

Mathematics and Computing: Level 2 M253 Team working in distributed environments



M253 Resource Sheet

he Open University

Making decisions: team rules

1 Overview

In most aspects of life, making decisions is the most important thing we do. Yet it is rarely a skill in which we receive training. We are often so bombarded with both information and with demands to choose amongst many alternatives that we are rarely given time to think about the process of preparing to make a decision. Thus we make "snap" decisions, often based on feelings and moods of the moment rather than careful consideration. This Resource Sheet sets out some ideas and exercises for helping you develop your decision-making capabilities.

2 Introduction

Many people spend a good deal of time trying to avoid making decisions on the mistaken assumption that, if we do not think about them, problems will 'go away' by themselves.

[To say] "Do not decide, but leave the question open," is itself a \ldots decision \ldots

William James (1896)

Section 3 below describes how to approach making a decision; Section 4 gives four models for making group decisions.

3 Preparing to make a decision

Under pressure, it may be necessary to make snap decisions. In a working environment, however, where the outcome of a decision must be made by a group of people, or even where it must be made by one person but affects others, it is important to *prepare* before reaching a decision. The following brief list sets out steps that we can and should reasonably take before making a *considered* decision. ('You' here can mean you individually, or you the group.)

- Set a deadline by which time you must have made a decision. It is easy to let things slip until events take over and you lose your ability to direct the outcome one way or another. Communicate the deadline to everyone involved, then stick to it.
- 2) Be sure you know what the problem is, and what you are being asked to decide about. One common pitfall is to mistake a symptom ('we are behind schedule') for the problem ('we did not plan very well'). As most doctors will agree, treating the symptom may give some relief, but it does not solve the underlying problem!

There are a number of techniques to help you to decide what the problem is. One is known as a cause-and-effect diagram. On a sheet of paper, the obvious symptom is listed on the right-hand edge of the page, and a line is drawn from it to the left-hand edge. Then things which might cause that effect are noted and drawn off the main line (in the form of a 'fishbone' structure). Figure 1 shows a simple cause-and-effect diagram to find the reasons for a symptom.

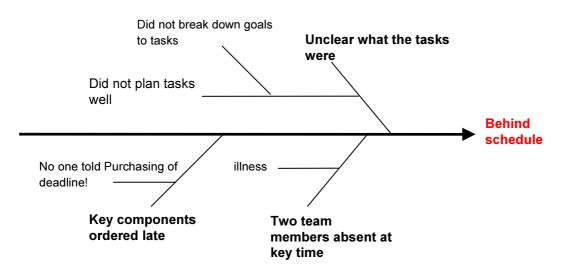


Figure 1 A cause-and-effect diagram to find the reasons for a project being behind schedule. While this shows quite specific reasons, it points to a general lack of proper planning. In this example, the symptom 'unclear what tasks were' was in turn caused by 'Did not plan tasks well', which in turn was caused by 'Did not break down goals to tasks'. A line is drawn from each cause to a more specific cause.

- 3) Determine what your options for solving the problem are.
- 4) Consider these options. Examine each option to determine its benefits and any problems it may cause (for example, an 'ideal' solution may take too long if you are under pressure and has to be discarded as a result). You may want to write down the options and then rank them according to their feasibility (whether they can be done easily or not) and their desirability.
- 5) Decide. When it is time to decide, you may find it helpful to draw up a simple chart of the 'for' and 'against' points of your decision: putting things down in black and white can help clarify your thinking and rank the importance of each 'for' or 'against' item. (See Figure 2 below.)

Going to university full time	Not going to university
In 7–10 years will achieve higher income	During study, no income and much expense! (debt!)
Satisfaction of establishing a career	Starting work now may not be so satisfying, but fewer worries as someone else will be in charge
Will learn more about my own potential	May lose interest in subject I choose to study or find I want to do something else; may be easier to change jobs than to change courses
Likely to enjoy the social life	Student social life may just add to debt! Work mates can provide a social life too.
Satisfaction of knowing I can study at this level	Can study part-time, e.g. with the Open University
Likely to meet people with similar interests	May not like the people I meet; at university we will be together for several years; at work I can move around if I do not like the people

Figure 2 A simple 'for' and 'against' table for deciding whether to go to university full time or start work (possibly combined with part-time study)

Exercise 1

Revisit a recent decision you, or your team, has made. Try to look back on it as though you were once again in the position of having to make it. Write down some brief answers to the following questions. What information did you have at the time? What information do you *now* think you should have had before deciding? What alternatives did you think you had at the time? Are there any additional alternatives you can think of *now* that you did not consider but wish you had? How did you evaluate these alternatives then, and how would you evaluate them if you had another chance to? What techniques (if any) did you use in determining what the problem was? Do you think they were effective?

Discussion

Everyone's answers to these questions will be unique.

To give an example for the purposes of discussion, I will revisit the scenario forming Example 2 on page 16 of the Course Guide (which I will also use in the discussion of Exercise 2 in this Resource Sheet): briefly this is about being asked by your supervisor to head a small project to draw up a standard scheme for naming computing files and for keeping them in a central file store. You find out that there are special requirements for secure file storage and for restricting the number of characters used in a file name. You will have to make decisions based not on certainties, but upon balancing competing requirements and needs.

Information I had consisted of naming 'rules' for the various computer platforms used in the company, any rules about storage and access (e.g. the need to restrict access and to whom). I wish I had had the technical knowledge of how security can be applied to different parts of a central file store. I thought of applying the most stringent sets of requirements to the naming and security conventions in use, and making everyone adhere to those. Another alternative was to leave things as they were. Now I think it might have been possible to develop a negotiated alternative amongst the different departments. In my early evaluation, I looked at the positive benefits of a standard naming convention and central store, and what would happen if things went on as they were. If I had considered a negotiated alternative, I would have had to carry out my evaluation at a more detailed level, for example looking at the costs and benefits of, say, keeping distributed stores but with a central backup store, or perhaps looked at how information is (or is not) shared between departments to determine what needed to be in a centrally accessible store and what did not. I used some simple lists to compare alternatives, and some very basic cost-benefit analysis techniques. If I were to do this again, I might have used some kind of weighted scale to rank more detailed possibilities to put before the different departments in an attempt to get a consensual agreement.

One of the best pieces of advice I was ever given was by a former boss, who sent me a one-page tongue-in-cheek article on 'how to manage'. The article may have been couched in terms of a joke, but it had a serious message. The advice was: set yourself a deadline for deciding; gather as much information as you reasonably can; sleep on it the night before (I have always taken this literally); make your decision. This is not dissimilar to the five points above: 'sleeping on it' is a way of considering your options.

4 Reaching a decision

Making a decision can be, and often is, difficult — particularly if it involves reaching some accommodation or agreement with others, as it does in working in a team.

There are many ways to decide something when a group of people is involved. Even where a decision would seem to be a simple matter, so long as a number of opinions are involved there will be differences in them!

[The National Academy of Sciences] would be unable to give a unanimous decision if asked whether the sun would rise tomorrow.

Paul Ehrlich (1970)

The subsections below give four models of ways to reach a decision when a group of people is involved. However, of course, the group has to decide which model to follow!

4.1 The autocratic model

I have heard your views. They do not harmonize with mine. The decision is taken unanimously.

Charles de Gaulle (quoted in Tornoux 1966)

The autocratic form of decision making applies where one person – usually the team leader or team manager – has either the formal authority to take a decision to which others will be bound (as in de Gaulle's case), or else one person has the personal charisma or personal authority – delegated to him or her by the others – to make decisions on the group's behalf. Sometimes a group, particularly a small one, might very well turn to one member whom they consider to have this personal authority, and say: 'You decide'. In either case, in this model one person decides for the group, with or without consultation. The drawback, particularly when a decision is taken without consultation, is that some or all of the group can be alienated and may even begin – if they feel strongly enough – to work against the autocrat.

4.2 Majority rules

The principle of majority rule is the mildest form in which the force of numbers can be exercised. It is a pacific substitute for civil war ...

Walter Lippmann (1926)

As Lippmann notes, majority rule does not mean that everyone agrees, but at least groups agreeing to agree by majority vote are unlikely to resort to violence to achieve a decision! The drawback of this model is that it is possible to become deadlocked if there is no majority: half for and half against. Should that occur, there needs to be some mechanism for breaking the deadlock: this could be anything from flipping a coin to bringing in another person to make the decision.

4.3 Majority rules, minority writes a dissenting opinion

Since the majority of me Rejects the majority of you, Debating ends forthwith, and we Divide.

Philip Larkin (1950)

The British Law Lords and the United States Supreme Court reach majority verdicts, and the majority prevails. But on occasions the minority feels strongly enough about their side of the argument to wish to lay their reasons before the public. To do this, the minority writes what is known as a *dissenting opinion*: it states what a different outcome could be and the arguments as to why that outcome gained their support. In a team, if a minority feels sufficiently strongly about their view, allowing the minority to prepare a short report for inclusion with the main decision of their views and reasoning can be useful for group cohesion, and may also prove valuable should the group need to revisit the decision in the future.

4.4 Consensus: the Quaker model for reaching decisions

Consensus is an oft misused word. Many people of very strong (and often controversial) views have damned consensus in terms like those attributed to Margaret Thatcher:

To me, consensus seems to be the process of abandoning all beliefs, principles, values and policies. So it is something in which no one believes and to which no one objects.

Margaret Thatcher (quoted in Healey 1989)

Rather than abandoning beliefs, principles, values and policies, the term *consensus* describes the quality or condition of being in complete agreement or harmony.

A group that makes regular use of consensus to reach a decision is the Society of Friends, commonly known as Quakers, who base their own governance, from local meetings to the international level, on the achievement of consensus amongst all present or all concerned.

In any group of more than a few, reaching a consensus requires a number of conditions or actions:

- being willing to accept that rejection of one's own proposals or ideas is not equivalent to rejection of oneself and does not demean one's worth within a group (taking ego out of discussion and decision-making);
- striving to find, in discussion with the other members of the group, areas of common agreement;
- ensuring that those who do not initially agree have a chance to have their say;
- ensuring everyone has the chance to think about their response to counter-suggestions, changes in wording, and so on;
- seeking to build on areas of agreement to achieve even wider agreement;
- willingness to continue the discussions in this vein until a consensus is reached;
- communicating as a decision only that which is supported by the consensus.

One person must be willing to 'chair' discussions (or moderate online group conferences) that hope to reach a consensus, and as chair must:

- ensure that everyone has a fair say (both by asking those who dominate a discussion to give way to others and by inviting those who seem reluctant to join in to express their views);
- ensure that personality clashes do not occur or are quickly diffused by reminding the participants that the discussions are intended to reach a consensus, not score debating points;
- remind the participants of the value and importance of goals to be reached.

These points apply as much to online discussions using email and conferencing software as they do to face-to-face sessions amongst participants.

Participants, on the other hand, must agree to leave their egos behind, to avoid making personal remarks, avoid (where possible) stating their positions as though those positions were the only correct ones, and avoid condemning the ideas and proposals of others out-of hand.

Consensus is not always easy to reach, and sometimes it is impossible. But when a decision has been reached by consensus, no one will be sniping from the sidelines!

Exercise 2

Revisit a recent decision you, or your team, has made and write some brief answers to the following questions. Did you set a deadline for making the decision? Did you have enough information available to you at the time you made the decision? How did you determine what alternatives were available to you? How did you (or the team) make your decision? Did your method follow one of the models listed above? Was the decision reached quickly or did it take a lot of time? Did it require extensive negotiation or did one person's view prevail? If you had to make the decision again, how would you go about it?

Discussion

Of course, your answers will be unique to your own choice of decision to review and its situation.

See the discussion of Exercise 1 above for a description of the problem I discuss here. First, I would write a short list of those requirements that *must* be met and then list possible solutions that would enable me to meet those requirements. I would then examine these to see which are feasible, then rank them according to their desirability before going back to the departments involved to seek their views. This is the sort of decision that needs everyone's support for it to work properly (though your supervisor *could* try being dictatorial). Knowing the importance of getting a consensual agreement, I would work to reach a decision by consensus though that is not easy.

5 A final few words on decision making

The [person] who never made a mistake never made a decision.

John Major (1990)

What if your decision turns out to be wrong? That worry paralyses many people when it comes to having to decide! But wrong decisions are excellent tools for learning how to do things better in the future (including reach decisions). Having made a wrong decision, there is often an opportunity to make a different decision at some future time. Almost always, there is a 'next time'.

Every decision is liberating, even if it leads to disaster. Otherwise, why do so many people walk upright and with open eyes into their misfortune?

Elias Canetti (1991)

6 Further resources

The following website has a good set of guidelines for making personal decisions and for making decisions within groups:

http://www.hooah4health.com/spirit/decisions.htm

For detailed guidelines on problem-solving and decision making, see:

http://www.mapnp.org/library/prsn_prd/prb_bsc.htm

The following website discusses four models for decision making in groups:

http://www.workteams.unt.edu/old/reports/lahti.htm

7 References

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