

RATIONAL DECISION-MAKING: KEPNER AND TREGOE'S MODEL.

Checklist 015

» INTRODUCTION

Decision-making is one of the most crucial challenges for managers. A global survey of CEOs cited by John Adair found that the 'ability to take decisions' was rated as the most important of 25 attributes required by senior managers. The way in which decisions are made will be influenced by an organisation's structure, procedures and policies, and more subtly by its culture and politics. It should also depend on the nature of the decision, for example the levels of uncertainty involved, whether a creative or technical approach is needed, and how many people are involved.

One well-known method for making decisions on specific issues was developed by Charles Kepner and Benjamin Tregoe in their book "The Rational Manager" published in 1965. Their research was based on their observations at RAND Corporation of how air force managers made decisions. They realised that while few were able to articulate their decision-making process, those who made better decisions could be seen to follow more logical processes.

Kepner and Tregoe's rational model can be an effective technique for determining a course of action and securing commitment to it. It is most suitable where a straightforward and technical approach is needed, rather than where creative thought is desirable. The model assumes that you can access all of the information you will need to make the decision. It requires that:

- › a single goal and clear options can be defined
- › preferences are unambiguous and constant
- › there is a high level of certainty about outcomes.

If used in the right circumstances, this model has several advantages over processes based on intuition. The rational model:

- › takes a thorough and systematic approach
- › aims to be impartial and transparent
- › provides evidence and support for how the decision was made
- › relies on effective information-gathering, rather than preconceived ideas
- › prevents managers from being distracted by their emotional responses

There can, however, be drawbacks, because the method:

can be very time-consuming and resource-intensive, especially in fast-moving situations
relies heavily on information which may prove difficult to gather
requires fairly strict adherence if the outcome is to be a rational decision
leaves little room for intuition or lessons learned from past experience

is a 'top-down' model which assumes that the decision-maker has the authority to make the decision tends to ignore the political consequences of decisions unless these can be quantified.

» DEFINITION

Decision making is the process of choosing between alternative courses of action. It may take place at an individual or organisational level. The rational decision making model is a specific technique for decision making which aims to reach a conclusion based on the decision maker's goals and an objective assessment of the merits of all available options.

» ACTION CHECKLIST

1. Define the decision to be made

Be clear on the exact decision that is to be made. This first step helps to clarify thinking, aids communications and provides a record for the future. It may lead to the discovery that assumptions have been made previously which have muddied the water. The aim is to arrive at a single goal or destination for the decision-making process. It should also be clear what is not being decided.

For example: a decision needs to be made regarding which computer to buy, but not which operating system it should have.

2. Establish the objectives

This stage involves consultation and information seeking. Aim to identify all stakeholders who have an interest in the matter. Stakeholder preferences can be converted into objectives, which break the goal down into specific and measurable targets. At this stage, it is not necessary to be concerned if there are apparent incompatibilities between the objectives.

So, in the case of deciding which computer to buy, the objectives might be: an affordable portable computer with a standard office software package, mobile internet access, support for videoconferencing and sufficient memory and document storage space for the intended use.

3. Classify the objectives

Given the objectives above, you would expect a rational process to favour a computer which falls within budget, with standard software, mobile internet access, an inbuilt webcam and microphone and sufficient hard drive space and RAM. However, it might be that this is not achievable in a single product.

Differentiate between the essential requirements (the "musts") and the desirable (the "wants"). The fundamental difference between musts and wants is that if one of the decision alternatives does not meet a "must", then that option should be rejected. Failure to meet a "want" should not mean automatic rejection.

Once options which fail to meet the "musts" have been eliminated, the provisional decision will be based on how well the remaining options fulfil your "wants". Kepner and Tregoe illustrate the distinction by stating that "the "musts" decide who gets to play, but the "wants" decide who wins".

For example:

Musts: Maximum price, minimum RAM, minimum hard drive capacity, minimum screen size, software packages included as standard

Wants: Mobile internet, larger screen size, inbuilt webcam, inbuilt microphone

4. Define the "musts" – exclude unviable options

To be a valid "must", an objective should have a quantitative measure or an objective standard. Assign quantitative measures to the "musts".

For example: *maximum price £500, minimum RAM 6GB (or upgradable to 6GB RAM), minimum 500MB hard drive, minimum screen size of 10 inches.*

This means that if an option presented for purchase either costs more than £500, or has less than 6GB RAM, is not upgradable to 6GB RAM, has a hard drive of less than 500MB or a screen smaller than 10 inches, it should be rejected.

5. Define the "wants" – add weights to prioritise objectives

Assess the importance of the "wants" for importance and assign a numerical weighting out of 10 (10 for the most important, less than 10 for something less important). For example if mobile internet access is the most important feature after the "musts", then it would be weighted 10. On the other hand it might be decided that an inbuilt webcam is not a very high priority, since a freestanding camera can easily be attached, and so that would have a less significant weighting.

Mobile internet	weight = 10
Screen size	weight = 9
Inbuilt microphone	weight = 8
Inbuilt webcam	weight = 6

6. Generate the alternatives

Once your objectives have been defined, the next step is to gather relevant information on potential options. In this case sources may include IT suppliers' websites, online price comparison sites, the trade press and knowledgeable colleagues.

7. Apply the alternatives to the requirements

The relevant details of each potential product should be recorded against the objectives.

8. Test the alternatives against the "musts"

Reject those options that do not meet the "musts". Ask yourself whether any of the options fail to match the "musts" relating to price, storage or processor. If the answer is yes, it is logical to reject that option.

If either you do not wish, or something else prevents, rejection of an alternative which has failed on "musts", it is possible that the "musts" are proving unsatisfactory. Return to Step 3 to re-classify your objectives. You may decide at this point that some of your "musts" are in fact only "wants", and you will then need to change the weightings accordingly.

9. Score the remaining alternatives against the "wants"

Score the remaining options against each of the "wants" in turn. The alternative that meets each "want" best should be scored highest and others allocated proportionate scores. If an option includes a 14 inch screen, it may score 10; if the screen is smaller it may only score 8. A microphone with poor sound quality will not score as highly as one with good sound quality. If an objective is not met, the score should be 0.

For example:

Mobile internet	score = 9
Screen size	score = 8
Inbuilt microphone	score = 6
No inbuilt webcam	score = 0

10. Multiply the weights by the scores

In order to rank the attractiveness of the different options, the weights should be multiplied by the scores for each option and the results added together.

For example, using the information from Steps 5-9 above:

Screen size	$9 \times 8 = 71$
Mobile internet	$10 \times 9 = 90$
Inbuilt microphone	$8 \times 6 = 56$
Inbuilt webcam	$6 \times 0 = 0$
TOTAL	= 217

11. Come to a provisional decision

The totals will enable you to come to a provisional decision. Once the totals are compared it is usually possible to make statements such as:

- › alternative A is clearly the best
- › alternatives D and E are not worth considering
- › there is little to choose between alternatives B and C.

12. Reach a final decision

The analysis will provide a sound framework for a clear examination of the options although it will not automatically lead to a decision, unless all alternatives but one fail to satisfy the "musts". Where several alternatives have similar totals, it is particularly important to re-examine the weights and scores and the evidence on which they have been based. It is not always necessary to use the entire process described above, especially for simple binary (yes/no) decisions. However, each element in the process can be used separately to improve the efficiency of a decision. Some initial assumptions will have been made in the decision process. Make sure you review all the assumptions made, before proceeding to the analysis. In our computer example, a technological assumption was made at the beginning that a minimum of 6GB RAM was needed. Once an assumption is made, it will condition our choices so we need to be sure that it is correct. Text.



POTENTIAL PITFALLS

Managers should avoid:

- › trying to use the process for the wrong kind of decision
- › jumping too quickly to an "apparently" obvious decision
- › being influenced by preconceived notions
- › cutting corners, especially if the decision has far-reaching implications
- › allowing personal preferences to cloud the process
- › taking the provisional decision as final.

BOOKS

Decisive: how to make better choices in life and work, Chip Heath and Dan Heath
London: Random House, 2013

John Adair's 100 greatest ideas for smart decision making, John Adair
Chichester: Capstone, 2011

Decide & deliver: 5 steps to breakthrough performance in your organization, Marcia W Blenko, Michael C Mankins, Michael C and Paul Rogers
Boston Mass: Harvard Business Review Press, 2010

Making better business decisions: understanding and improving critical thinking and problem solving skills, by Steve W Williams Thousand Oaks Calif: Sage, 2006

Problem solving and decision making: hard soft and creative approaches, 2nd ed, Michael J Hicks
London: Thomson Learning, 2004

The new rational manager,

This is a selection of books available for loan to members from CMI's library. More information at: www.managers.org.uk/library

JOURNAL ARTICLES

Decision making: it's not what you think, Henry Mintzberg and Frances Westley
MIT Sloan Management Review. Spring 2001, vol 42 no 3, pp 89-93

RELATED CHECKLISTS

012 Solving problems

INTERNET RESOURCES

Boundless.com <https://www.boundless.com/management/textbooks/boundless-management-textbook/decision-making-10/rational-and-nonrational-decision-making-76/rational-decision-making-369-8376/>
An outline of the Kepner-Tregoe model, including a flowchart.

This checklist has relevance for the following standards:

- › Unit EC5 Use information to take effective decisions



MORE INFORMATION

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