



# M253 Resource Sheet

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## *Team organisation*

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### 1 Overview

This Resource Sheet serves two purposes. First, it provides an overview of some of the ways in which teams can be organised. Second, it describes some of the different roles that team members can take on. This Resource Sheet also makes strong recommendations on the organisation that you should adopt in your team and on which roles you should have.

### 2 Introduction

The literature on the ways in which teams can be organised and the different types of teams is large. The project management literature (see, for example, Boddy 2002, Field and Keller 2002, or the Open University course M865 *Project Management*) takes the view that projects, and hence teams, are usually undertaken within existing organisations. Therefore, teams would be composed of members from within a department or function (such as finance or advertising) – these are known as functional teams. Other teams may have members from different departments – such teams are called cross-functional teams. Of most relevance to M253 are a third type of team – project teams – which are often put together in order to undertake a task that is too large or complex for one person to attempt, or would take one person too long to complete in the time that is available. In other words, a project. Therefore, teams must be able to manage such tasks – breaking down the overall task into small components and distributing these among the members of the team. When allocating tasks to team members it is important to take account of the different skills and skill levels of individuals within the team. In undertaking this allocation task, a team must have mechanisms for making decisions (for example, deciding upon how to partition the overall task) and for distributing the tasks between the members of the team. In other words, teams need to have a management structure and mechanisms for decision-making (or ways of organising the team). We will discuss these topics in the next two sections of this Resource Sheet.

### 3 How teams can be organised

It is instructive to study the way in which computer software is developed since this is often carried out by teams. Such teams are usually small, typically of between six and eight members (about the same size as a team on M253). If the project is large then the overall project is often broken down into several smaller projects (Sommerville 2000). Within software engineering teams, several common team structures have been recognised: democratic, hierarchical, 'ego-less' (or 'everyone does everything' teams), and 'chief programmer' teams. We will focus our discussion on the first three since your team could adopt any one of these team structures. Further information on these team structures may be found in any of the major software engineering textbooks, such as Sommerville (2000) or Pressman (2004).

### *3.1 The democratic team*

In a democratic team all team members are involved in making decisions. Decisions are made by consensus, or if a consensus cannot be reached, by a vote. There is a minimal hierarchy within the team, so that all team members are considered to be equal, which means that the tasks that they undertake must also be considered to be equal. One way in which this can be achieved is for some of the common team tasks (such as chairing and taking minutes of meetings) are rotated between team members so that these tasks do not always fall to the same people.

Often, democratic teams have no appointed team leader. However, team leader(s) may evolve informally or be recognised by people who are external to the team (usually management within the organisation or a client) as the contact point for the team and the person with whom they wish to liaise. In democratic teams where a team leader is recognised gradually, it may be the person with the most leadership personality traits, the most technically skilled, the oldest or longest-standing member of the team, or even the person with the strongest vision for the team. With respect to this last point, it is important to ensure that someone within a democratic team does have an overview of the project and the team, even if he or she has no special decision-making powers within the team.

There are at least two benefits of working in democratic teams: often they have high morale and they can be very productive. Unfortunately, democratic teams are not without their drawbacks, since they can become inefficient or even break down if no consensus can be reached over critical issues. In such situations it may be necessary to look to an external (usually higher) authority to intervene and help in making the difficult decision.

### *3.2 The hierarchical team*

There are several variants of hierarchical teams – the term is used to indicate that there is a team leader or manager who makes decisions and carries some responsibility for the team. For example, there are teams in which one person has greater technical skills than the other members of the team (in software engineering practice, such teams are often called chief programmer teams – the chief programmer usually being the person who has the most experience). The rest of the team work to support this technically skilled team leader. This often happens in other professions: restaurants often have a head chef, operating theatres will have a surgeon who leads the team, and a large garden will be overseen by a head gardener. In each of these examples one person is in charge of the team. In some hierarchical teams, the team leader has a more managerial role, deferring to an informal technical leader on decisions that involve technical knowledge that the manager does not possess.

Hierarchical teams are very common in large companies. In such companies, a team leader will often be appointed by company management in order to lead and oversee the project. Decisions are made high in the chain of command (sometimes outside the team) and are communicated downwards to the team.

### *3.3 The ego-less team*

In an 'ego-less' or 'everyone does everything' team, all team members are meant to do the former and supposed to have the latter. Responsibility for the work is jointly assumed by all team members so that everyone works on everything and no one owns, or has control of, any of the tasks within the overall project. Within such a team, decision-making has to take place by consensus since there is no leader. In software engineering, the recent software development practice of Extreme Programming (XP) shares many of the characteristics of everyone does everything teams.

### *3.4 Which team organisation should you have?*

While an 'everyone does everything' team may sound like an ideal team in which to work, they are difficult to achieve in practice. In such a team, if team members have different talents (as they often do) then having everyone doing everything may not make best use of individual team members' strengths.

If we contrast the democratic and hierarchical approaches to team organisation, the primary distinction between the two is that in a hierarchical team, one person ultimately makes decisions – the team manager. While the team as a whole might be involved in discussions leading up to the decision (or afterwards over its implications), ultimately, making the decision falls to one person. In theory this has less risk of failure associated with it than a democratic team since there is a sense in which responsibility for the team lies with one person: the team leader.

If we take into account the autonomous situation in which you will be working, a hierarchical team will probably not work as well as a democratic team. You will be making decisions and allocating team roles by consensus rather than having them imposed upon you. Therefore we recommend that you adopt a democratic team structure and, within that, a number of team roles. We will recommend which roles you will need in your team at the end of the next section.

## 4 Team roles

The work that you will be doing in your team falls into two main categories. The most obvious category is that of undertaking the team task, in other words, working on the task that the team has been assigned.

The second category of work consists of the management tasks that are required to make the individual members of your team function effectively as a team. Working on the *process* of team organisation and management often appears to be of secondary importance when compared to that of working on the task and meeting deadlines. However, ensuring that team members work constructively together will prevent the team from drifting aimlessly, sometimes acrimoniously, without getting much done.

Some of these *process*-related tasks are best defined and carried out by team members having particular roles. In the remainder of this section we will describe these roles, give recommendations over how these roles can be allocated, and which roles you should have in your team.

### 4.1 Allocating team members to roles

Your team needs to agree on who is going to carry out which role. This need not be fixed for the whole duration of the project. You could, for example, rotate the roles so that everyone takes a turn and thus gains experience of the different roles (as in some forms of democratic team). Or, you may want to allocate the crucial roles within the team to the people who would like to take them, are best qualified to carry them out through prior or current experience, or even to people who would like to take on an unfamiliar role in order that they can gain some experience of performing that role.

Whatever protocols you use for allocating roles within your team, you should make sure that someone performs these roles, or if the roles are not allocated, that someone in the team undertakes the tasks, as the following tale demonstrates.

### **Everybody, Somebody, Anybody, and Nobody**

This is a story about four people named Everybody, Somebody, Anybody, and Nobody. There was an important job to be done and Everybody was sure that Somebody would do it. Anybody could have done it, but Nobody did it. Somebody got angry about that because it was Everybody's job. Everybody thought that Anybody could do it, but Nobody realized that Everybody wouldn't do it. It ended up that Everybody blamed Somebody when Nobody did what Anybody could have done.

Anon.

There are four key roles that should be allocated to someone in the team, so that everyone knows who is performing the role at any one time. The roles are the *team leader*, the *record keeper*, the *report coordinator* and the *progress chaser*. These and other team roles are described in more detail below.

## 4.2 Team leader

Teams need leaders. Even in democratic teams, where decisions may be taken by the whole team, someone has to take responsibility for chairing meetings, or their virtual equivalent. In a meeting, this person has responsibility for clarifying the aims of the meeting and its agenda. They should introduce each item on the agenda, guide the discussion of the items and then summarise the discussion and the decisions taken. In a hierarchical team, the team leader also has a strong leadership and decision-making role to play, which includes the partitioning of tasks and allocation of activities.

## 4.3 Record keeper

Elsewhere we have recommended that everyone keeps some form of record of meetings held by the team in their log books, particularly of those issues that impact most upon them personally. But a team also needs someone who will take notes in meetings – a meetings secretary or record keeper. One of their duties is to keep a record of what decisions have been taken, who is doing what, and the date of the next meeting. A summary of the meeting will normally be circulated to the rest of the team in the form of meeting minutes by the meeting secretary. Therefore the minutes of the meeting can be seen as the official record of the meeting and can be referred to if decisions are revisited or are in doubt. In the distributed team setting, the easiest way to emulate this decision-making function of meeting is to set a deadline by which an issue must have been debated and a decision made, by voting if necessary. The team leader can facilitate this process, with the record keeper ensuring just that – that a record of the decision is kept.

## 4.4 Report coordinator

In project teams, the team secretary may take a stronger role, coordinating the production of team documents and reports through managing the different versions of the documents that the team produce. Or, this role could fall to the team leader. Better still is to make this role a separate role within the team since the editorial task of managing the production of documents can be quite large.

## 4.5 Progress chaser

A team needs someone who is responsible for ensuring that the team is keeping to the schedule that the team has set themselves and ensuring that they will meet the external deadlines which have been given to them. Such a person should monitor progress, ensuring that everyone is doing what they are supposed to and that all the tasks that need to be completed by a particular date are on schedule before the deadline and have been completed once the deadline has passed.

## 4.6 Timekeeper

A related role to the progress chaser, the timekeeper is someone who monitors how long is spent on each item in face-to-face meetings. It is very easy to spend all your time on the first few items of a long agenda and never to get around to discussing the later items. An agenda in which each item is allocated a certain time for discussion (a so-called “timed agenda”), or in which the time to be allotted to each item is agreed before the item is discussed, will help to ensure that each item is given adequate time for discussion. The timekeeper’s role is simply to monitor the passage of time and alert the team when that period of time has elapsed. The leader (or team – but be careful not to create another discussion on how to proceed) should decide what to do next, not the timekeeper. In Coar’s (2003) article on *The Sun Never Sets on Distributed Development*, he notes that one of the consequences of relying on e-mail or other asynchronous communication media is the difficulty of coming to conclusions or reaching a consensus. The article contains some useful suggestions on how to manage decision-making using electronic communications media such as email.

#### 4.7 *Technical director*

In teams that have been set up to address tasks that have a significant technical content or require particular skills such as developing a new product, then someone whose role it is to advise the team and particularly the team leader upon technical issues can be invaluable. Such a person is usually the most technically knowledgeable member of the team. They may already have the relevant technical knowledge and skills, or they may be asked to acquire the relevant technical knowledge and skills by the team.

#### 4.8 *Process consultant*

The process consultant has a similar role to the technical director in that their role is to advise the rest of the team. In contrast to the technical issues (which relate to the product that the team is producing), the role of the process consultant would be to advise on the process of working in a team. For example, while the other members of the team may be engaged in detailed discussions, the process consultant could monitor the way in which the discussions are being conducted and advise other members of the team on ways in which these discussions could be improved upon. The role of the process consultant needs to be handled with tact and sensitivity since they should make positive suggestions on how the team (or particular individuals within the team) could improve their working practices and relationships with other team members.

#### 4.9 *Client liaison*

A team may be engaged on a project that involves liaison with an external organisation. For example, the project may involve writing a piece of software to manage appointments and waiting lists in a doctor's surgery, or the team may be asked to write a report that has been commissioned by a government department. In this situation, liaison with the client – often to clarify exactly what is required by the client – will be required. Rather than have any member of the team contacting the client as and when required, it is often good practice for one member of the team to have responsibility for dealing with them. In this way, the team – to the benefit of both the client and the team – manages contact with the client. This means that there can be a more structured and productive relationship between the client and the team.

#### 4.10 *Which roles should you have?*

Having read the above discussion of team roles you might be overawed and be thinking "How can we possibly allocate so many roles within our team when we only have a small team?" The answer to this question is that you do not need all of these roles all of the time, and the same person may fill more than one team role.

So which roles *do* you need?

- 1 *A team leader*, whose role may encompass several of the above roles.
- 2 *A record keeper*, whose role it is to maintain the official record of meetings, including documenting any decisions that were made.
- 3 *A progress chaser*, who ensures that the project runs according to plan and that the team's reports are produced on time.
- 4 *A report coordinator*, who coordinates the production of documents by the team and manages the various versions of documents as they are produced.

### 5 **Summary**

This Resource Sheet has discussed two related aspects of team management: the ways in which teams can be organised and the different roles that team members can take on. These two aspects of team management are related and necessary so that everyone in the team knows who is doing what, who is responsible for what, and how decisions are made. We have also recommended a particular team organisation and the roles that it is most important for you to have in your team.

## 6 Further resources

Gibbs, G. (1994) *Learning in Teams: A Student Guide*. The Oxford Centre for Staff Development, Oxford Bookes University, Oxford.

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## 7 References

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