Question 1: What is Expected Utility Theory?

Answer 1:

Classical expected utility theory was not intended to describe actual human behavior. Expected utility theory is, instead, a normative theory that suggests how you will likely behave if you follow the requirements of rational decision making. What does that mean to you? It means that there are some guidelines you could use when making a decision and when you are trying to understand how other people make decisions.

Examine these principles by using everyday examples of rational decision making in action:

1. You are shopping for an automobile. You have three children so it must be large enough for the entire family. Even if you saw a small car you liked, it would not be practical. Ordering of alternatives says that you will compare alternatives such as large and small; that auto size will be very high in the order of your alternatives; and that you will not consider a more attractive small car.
2. A rational, reasonable person will never make a decision that is dominated by other strategies.
3. When faced with a decision between two or more items; if all the items have some common characteristic such as convenience, price, or color, that common characteristic is cancelled out. If you love three cars and they are all red, then you will have to base your decision on which one to buy on something other than color, because they all have the same color, thus, negating that characteristic as a deciding variable.
4. An example of transitivity would be as follows: You and your friends go out to eat together after work. You all like hamburgers better than pizza, so, even though there is an Italian restaurant closer, you will drive past it to find hamburgers.
5. Continuity says that you would prefer to risk making a choice between an excellent outcome to your decision or a horrible outcome, rather than having a guaranteed outcome that was neither excellent nor horrible but somewhere in between.
6. The rule of invariance suggests that you would not be affected by the way your options are presented to you.

It is important to remember that expected utility theory has been altered and extended by later scholars. Thus, even though expected utility theory is often discussed as a monolithic theory of rational decision making, it is more aptly
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Described as a family of theoretical suppositions.

**Question 2:** Am I a rational decision maker? How do I know? Is it important?

**Answer 2:**

To be truly considered a rational decision maker, you would need to select the decision that would give you the best results after having made the decision. To know if you have made a rational decision can take time. You might not know right away if you made the best choice. It is also possible that you believe, at first, that you have made the right decision, only to discover weeks later that not only it was not the best decision, but worse, it was the wrong decision.

Why would you make an irrational decision? If you did, it would probably only be because you did not realize it was irrational at the time you made the decision. You might have made an irrational decision because:

- You assumed certain things to be true that were not true, or assumed certain things to be false that were not false. (The product warranty was only 60 days, not the one year that you expected.)

- You might not have had adequate, complete or accurate information upon which to base your decision. (You had to choose between a concert and a sports event to attend with your friends, but you didn’t realize that the tickets are sold out for the concert.)

- Your perception could have been highly selective (I don’t like that color of blue on a car; that restaurant always puts too much salt on their food)

- You did not know everything that would happen to you after making each decision.

Is it important to be a rational decision maker? That depends on numerous factors such as how rationality and logic are culturally defined, the importance of the decision, and the context in which the choice was made. What to eat for lunch probably does not deserve extensive research and study to avoid undesirable consequences. Choosing the right education and career for your future happiness, however, is likely to yield more significant consequences and deserves more time and attention than the former.
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**Question 3:** Why are models based on rationality problematic?

**Answer 3:**

As sensible as the principles of rational based models sound (in particular, expected utility theory); there are many cases in which decision makers violate those principles. In fact, decisions that cannot be defended as logical may nevertheless be rational if, over the long run, it provides a quick and easy approximation to normative strategies that maximize utility. Simply put, the pillars of cancellation, transitivity, invariance, and dominance were not consistently supported by continuing research. In fact, actors made seemingly "illogical" choices that could still easily be seen as rational acts. As a result, expected utility theory operated better as a normative theory, "how people might act" than as a descriptive theory, "how people do act."

**Question 4:** How can the "endowment effect" influence my decisions?

**Answer 4:**

The endowment effect is a result of loss aversion in which the value of a good increases when it becomes part of a person’s endowment. In other words, you are likely to name a selling price for something you own that is higher than what you, yourself, would be willing to pay for the same item. Richard Thaler and his colleagues suggest that the reason for this effect is that losses are felt more strongly than equivalent gains.

**Question 5:** What are noncompensatory strategies?

**Answer 5:**

When people are confronted with complex choices among a number of alternatives, they typically use noncompensatory strategies. In contrast to compensatory strategies, these strategies do not allow trade-offs. Four well-known examples of noncompensatory strategies are the conjunctive rule, the disjunctive rule, the lexicographic strategy, and elimination-by-aspects.

- **Conjunctive rule:** Decision makers using the conjunctive rule eliminate any alternatives that fall outside certain predefined boundaries. In other words, it is an example of satisficing, not optimizing.

- **Disjunctive rule:** According to the disjunctive rule, each alternative is evaluated in terms of its best attribute, regardless of how poor other
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aspects of the alternative may be.

- **Lexicographic strategy:** A decision maker using this strategy begins by identifying the most important dimension for comparison and choosing the most desirable alternative or alternatives on this dimension. If more than one alternative remains, the alternatives are compared on the next most important dimension, and then next, and so on until only alternative remains.

- **Elimination-by-aspects:** The elimination-by-aspects strategy is essentially a probabilistic lexicographic strategy. Each aspect of comparison is selected with a probability proportional to its importance. The alternatives are first compared with respect to a selected aspect, inferior alternatives are then eliminated, another aspect of comparison is selected, additional alternatives are eliminated, and so forth, until only one alternative remains within the field of choice.

**Question 6:** What is counterfactual reasoning?

**Answer 6:**

As prospect theory makes clear, decision makers evaluate their alternatives relative to a reference point. The status quo is probably the most common reference point, but in some cases, people compare the quality of their decisions to what might have happened if they had made a different choice. This comparison of imaginary outcomes is sometimes referred to as counterfactual reasoning because it relies on hypothetical events.

**Question 7:** What is satisficing?

**Answer 7:**

Actually, one the earliest alternatives to expected utility theory was Herbert Simon's notion of satisficing. Simon contended that people "satisfice" rather than optimize when they make decisions. To satisfice is to choose a path that satisfies your most important needs, even though the choice may not be ideal or optimal.