

Critical Decision-Making Techniques

Critical thinking is the mental process that individuals go through to reach an answer or a conclusion. The critical thinking process can be a valuable tool in problem-solving and decision-making. Here we look at some of the techniques involved.



Critical thinking is essentially the process of taking information gathered through day-to-day activities such as observation, reflection and reasoning, and, using personal experience and beliefs, analysing and applying that information to a given situation. Critical thinking tends to be used in conjunction with creative thinking, where the ideas and processes themselves are generated. Critical thinking can then be used to interpret, assess and evaluate these ideas and processes.

Critical decision-making characteristics

When faced with a difficult or complicated decision, there are a number of characteristics found in those who approach the process critically.

- **Truth seeking.** The process of critical decision-making requires a desire for the best possible knowledge or outcome, even if, as a result, personal preconceptions, beliefs or self-interests are undermined.
- **Open-minded.** Successful critical decision-makers are tolerant to divergent views, and are aware of possible bias in their thought process.
- **Analytical.** The decision-making process is necessarily analytical. The application of reason and evidence, remaining alert to problematic situations and being able to anticipate potential consequences are all important.
- **Systematic.** Organisation, focus and diligence when approaching decisions of all levels of complexity are beneficial to the critical decision-maker.
- **Self-Confidence.** When using critical thinking as a decision-making tool, the user must have a high level of trust in their personal reasoning.

- **Inquisitive.** A natural curiosity and eagerness to acquire knowledge and seek explanations will help to ensure the decision is made using as much relevant information as can be found.

In addition to these characteristics, critical decision-making requires a certain level of cognitive maturity. The user will be aware of the importance of prudence in making, suspending, or revising their original judgment, and will have an awareness that multiple solutions can be acceptable.

Critical decision-making techniques

As well as developing the characteristics above, there are a number of techniques which will aid in critical decision-making.

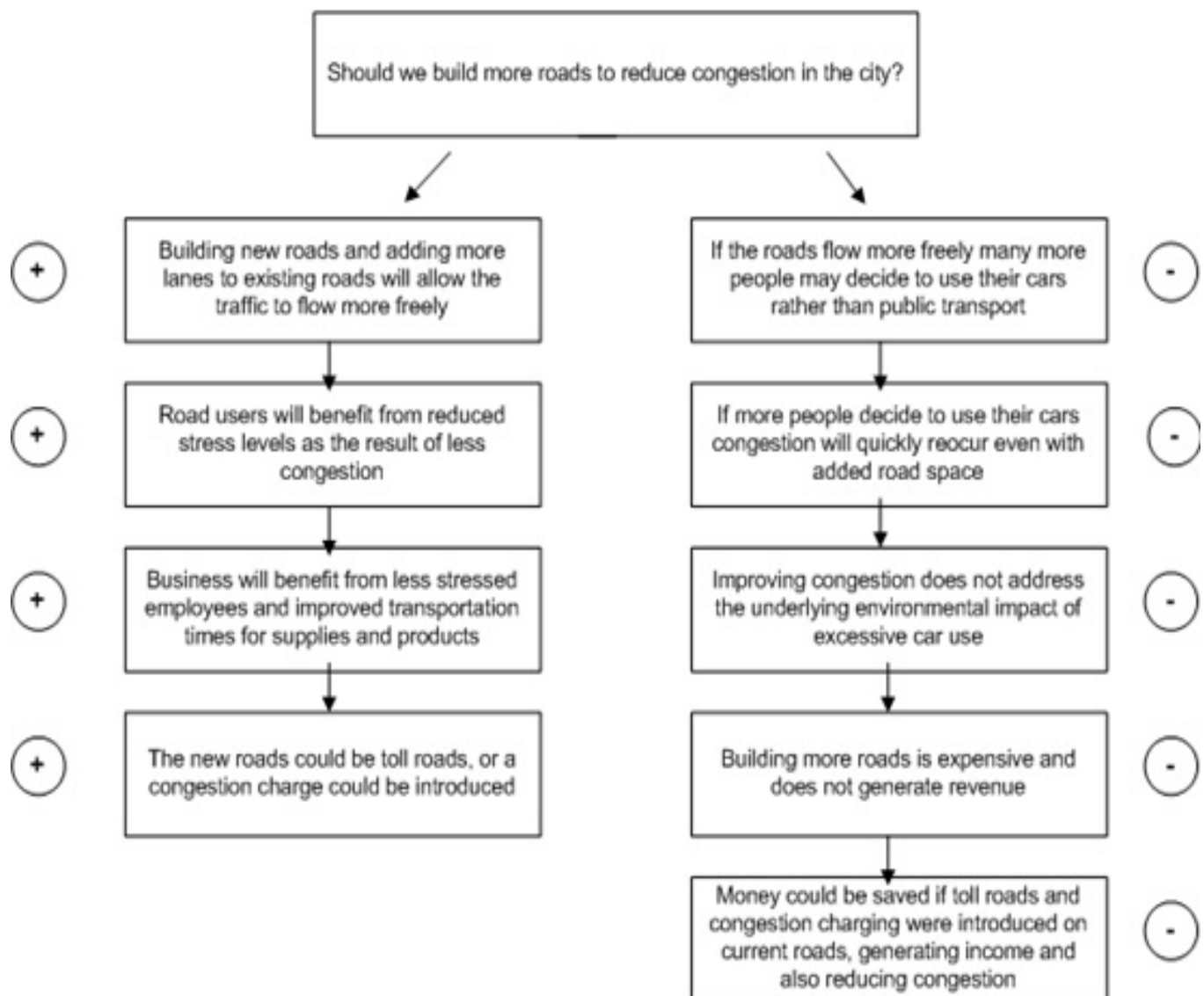
Argument mapping

Argument mapping is, roughly, making a picture of reasoning. Typically, argument maps are box and arrow diagrams, a bit like flowcharts. Belonging to the same family as mind mapping, argument mapping focuses specifically on the structure of a reason or argument. Argument mapping helps the user to come to a decision by weighing up the evidence for and against specifics, as well as providing a visual picture of where an argument or decision may fail due to an assumption being made.

Positive and negative arguments for potential alternative decisions can then be identified.

A simple decision-making example might look like this.

Should we build more roads in order to reduce traffic congestion in the city?



More information on the uses of argument maps and how to create them can be found using these links.

<http://philosophy.hku.hk/think/arg/complex.php> 17/09/08

<https://www.rationaleonline.com/docs/en/tutorials#tvv5fw> 29/10/18

Critical decision-making model

The critical decision-making model is a quick and easy tool that can be used by anyone who needs to make a decision. First briefly state the problem or decision to be made. Then identify at least three possible options or courses of action. As a simple example:

Decision to be made: Should we employ more staff to answer the phones?

Possible courses of action/options:

- Employ more staff.
- Install an automated system.
- Accept that some people may have to be kept on hold until the existing staff can answer the phone.

- Add a frequently asked questions section to the website to reduce the volume of similar calls.

Each course or action/option can then be evaluated to determine the best possible outcome. An argument map or a simple pros and cons list will help here.

Fact or fiction

Simply write down a list of reasons supporting each possible option for the decision that needs to be made. Then write beside each one whether it is fact or fiction. Only determine something to be fact if the information can be backed up by accepted evidence such as statistics or case studies. For example:

Should we build more roads in order to reduce traffic congestion in the city?

The available options and the accompanying reasons might include:

Build more roads

- more roads will reduce the amount of congestions
- more roads will keep traffic moving faster
- road users are less stressed when more roads are built

Develop public transport instead

- improved public transport will reduce congestion
- improved public transport is better for the environment
- more people will use public transport if the service is more frequent

Some or all of these options may well be fact, however it should be checked that there is available evidence before stating this categorically. The purpose of this exercise is to show where assumptions have been made which may result in making the wrong decision.