Chapter 11
Software Project Management Ethics

11.1 Introduction

It appears universally accepted that the most effective way to develop software is through the use of a project-based organizational structure which encourages individuals to participate in teams with the goal of achieving some common objective. Much has been written about the management of software development projects and no doubt much will be written in the future. The purpose of this chapter is to examine whether project management practice effectively caters for the ethical issues surrounding the software development process. For the sake of clarity, only one project management approach is discussed. The aim is to tease out the fundamental issues and not to dwell on the nuances of a particular approach.

Section 11.2 briefly considers the chosen project management methodology, Structured Project Management (SPM). Section 11.3 establishes a set of eight guiding ethical principles for computer professionals. Section 11.4 analyses SPM using the guiding principles; two of the steps within SPM are examined in detail to demonstrate how the application of the relevant ethical principles helps to ensure ethical behaviour. Section 11.5 considers two primary ethical hotspots of project management; defining of the scope of consideration and the information dissemination to the client. Finally, Section 11.6 provides some concluding remarks.

11.2 The Target Project Management Approach

O’Connell, in his book *How to Run Successful Projects* (part of the British Computer Society Practitioner Series [O’Connell94]), provides details of the Structured Project Management (SPM) approach. He explains that SPM is a practical methodology that, as DeMarco states, is a “basic approach one takes to getting a job done”[DeMarco87].

SPM has been chosen for discussion as it is practical rather than conceptual and provides practitioners with realistic guidance in undertaking the vastly complex activity of project management.

SPM comprises ten steps as shown in Table 11.1. The first five steps are concerned with planning and the remaining five deal with implementing the plan and achieving the goal. O’Connell states that most projects succeed or fail because of decisions made during the planning stage thereby justifying the fact that half of the effort expended in the SPM approach is on preparation.

It is this planning element of project management which lays down the foundations on which the project ethos is built. Here the scope of consideration is established, albeit implicitly or explicitly, which in turn locates the horizon beyond which issues are deemed not to influence the project or be influenced by the project. How the project
is conducted will depend heavily upon the perceived goal. The visualization of this
goal takes place in Step 1. The first two points in the visualization checklist given by
O'Connell are:

1. What will the goal of the project mean to all the people involved in the project
when the project completes?

2. What are the things the project will actually produce? Where will these things
go? What will happen to them? Who will use them? How will they be affected
by them?

These are important because through answering these questions an acceptable
project ethos and scope of consideration should be achieved. The problem is that in
practice these fundamental questions are often overlooked. It is more likely that a
narrower perspective is adopted with only the obvious issues in close proximity to
the project being considered. The holistic view promoted by the two checklist points
requires greater vision, analysis and reflection. The project manager is under pressure
to deliver and so the tendency is to reduce the horizon and establish an artificial
boundary around the project.

Steps 2 to 5 are concerned with adding detail and refinements thus arriving at a
workable and acceptable plan. Steps 6 to 8 are concerned with implementing the plan,
monitoring performance and keeping those associated with the project informed of
progress. Step 9 defines the control feedback loops which ensure that the plan remains
focused, current and realistic. Finally, Step 10 is the delivery of the project output to
the client and an opportunity to reflect upon what has and has not been achieved.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Visualise what the goal is</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Make a list of the jobs that need to be done</td>
</tr>
<tr>
<td>Step 3</td>
<td>Ensure there is one leader</td>
</tr>
<tr>
<td>Step 4</td>
<td>Assign people to jobs</td>
</tr>
<tr>
<td>Step 5</td>
<td>Manage expectations, allow a margin of error and have a fallback position</td>
</tr>
<tr>
<td>Step 6</td>
<td>Use an appropriate leadership style</td>
</tr>
<tr>
<td>Step 7</td>
<td>Know what is going on</td>
</tr>
<tr>
<td>Step 8</td>
<td>Tell people what is going on</td>
</tr>
<tr>
<td>Step 9</td>
<td>Repeat Steps 1 through 8 until Step 10 is achievable</td>
</tr>
<tr>
<td>Step 10</td>
<td>Realise the project goal</td>
</tr>
</tbody>
</table>

Table 11.1 The Ten Steps of Structured Project Management

11.3 Principles of Ethics

Relevant ethical principles must now be established in order to identify the ethical
issues associated with software development project management in general and SPM
in particular.

Ethics comprises both practice and reflection [vanLuijk94]. Practice is the consci-
ous appeal to norms and values to which individuals are obliged to conform, whilst