**What is Management Science?**

1. According to the book, management science has many definitions.

a. To optimize the use of available resources, given all the internal and external constraints placed on them.

b. The art (science?) of Mathematical Modeling of complex situations.

c. The science of the development of solution techniques used to solve these models.

d. The ability to effectively communicate the results to the decision maker.

To me the best definition focuses on two main points

e. Using some sort of model in order to input data which results in information that will assist the decision maker or makers to act.

f. To be able to communicate the results effectively and quickly.

2. To me it would be measure the success that was achieved given the internal and external constraints. What was the result and how did it measure up… The benefit I hope to achieve is that I make the optimum choice at each fork in the road, personally and professionally.

3. In general, I think that it does receive mainstream attention. At least in my experience it does. This topic has been brought up in many of my classes, marketing, management classes, etc. It seems to be a pretty hot topic in my life. If it truly does not receive mainstream attention, which I believe it does, maybe it is because of the following reasons:

a. Computers have really just been introduced to the mainstream population within the last decade. Management science, linear programming, etc. really have the ability to flourish with the assistance of computers.

b. It seems that in the Management Science time-line, pg 4, that the concepts really were used by select individuals or groups. For example, to assist in war strategies, it really hasn’t had the publicity or tools to make it effectively in history.

4. Yes, I do believe that the general public will embrace decision aides. I believe that they do today, but I believe that they will a lot more in there near future. Two reasons I believe that they will are:

a. Today management science and decision‑making are extremely hot topics in the educational system. In the past they were not. Now that the general public, at least in college and graduate work, are being filled with decision‑making tools they will take and use them more in their professional studies.

b. As computers become more used in our lives I believe that the ease of use will increase in using these tools. Computers will become a dominant part of our lives – linear programming, etc. will be more accessible to the general public.

5. My perception is that people have a difficult time making decision because they are scared of making the wrong choice. They feel that if they do not decide, they cannot be blamed for making a mistake. For me, it is because I feel that whatever choice/decision I make leads to a different road. I will never be able to go back to that fork in the road and choose differently. Opportunity cost, how do I really know what it is?

6. I definitely agree. I believe more strongly that it should be taught in high schools than at any other educational level. In high school people basically decide what their entire life will consist of. I would love to see students in high school run a model of what their gross income over life would average out to be in two situations. One, if they decided to go to college and one if they did not go to college, I bet that we would have many more students attending college that we do today.

7. I guess they would be intertwined. Management science and applied decision science overlap in many areas I assume.

8. No, management science does not make decisions. It provides tools, which result in some sort of data that will assist a decision maker in making a decision.

9. I think that the most important reason, again, is computers. They are more readily accessible and are much more inexpensive than in previous time periods.