Heuristics, Biases & Alt. Solutions

The following are the three types of Judgment Heuristics:

- availability heuristics
- representative heuristics
- affect heuristics

A heuristic is a simplified model used to speed up decision making. Heuristics may not always produce the optimal answer, but they generally save time and therefore cost (Bazerman, 2006).

The availability heuristic is based upon convenience. The simplest heuristic to use is based upon available memory (Tversky & Kahnemann, 1973). What people remember will often guide their decision. Anyone who has touched a hot stove will remember to avoid repeating the experience in the future. This is true because of the biases of the following (Tversky & Kahnemann, 1973):

- ease of recall
- memory structure
- presumed associations

These three biases allow decisions to be made quickly with satisfactory results almost always. Errors occur in using the availability heuristic when memory is hazy or memory structure is flawed and when presumed associations are erroneously based. A predisposition toward perceived views of liberty, equality, community, and efficiency will also influence judgment (O'Toole, 1993). While the heuristic is the system used to make a decision, perception of what society should be sets the context in which these decisions are made.

The representative heuristic is based upon perceived similarities with previously formed judgments (Nisbett & Ross, 1980). People generally classify others by how much they resemble, by behavior or appearance, other people previously stereotyped (Bazerman, 2006). Managers often base decisions on reference points that are clouded by associations (O'Toole, 1993; Bazerman, 2006). Typical biases in representative heuristics are the following (Bazerman, 2006):

- insensitivity to base rates
- insensitivity of sample size
- misconception of chance
- regression of the mean
- conjunction fallacy

The key to avoiding mistakes based on using the representative heuristic is to examine all cases individually and to more carefully evaluate assumed similarities, which may be minor at best.

The affect heuristic is often based on emotions (Kahnemann, 2003). Emotion-based decisions are usually not conscious but are precognitive in nature (Slovic, Finucane, Peters, & MacGregor, 2002). Distractions and time constraints often are the cause of the affect heuristic used in decision making (Gilbert, 2002; Hsee, 1998). Common biases associated with the affect heuristic include the following (Bazerman, 2006):

- anchoring
- conjunctive and disjunctive events
- overconfidence
- confirmation trap
- hindsight and the curse of knowledge

Overcoming these biases requires taking the time to think through the decision-making process, ignoring purely emotion-based reactions, and being aware of the biases associated with this type of heuristic. Most of the preferences associated with the desire for liberty, equality, community, and efficiency (O'Toole, 1993) are emotion-based affect heuristics.

References

- Bazerman, M. H. (2006). Judgment in decision making (6th ed.). Danvers, MA: Wiley.
- Gilbert, D. T. (2002). Inferential correction. In T. Gilovich, D. Griffin, & D. Kahnemann (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 167–184). Cambridge, UK: Cambridge University Press.
- Hsee, C. K. (1998). Less is better: When low value options are judged more highly than high-valued options. *Journal of Behavioral Decision Making II*, 11, 107–121.
- Kahnemann, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist* 58(9), 697–720.
- Nisbett, R. E., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice Hall.
- O'Toole, J. (1993). *The executives compass: business and the good society*. New York: Oxford University Press.
- Slovic, P., Finucane, M., Peters, E., & MacGregor, D. G. (2002). The affect heuristic. In T. Gilovich, D. Griffin, & D. Kahnemann (Eds.), *Heuristics and biases. The physiology of intuitive judgment*. Cambridge, UK: Cambridge University Press.
- Tversky, A., & Kahnemann, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, *5*, 207–232.