiview, Equity, @Risk, Netica, DPL, DATA, Analytical, Crystal Ball, Extend, ORA, and I-Think, among others. Most of the tools we use have been chosen with the human factors side of decision analysis and decision making in mind. The interfaces are designed for easy use. The use of color has meaning. Scrolling is minimized to maintain focus – concepts that are designed from the cognitive side of group decision making. For decision conferences, we want tools that help the group converge quickly after we've been through the divergent phase in the decision making process. When software doesn't exist that meets the client needs, IDI creates it.

 As we look to the future at IDI, we envision modest, steady growth in our highly specialized decision analysis niche. The key to growth to date has been forming strategic alliances with the well known, large consulting firms. By complementing their subject matter experts with our unique perspectives and skills in decision analysis, we can provide a powerful "one-stop shopping" team that can meet most clients needs. The most substantial challenge that we face is finding a continuous stream of skilled decision analysts. As we grow, our reliance on a strong mentoring program for junior analysts will become critical.

Please visit our website at www.innovativedecisions.com for more information.

 Terry Bresnick, President, IDI