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Rational Model of Decision Making

Francis C. Uzonwanne
College of Management and Social Science,
Department of Psychology, Redeemer's
University, Ede, Osun State, Nigeria

Synonyms

[Decision-making models](#); [Leadership decision making](#); [Rational decisions](#); [Rational planning model](#)

Definition

Being the opposite of intuitive decision making, rational model of decision making is a model where individuals use facts and information, analysis, and a step-by-step procedure to come to a decision. The rational model of decision making is a more advanced type of decision-making model.

Introduction

Decision making is what hominids do everyday. From the moment humans open their eyes in the morning, they start making decisions about whether to snooze the alarm or just go ahead and get up. All through the day, decisions are made

continuously until the decision is made to close their eyes again. Decision making therefore is what makes the human element alive and functional while deciding the world around them and ultimately individual personal fates. Decision making almost always involves choices. In a world full of choices, the individual personality is constantly arraigned with options which can be as basic as what to wear out for the day or what to have for dinner to decisions about what policies would have the best intended outcome toward national economic progress. The business dictionary defines decision making as “the thought process of selecting a logical choice from the available options.” (Decision Making [n.d.](#)). styles are therefore the learned, habitual response pattern exhibited by an individual, when confronted by a decision situation (Scott and Bruce [1995](#)). Scott and Bruce ([1995](#)) proposed four different types of decision-making models: (a) rational decision-making style, which is characterized by a thorough research for and logical evaluation of alternatives; (b) intuitive decision-making style, which is characterized by a reliance on hunches; (c) dependent decision-making style, which is characterized by a search for advice and direction from others; and (d) avoidant decision-making style, which is characterized by attempts to avoid making decisions altogether (Scott and Bruce [1995](#)). Rational decision making is defined and discussed along with characteristic components like intuitive decision making. A model of rational decision making is provided, and some

suppositions about rational decision making are also discussed.

What Is Rational Decision Making?

While decision-making models like the intuitive and dependent or even the avoidant decision-making style may be seen as basic and primary in the sense that these are used more often on a daily basis and rely mostly on predisposition, the rational model of decision making is a more advanced type of decision-making model. Scott and Bruce (1995) lay particular emphasis on the characteristics of thorough research and logical evaluation as it concerns rational decision making. Most people will not go into thorough research concerning what route to take to work on a busy day in a crowded city or on what choice to make out of the several options on a dinner menu; intuition would probably take care of that. Intuition, most often, does not require reasoning or logic. Instincts are the basic driving factor for the use of intuition in this model. Logical evaluation involves the process of gathering facts and utilizing logic to organize and analyze these facts in such a way that they aid accurate or near accurate decision making. According to Oliveira (2007), rationality has been defined as the “compatibility between choice and value.” Rational behavior therefore seeks to heighten the significance of the consequences focusing on the process of choosing rather than emphasizing the selected alternative (Oliveira 2007). Rational decision making is therefore the model of decision making that is most likely to apply to higher-level decision making of a more serious nature. These are the sort of decisions that managers and higher-level leaders are faced with in their leadership roles. Rational decision making as defined in a business dictionary is “a method for systematically selecting among possible choices that is based on reason and facts. In a rational decision making process, a business manager will often employ a series of analytical steps to review relevant facts, observations and possible outcomes before choosing a particular course of action.” In rational decision-making models, decision makers

evaluate a number of possible substitutions from different possible situations before selecting a choice (Oliveira 2007). These possible situations or scenarios are weighed by probabilities, and decision makers can determine the expected end result for each choice (Oliveira 2007). The final choice that the decision maker chooses would be the one offering the best-predictable consequence and with the highest prospects of consequence (Oliveira 2007).

Rational Choice Theory

Rational choice theory is a context for understanding and properly modeling social and economic behavior (Blume and Easley 2008). The basic idea of rational choice theory is that cumulative social behavior results from the behavior of individual actors, each of whom is making their individual decisions (Blume and Easley 2008; Sen 2008). The theory therefore focuses on the determinants of the individual choices (Blume and Easley 2008; Sen 2008). Rational choice theory then supposes that an individual has preferences among the available choice alternatives that allow them to state which possibility they prefer (Blume and Easley 2008; Sen 2008). These preferences are also supposed to be complete (the person can always say which of two alternatives they consider preferable or that neither is preferred to the other) and transitive (if option A is preferred over option B and option B is preferred over option C, then A is preferred over C) (Blume and Easley 2008; Sen 2008). The rational agent is assumed to take account of available information, probabilities of events, and potential costs and benefits in determining preferences and to act consistently in choosing the self-determined best choice of action (Blume and Easley 2008; Sen 2008).

Rational Decision Making and Intuitive Decision Making

The rational style according to Russ et al. (1996) is “deliberate, analytical and logical; rational decision makers assess the long-term effects of their decisions and have a strong fact based task orientation to decision making” (p. 5). Rotter (1966) opined that the rational style seems related to initiation of a structure and an internal control

orientation. Kholi (1989) has posited that both initiation of a structure and a higher internal control orientation may be linked to higher performance. A most directly opposing decision-making model will be the intuitive decision-making model. Employing the intuitive style for making decisions on the other hand involves feeling orientation and is based on an internal ordering of the information leading to hunches (Russ et al. 1996). These intuitive decisions are made relatively quickly and with limited information and often changed if the intuition was in error (Russ et al. 1996). Russ et al. suggest, “Intuitive decision makers are likely to be more error-prone and inconsistent, which may lead to uncertainty and loss of confidence in the manager by superiors and subordinates” (p. 5). In a high-stake environment, this type of decision making may be quite risky. If the decision turns out to be error-prone, for instance, in an environment where financial stakes are high, the consequences may be rather costly. Rational decision making is therefore predominant where investor stakes and life stakes in general are high. Intuitive decisions are also made when there is a dearth of facts and information, when there is need to come up with an immediate solution to a problem, and also when the decisions to be made are challenging. Rational decision making on the other hand is often characterized by a precision-based process. This process involves gathering adequate material in terms of availability of information, value of the information, precision of the information, and reliability of the information. There is usually a need to ensure that the solution reached is fail proof. This is because a properly analyzed fact-based decision will typically result in a positive and effective solution. There are setbacks to this process however; this materializes in terms of human inability to gather adequate materials of information. It is not unusual for the decision maker to back down or settle for the amount of material information at their disposal.

Rational Decision Making and Demographic Variables, Age and Gender

Rational decision making has been studied in terms of demographic variables. Two of the most

commonly studied demographic variables are age and gender. According to Uzonwanne (2016), “through multiple comparisons examining differences in decision making by age and gender, analysis showed that almost the same number of males and females used the rational decision-making models.” Though the mean scores were generally high, comparisons show that executives who were 60 years and older used the rational decision-making model more than any other age group; age may therefore be a factor for the use of rational decision-making model (Uzonwanne 2016). Löckenhoff (2011), in a review of the behavioral literature, reveals that older adults are often more willing to wait over short-time delays for a larger amount of money compared to a smaller amount of money available immediately. Neuroscience research suggests that the accumulation of experience with delayed rewards over the life span may serve to tune activity in regions like the ventral striatum (Samanez-Larkin 2013). In two recent datasets, reported by Samanez-Larkin (2013), the strong sensitivity to immediately available rewards in the striatum in young adulthood is reduced in older age as older adults show similar activity for rewards available now or later (Eppinger et al. 2012; Samanez-Larkin et al. 2011). One interpretation is that it is as if the older folks know that \$20 is going to be just as good in 2 weeks as it is today and those in their twenties just haven’t had the opportunity to realize interest rates over decades and appreciate the long-term rewards of waiting (Samanez-Larkin 2013). This may be a situation where attempts should be made to try and get those impatient young people to make decisions more like the older folks (Samanez-Larkin 2013).

Suppositions of Rational Decision Making

Suppositions of rational decision making assume that people naturally want to make the best choices everytime there is an investment involved or something of value is at stake. For instance, people shop for a product of their desire, and when such a product is found, the individual will mostly carry out some sort of information gathering, so as to ensure that they are actually getting their investment’s worth. This is known as rational choice

(Scott 2000). According to Scott (2000), it has been assumed that people are motivated by money and by the possibility of making a profit, and this has allowed it to construct formal, and often predictive, models of human behavior. One of these models of human behavior is the rational choice theory. The rational choice theory was built around the idea that all action is fundamentally “rational” in character and that people calculate the likely costs and benefits of any action before deciding what to do (Scott 2000). Another related supposition is that an individual is cognitively capable of searching for and gathering useful facts that aid their final choice. Such information and facts are based on success criteria pertinent to the situation or the individual. The individual is able to create the time and also the resources required for rational decision making in order to achieve an effective and functional solution.

A Model of Rational Decision Making

Rational decision making may involve several different processes. Regardless of the various steps in each process, rational decision processes have similarities that mostly result in effective solutions. A model of rational decision making is presented in the following steps:

1. Identifying the problem that requires a solution
2. Identifying the solution scenario
3. Carrying out a gap analysis
4. Gathering facts, options, and alternatives
5. Analyzing option outcomes
6. Selecting best possible options
7. Implementing decision for solution and evaluate final outcome

Identifying the Problem that Requires a Solution

It is important in any problematic situation to properly clarify what the problem is that requires a distinct decision-making process for a solution. If the problem is not properly understood, the decision maker may engage in doing too much or too little to solve the problem. As a president-elect, the Obama-Biden team created an elaborate

document on “change.gov” (The Obama-Biden Plan) highlighting a detailed description of the problems America faced at the time. It was not enough to say that America was in a recession; the beginning of a rational solution was to understand what aspects of the American economy defined the recession. A manager of a restaurant in financial distress must be able to accurately define the nature and source of the problem. If the nature and source of the problem are not accurately defined or identified, the manager stands a risk of throwing solution options at a situation that is working well or doing little to resolve the actual problem.

Identifying the Solution Scenario

Equally important in the rational decision-making process is defining what a solution scenario will look like at the end of the process. What characteristics will determine that a solution has been found? In other words, what will success look like? What are the identifiers that will be observed to characterize success? For instance, if XYZ are in place, will that mean success? For some managers, if the organization’s financial returns are enough to pay the bills, remunerate the employees, and also have enough profit to service investor portfolios, then that is a picture of success. For some other managers, that is a problem that requires rational decision making for solution. Indices and marginal qualifiers are some determinants of success for many. If the numbers fall beyond the preset indices or qualifiers, then a problem is identified. Success will simply mean that the profit levels have exceeded the preset indices and qualifiers by a preset minimum ratio. Understanding what success will look like is inevitable for accurate gap analysis.

Carrying Out a Gap Analysis

A gap analysis is simply defining and understanding the gap between the problem and the solution. What is it going to take, for instance, for the organization to go from the identified problem to the identified solution? The business dictionary defines gap analysis as “a technique that businesses use to determine what steps need to be taken in order to move from its current state to its desired, future state.” In other words, now that

the problem has been accurately defined and an accurate picture of success has been determined, the next step will be to determine what it takes to go from problem to solution. Again, the Obama-Biden team was able to clearly document the steps that they were going to take to bring America back to where they had identified as success for the nation. This is an aspect of rational decision making that should involve other people as think tanks. In this regard, all the possible steps involved with the gap analysis will be mostly identified. If the solution will require project management for solution, the steps identified in the gap analysis will become the specific goals and specific success criteria that will be achieved toward success. During think tank sessions, the manager or management is able to accurately analyze where the organization is and where they want to be but, most particularly, how to get there.

Gathering Facts, Options, and Alternatives

The next phase in this rational decision-making model is to gather facts and options surrounding the steps that have been identified in the gap analysis. To be properly informed is at the center of effective rational decision making. With the information gathered, considerations will be made on how the steps that will be taken will affect the stakeholders involved, positively or negatively. Somebody somewhere may have researched the steps to be taken or may have even taken similar steps. The facts from the outcomes may prove very useful in the eventual decisions made at that point.

Analyzing Option Outcomes

With the facts in hand, the consequences or outcomes of the various options identified should be analyzed to determine the most effective and functional option. Adequate time should be allotted for studying and identifying the possible outcomes of each of the options to be studied. An integral aspect of the study will be to weigh in on how the different outcomes will impact stakeholders involved. There may be outcomes that do not favor some stakeholders while the same outcomes favor others. Situations like these can be challenging to resolve. This is where a think tank team may

be useful again. The goal is to accurately predict the outcome of each of the options selected, and from these predictions, a final option is selected.

Implementing Decision for Solution and Evaluating Final Outcome

After the best option has been selected, the decision has to be implemented accurately as decided for effective and functional solution. This phase of the model may sound redundant, but it is an imperative aspect of rational decision making. Securing a hitch-free implementation of the decision made provides a successful closure to the process. After the decision or option has been implemented, it is also important to evaluate the final outcome based on the solution scenario that was created in the second step. Has success been achieved? If it is not looking like success, then there is a need to go back to the gap analysis phase and reevaluate the steps decided for the solution process.

Conclusion

Rational decision making has been defined as a more advanced type of decision-making model, laying emphasis on the characteristics of thorough research and logical evaluation, selecting among possible choices based on reason and facts. The basic idea of rational choice theory which is premised on the assumption that cumulative social behavior results from the behavior of individual actors, each of whom is making their individual decisions, is highlighted. Studies have shown that older adults typically tend to lean toward rational decision making more than younger ones. There were no apparent gender-based differences however. Despite the time and resources involved, comparisons show that rational decision making offers more effective and functional solutions than intuitive decision making. Intuitive decision making is identified as a most directly opposing decision-making model in comparison to rational decision making. Decision-making models in general should be an integral aspect of training focus for all executives, leaders, and managers in the governmental and in the entrepreneurial

worlds. Rational decision making should be extensively included in leadership training, seminars, and conferences, specifically those that border around management and sustainable development within organizations and governments. Younger managers and leaders should be particularly identified as recipients of rational decision making based on findings. Suppositions and assumptions of the rational making model are identified, while a decision-making model process is elaborated. Rational decision making is positioned as the most promising, effective, and functional decision-making process for leaders, managers, and individuals, especially when stakeholders, investments, and high stakes are involved.

Cross-References

- [Ethics and Social Policy](#)
- [Governance and Leadership](#)
- [Leadership, Ethics and Decision-Making](#)
- [Psychology of Leadership](#)

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