

New York University
Stern School of Business
Executive MBA Program in Management

**Managerial Decision Making
Spring 2005**

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COURSE OBJECTIVES:

The objective of this course is to help you become a better decision maker. When asked about their ability to make decisions, previous students express concerns and several said they lacked self-confidence in making decisions. Others indicated that the process of making decisions may be painful, especially if one has to make an important decision. This may stem from the deliberation process one goes through that may be stressful. Yet others added that at times they second-guess their decisions and some acknowledged that they suffer from regret when a decision they have made led to an undesired outcome. A few mentioned that having gone through such a process made them indecisive and unclear about how to go about making decisions.

While the above concerns are described with regard to personal and business decisions, similar concerns are often voiced even by more experienced managers whose work requires making many business decisions. Making decisions at work may be easier when one can solicit the help of his or her colleagues but at the same time the consequences may loom even larger when making decisions at work rather than when making personal decisions. This course takes a systematic approach to improve your decision-making skills. The course is organized around a major distinction in decision-making between *descriptive*, *normative* and *prescriptive* aspects.

Descriptive aspects: This aspect examines how do we make judgments and predictions about the world (such as how successful a certain start-up is going to be)? How do we learn and how we update our beliefs based on new information? How do we make decisions based on these judgments? How do we deal with risk? All these questions are descriptive and we will attempt to describe the actual way people behave in dealing with those aspects. It appears that while people may be consistent in forming judgments and making decisions, their decisions are not always as wise as they can be. You may ask how does one determine what is a wise decision, and this is the topic of the next section.

Normative aspects: How should we act in a given decision situation? In what way should our decisions be structured and constrained so that we eventually make decisions in a consistent manner? We will devote considerable time in class to compare the “should” (normative analysis) with the “do” (descriptive aspect). The normative aspect often refers to the question of rational decision making, that is, how we should act if we wish to behave rationally. We will discuss the principles of rationality, that is, the principles that most

reasonable people wish would govern their choice behavior. Suppose you find a difference between the descriptive and normative aspects of decision behavior, what can one do to “correct” their behavior? This is the topic of the next section.

Prescriptive aspects: How can you improve your decision-making? The emphasis here is on prescription, similar to the way a doctor writes a prescription to improve someone’s physical condition when their behavior (descriptive) does not conform to what it ought to be (normative). In this course we will develop a framework that will help you understand your own decision behavior and will allow you to improve to generate choice options from which to choose the best alternatives; to be able to form judgments about the uncertainties involved in those alternatives; and to understand why the goals of the decision making process, that is, why do you value one outcome more than the other.

COURSE REQUIREMENTS

1. Class Participation (30% of your grade). You are expected to attend all class sessions since live discussion is essential for learning the class material. Students are expected to participate in all class discussions. Participation includes full preparation for class and for exercises. If you will be absent (only under exceptional circumstances) or unprepared, I should be notified in advance. There are reading assignments for each class and in class exercises in all class sessions.

* Quality of class Participation (30%). Active discussion is a very important part of the learning process in the course and is also part of what will make the course interesting for you and your fellow students. You will be evaluated on the quality of your contributions and insights. Quality comments possess one or more of the following properties:

- Offer a different and unique, but relevant, perspective
- Contribute to moving the discussion and analysis forward
- Build on other students' comments
- Transcend the "I feel" syndrome. (That is, they include some evidence, argumentation, or recognition and demonstrate some reflective thinking.)
- Provide a real life example of a course concept

2. Home assignments (30% of your grade). There will be three short home assignments. All assignments should be submitted electronically via Blackboard (BB). In addition, there will be a stock price prediction competition. The winner will receive a financial award

3. Final group paper (40% of your grade). The paper should analyze a current or previous work experience or a newspaper or a magazine article that illustrates one or more principles that were covered in the course. If the source is a personal experience; provide a brief description of the situation (two pages maximum in addition to the analysis). The paper should analyze the case and describe its relevance to material that was covered in the course. The paper should be both *descriptive* (Why did the decision maker behave as

they did in the specific situation) as well as *prescriptive* (How could they have acted better?).

The paper will be graded according to (1) whether the insights generated from your analysis are based on the course concepts (integration); (2) the relevance of the analysis conclusion to the decision makers involved in the case; and (3) the originality and depth of your analysis and prescriptions (originality).

- Texts:** (1) Shapira, Z. (1997). *Risk taking: A Managerial Perspective*. New York: Russell Sage Foundation.
(2) Russo, E. and Schoemaker, P. (2002). *Winning Decisions*. New York: Judy Piatkus Pub.
- Readings:** (3) Reading packet including cases from the Harvard Business School.

COURSE SCHEDULE

1. April 23 Introduction to decision making

We start the course by discussing normative and behavioral perspectives on decision-making. We will discuss the differences between the requirements of normative models and the ways people process and combine information (descriptive model).

1. Shapira (1997). Ch. 1-2
2. Bell, D. (1981). "John Brown" (A and B) *HBS* case (9-182-127; 9).
3. Wu, G. (1999). "Decision analysis," *HBS* case (9-894-004).
4. Gawande, A. (2002). "The Case of the Red Leg", from *Complications*.

Submit one page decision description (due April 28 via BB)

2. April 29 Judgment under uncertainty

This week we learn about judgmental heuristics and the resulting biases in probability assessment. We will focus on the ways people come up with estimates of probabilities and how they evaluate uncertainty. Our goal will be to understand the basic processes and how to improve your ability to estimate uncertainty.

1. Russo & Schoemaker (2002), *Winning Decisions* Ch. 1.
2. Tversky, A. & Kahneman, D. (1974). "Judgment under uncertainty: Heuristics and biases," *Science*, 185, 1124-1131.
3. Munger, C. (1995). "A lesson on elementary, worldly wisdom as it relates to investment management and business." *Outstanding Investor Digest*, 1, 49-63. (Handout).
4. Russo & Schoemaker (1992). "Managing overconfidence," *Sloan Management review*, Winter, pp. 7-17.

5. Dreazen, Y. J. (2002). "Wildly Optimistic Data Drove Telecoms to Build Fiber Glut", *Wall Street Journal* (September 26).

Submit case question-TBA (due May 5 via BB)

3. May 7 The difficulty of learning

How can we correct the errors people make in prediction and decision making? One mechanism that can help is learning. Do people learn from their errors? We will discuss findings that suggest that learning in uncertain environments may be difficult.

1. Russo & Schoemaker (2002), *Winning Decisions*, Chapters 4-5, 8
2. Roberts, M.J. & Walton, E. J. "National Demographics & Lifestyles (A)", Harvard Business School case (9-388-043)
3. David Leonhardt (2003). "Caution is Costly, Scholars Say", *New York Times* (July 30).
4. Tversky, A. & Gilovich, T. (1989). "The Cold Facts about the 'Hot Hand' in Basketball", *Chance* 2, 16-21
5. Gladwell, M. (2000). "The New-Boy Network", *New Yorker* (May 29).
6. Gladwell, M. (2003). "Connecting the Dots", *New Yorker* (March 10).

4. May 13 Information integration for predictions: Humans vs. machines

In making decisions and predictions people use information on different variables. Combining this information and comparing the outcome against a cut off criterion is not easy. We will analyze the ways people combine information and compare those with the ways recommended by normative methods. We will then discuss the strengths and weaknesses of humans vs. non-humans mechanisms (i.e., computer programs) to arrive at a way of using both sources for better information integration.

1. Kleinmuntz, B. (1990). "Why we still use our heads instead of formula: Toward an integrative approach." *Psychological Bulletin*, 107, 296-310.
2. Blattberg, R. & Hoch, S. (1990). Database models and managerial intuition: 50% model and 50% manager," *Management Science*, 36, 887-899.
3. Passel, P. (1990). "Wine equation puts some noses out of joint." *New York Times*, March 4.
4. Waldholz, M. (1991): "Computer 'brain' outperforms doctors in diagnosing heart attack patients." *Wall Street Journal*, Dec. 2, p. B6B.
5. Angier, A. (1999). "Route to creativity: following bliss or dots?" *New York Times*, Sept. 7.

5. May 21 Framing, choice, creativity and competitive decision making

This week's topic is the effects of different frames and problem presentation on choice. Research has shown that different framings of the same decision problem lead to divergent choices. We will highlight those tendencies and come up with remedial procedures so that you are able to make choices based on the substantial information available and minimize influenced of framing.

1. Tversky, A. & Kahneman, D. (1981). "The framing of decisions and the psychology of choice." *Science*, 211, 453-458.
2. Useem, J. (1998) "Dressed up and no IPO: The story of a failed offering." *Inc.* Feb. 20 (2), p. 56.
3. Grossmann, J. (1997). "Jump-start your business." *Inc.* (May).
4. Grossmann, J. (2001). "The idea guru." *Inc.* (May).

Submit Assignment 1 (due May 20 via BB)

6. May 27 Risky and financial decision making

Risk is associated with uncertainty. Formal models suggest ways in which people should evaluate alternatives and decide whether to take certain risks. However, people often do not follow such procedures. We will examine behavioral models of risk taking and compare them to the above procedures. We will also look at the ways behavioral issues affect risk taking in financial settings.

1. Wu, G. (2000). "A Note on Risk Taking in Decision Making." (handout)
2. Fox, J. (1997). "How to manage your stock options", *Fortune* (December 29)
3. Olin, D. (2003). "Crash Course: Prospect Theory", *New York Times* (June 8)
4. Lowenstein, R. (2001). "Exuberance is rational", *New York Times Magazine* (February 11).
5. Ramstad, E. (1998). "How Trilogy Software Trains Its Recruits to Be Risk Takers", *Wall Street Journal*, (September 21).

7. June 4 Risk taking in organizations

Taking risks in organizations is different than taking risks that affects only you individually. On the one hand, decisions you make in an organization may affect other people your success and/or failure in such decisions may have different consequences compared to risks you take say with your

own resources. We will consider the applications of behavioral models to problems of managerial risk taking in such areas as entrepreneurship and innovation.

1. Shapira: Chs. 3-7
2. Carley, W. (1998). "Swissair 111 crash spurs debate on following cockpit procedures." *Wall Street Journal Interactive Ed.* (Dec. 16).
3. Carey, S. (2000). "Until Alaska Airlines, procedure was clear: Keep flying the plane." *Wall Street Journal Interactive Ed.* (March 6).
4. Shapira, Z. (2000). *Talia Technology and the RTA* (handout).

Submit Assignment 2 (due June 3 via BB)

8. June 10 Organizational decision-making

Risk taking plays a particular role in organizational decision-making. Individual investors in the stock market for example, do not have to report to any manager about their decisions. In organizational settings however managers report to their bosses about their decisions and the degree to which they are willing to take risks is affected by the anticipated rewards and penalties that are a part of their organizations' rules and culture. We will discuss several aspects affecting the willingness to take risks in organizations and relate them to existing examples in the corporate world.

1. Shapira: Chs. 8-9.
2. Eisenhardt, K. (1990). Speed and strategic choice: How managers accelerate decision making." *California Management Review*, 32, 39-54.
3. Sharpe, P. & Keelin, T. (1998). "How Smithkline Beecham makes better resource allocation decisions." *Harvard Business Review*, (March) 45-57.

Submit Assignment 3 (due June 15 via BB)

Submit Final project (due June 17 via BB)