

## 1 Introduction

Almost every time an organisation changes its information management, it uses a project. Project Management is a central skill to performing information audits, to gathering user requirements, to implementing an electronic document and records management system (EDRMS), to moving an archive or a records centre, or to any other significant change.

In this handout, we will discuss:

- What is a project?
- Project Roles
- Project Structure
- Project Plans
- Case Study

We base our discussion on the PRINCE 2 project management methodology, but the general points are true for any project in any project management system. (PRINCE = projects in a controlled environment.)

## 2 What is a Project?

A project can be defined as: “A management environment that is created for the purpose of delivering one or more business products according to a specified business case.”

Characteristics of a project are that it is:

- Temporary and finite,
- Set up to achieve an aim or objective,
- Likely to span organisational divides and boundaries,
- Variable in the nature of its workload,
- Likely to consume diverse resources,
- Of defined lifespan and structure.

A project is unique. It is not part of routine operations; it has a limited lifetime, with specific objectives.

## 3 Project Roles

Any project needs to have certain roles filled. Sometimes these are filled by full time staff, dedicated to the project. At other times, for smaller projects, these roles may be part time, or two roles may be held by the same person.

### 3.1 Project Board

A PRINCE 2 project should be governed by a Project Board. The Project Board should have authority to approve the costs (in time, money, and staff) of the project. It should have authority to accept (or reject) the results of the

project, and to sign the project off as completed, or to halt the project if required.

The Project Board should be three people:

### **3.1.1 Project Sponsor**

The Sponsor is generally a senior officer of the organisation that owns the project (that pays for it and will benefit from it). The Sponsor:

- Represents the business interests,
- Ensures continued viability of the project,
- Owns the business case,
- Is ultimately accountable for the project.

### **3.1.2 Senior User**

The Senior User must have authority within the organisation that owns the project and within the specific user community that will use the project's results. The Senior User:

- Ensures user representation and involvement,
- Ensures that the solution meets real user needs,
- Commits resources from the user community,
- Resolves user requirement and priority conflicts.

### **3.1.3 Senior Supplier**

The Senior Supplier is the senior officer of the supplying organisation. This may be an internal IT department, or it may be external consultants or an external supply company. The Senior Supplier:

- Ensures that the supplier resources are assigned and committed,
- Ensures the technical and practical soundness of designs and products,
- Ensures adherence to strategies and standards.

## **3.2 Other roles**

A project should have other roles filled. In a small project these roles may be part-time, and some may be filled by the same person. In a large project, some roles may be filled by teams of full time project staff.

### **3.2.1 Project Manager**

The Project Manager is one of the most important roles in any project. This is the person in day to day contact with the whole project. The Project Manager is responsible for delivering the project according to the instructions of the Project Board. The Project Manager is also responsible for informing the Project Board of all aspects of the project: what is working well, what has been done, what is going wrong, what will be delayed or impossible.

The Project Manager is:

- Captain of the ship,
- Responsible to the Project Board,
- Responsible for planning and control,
- Responsible for finding and reporting exceptions,
- Manager of the people who are working on the project.

### 3.2.2 Quality Assurance

Every project needs someone who is responsible for the quality of the project's deliverables. This person should be separate from the Project Manager, and should report independently to the Project Board and the Sponsor. The quality assurance (QA) role is:

- To promote and safeguard the project's integrity - specific requirements may vary,
- To report to the Project Board,
- To know what is going on – this is a proactive role,
- Independent of the Project Manager,
- External to the rest of the project team,
- To help the project to succeed.

In spite of the independence described above, the QA role must be intimately involved with the project team, so that information passes to and from the QA. The QA role should also be seen as committed to the success of the project, and thus as supporting the Project Manager and the Project Board.

**Note:** whilst some roles can be combined, the project manager and the quality assurance roles **MUST NOT** be combined.

### 3.2.3 Project Support

A project produces a lot of information, both to operate as a project and as part of its operational deliverables. Projects often need a support person to look after plans, Gantt charts, risk logs, and other project documents. Project support can also arrange meetings, book meeting rooms, and do other logistic functions. As before, this may be a part time role, or it may be a fully staffed Project Support Office with several staff, and some specialist skills.

Project Support may be asked to look after:

- Monitoring,
- Use of planning tools,
- Logistics,
- Specialist knowledge for:
  - Estimating,
  - Standards,
  - Use of techniques,
  - Administration.

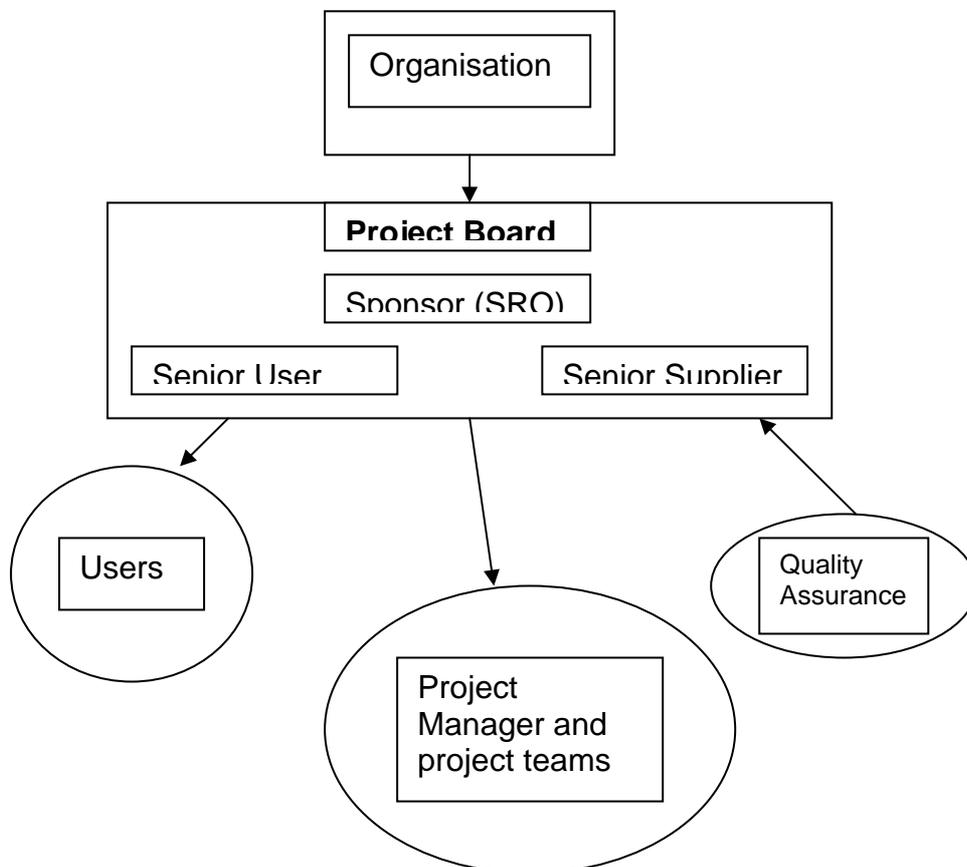
### 3.3 Other ad hoc roles

In addition to the roles above, the Senior User may need a more or less formal group of users to work on the project, to provide input covering the range of potential users, and to review project deliverables.

The senior supplier may also need a group of suppliers to coordinate work and discuss changes in the project scope or timing.

A large project may also have several teams, perhaps covering areas such as technical design, hardware, software, technical implementation, and user training.

## 4 Project Structure



A typical project structure might be as represented above. The organisation is paying for the project, will benefit from the project, and is the overall authority. The organisation delegates authority to the Project Board (Sponsor, Senior User and Senior Supplier).

The Project Board works through the Project Manager and the project teams. It may also have separate teams or groups of users (and of suppliers). It should also have a Quality Assurance person on the team.

## 5 Planning

### 5.1 What is a Plan?

In almost every case, a project requires a project plan.

A Plan is a “document framed in accordance with a pre-defined scheme or method, describing how, when, what and by whom a specific target or group of targets is to be achieved.”

A project plan should describe the purpose of the project, and say what benefits the project will bring to the organisation. (It should describe the business case.)

It should also describe the overall Who, What, When, Where of the project. (This is often summarised and managed with a Gantt chart, but a Gantt chart is NOT a project plan.)

#### A Project Plan is:

- A statement of intent,
- A view of the future,
- A basis for decision making,

#### A plan is not:

- A millstone.

The plan should set out enough detail that people can understand and monitor the project. If circumstances change, the plan should change. The plan should not control the project, nor impede the project. It should support the project and help people to participate in the project.

### 5.2 What are the benefits of a plan?

A project plan should help you to think, to correlate the views and experiences of a large project team, and to double check that no gaps have been left in your thinking about the project, its timing, its staffing and its risks.

A plan lets you:

#### 5.2.1 Pre-think future action

The discipline of thinking out what has to be done, and all its ramifications, goes a long way towards avoiding unpleasant surprises during the project. This pre-think allows project management to become aware of the true scale of what has to be done.

### **5.2.2 Verify target achievability**

It is unwise to accept a job without knowing whether it is inherently possible to do it. A plan lets you see whether the project is possible within the time, staff effort and money allocated.

### **5.2.3 Identify problems and risks**

A plan lets you be proactive in dealing with problems and risks. If problems and risks are identified ahead of time, discussed, and included in the plan, then you have a chance to build in ways of avoiding the risk, or of reducing its impact.

### **5.2.4 Plan resources and staff**

A plan helps you to define and then to get the hardware, software and financial support which the project requires. It makes it possible to get the right people at the right time.

### **5.2.5 Communicate to others**

A key purpose of any plan is to communicate with others. The plan must be shared as widely as possible. It will inform the people involved (and their managers) of their required involvement.

### **5.2.6 Gain commitment**

A plan helps the project to get a commitment that the people will be available, that effort required will be given, and that the organisation will support the project.

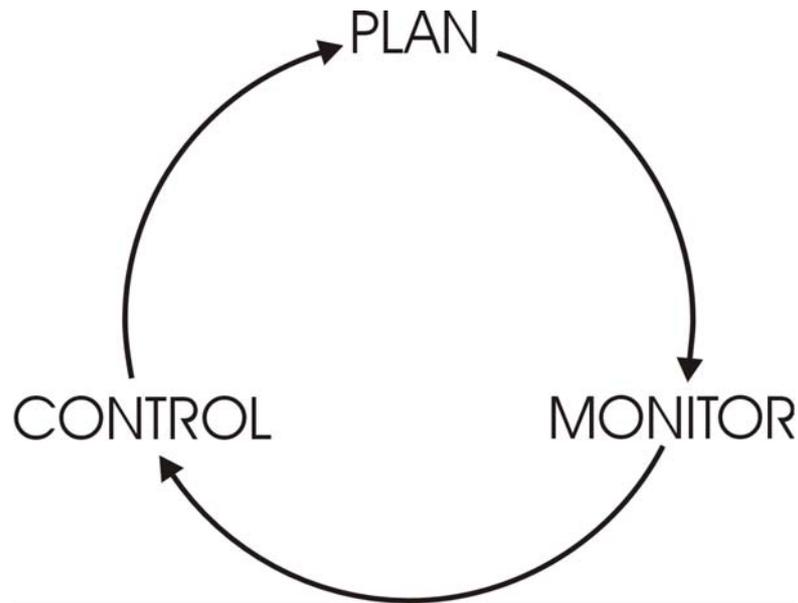
### **5.2.7 Provide people with objectives**

The plan provides clear statements of what needs to be done, by whom, and when. A good project plan will use unambiguous and achievable targets as a prime motivator.

### **5.2.8 Basis for control**

The plan is the basis for control. It says what should have happened, and when. The project manager and team can then compare what has happened with what should have happened. They can use the plan to quickly see and react to delays, cost over-runs, or other exceptions.

The control cycle is shown below. The plan is an essential element in this cycle. Without a plan, control is almost impossible, and agreement on control is even harder. A plan lets everyone know (and agree in advance) what will be done, by whom and when.



All of the earlier benefits are subsidiary to the main point of having plans, that is as a basis for controlling the project. Project control is all about comparing what has been achieved with what was originally planned. It is obvious, therefore, that the plan is a pre-requisite to this function.

Communications, mentioned briefly above, is often critical to the success of a project. A separate Communications Plan may be required, and some projects will have a separate public relations or communications team.

## 6 Levels of planning

Planning can take place at different levels;

- Project Plan,
- Stage Plan,
- Team Plan.

However, the degree of planning will depend on the size and complexity of the project and not all levels are always required.

### 6.1 Project Plan

A project plan is essential. For a small project it may be the only plan produced. For a larger project, the project plan may provide a high level view, and the other plans (stage plans, team plans, quality plan, communication plan, etc.) may provide the detail.

#### 6.1.1 High level view

A project plan provides an overview that allows the Project Board to know how long the project will take, what people will be required, what will be the major products or deliverables, how often control will be exerted, how quality will be maintained and what risks are inherent in the approach taken.

### **6.1.2 Major products**

It is important that the Project Board be aware of, and agree, the major deliverables of the project. This will include actual deliverables (installed software, trained users, test plan and test results, for example), and project deliverables (project plan, checkpoint minutes, end of project report).

### **6.1.3 Stage by stage**

The Project Plan will break the project into manageable tasks. These may be separated into defined project stages.

### **6.1.4 Narrative and graphical summaries**

The plan should contain summaries that turn the plan into a management report. These should include graphical summaries: charts, Gantt charts, etc.

### **6.1.5 Basis of business case**

The project plan will show the predicted costs and benefits of the project. It will say how benefits will be achieved and measured, and how costs were calculated and will be controlled.

## **6.2 Stage Plan**

A mid-sized or large project may be broken into stages. Generally each stage must be completed before the next stage begins. Each stage should have its own Stage Plan. The stage plan is created prior to the end of previous stage. It provides an intermediate level view, of a single stage only. The stage plan usually expands on the project level products, and defines the products for that stage in more detail.

Just as with a project plan, a stage plan should include both narrative and graphical summaries. It will be used by the Project Manager and Board for regular progress monitoring.

Having specified the Stages and major products in the Project Plan, each stage is then planned in a greater level of detail. This is done about a week before the stage boundary. An intermediate view of a single stage is thus generated. The procedure at Stage Planning time involves taking the major products and decomposing these (typically) a further two or three levels.

Given that each Stage is planned at the end of the preceding one, the planner should now have a clearer view of what has to be produced than would have been the case earlier in the project. As with Project Plans, Stage Plans are management reports with all the narrative sections that this implies. The Stage Plans are used by the Project/Team Manager to track progress on a week by week basis through regular progress monitoring.

## 6.3 Team Plan

In large projects, especially those with different teams doing quite different tasks, a set of team plans may also be helpful. They are created in parallel with Stage Plans. Team plans are optional, and should only be written when they will help. For example, if a project involves some building work, some electrical work, some networking, and some software, then each team may be quite separate, and team plans may help them to understand their place in the project and the ways they interact with the other teams.

A team plan has the lowest level of detail. It expands the stage level activities, but it is not normally a narrative. Team level plans are the lowest level of detail and specify details down to a (typically) daily level.

Again, there is a further decomposition, this time of Stage level plans. Each activity in Team level plans has a clear definition of who is responsible for carrying that activity out. Team plans do not normally contain the narrative sections associated with the higher levels.

## 7 Components of a Project Plan

### 7.1 Project description

The project description provides a narrative overview of the project. It should present the reader with an understanding of what the project is about. It should be no more than a page.

### 7.2 Project objectives

This section should detail the specific objectives of the project. As with any objectives, they should be SMART.

<b>S</b> pecific –	stating precisely what has to be done
<b>M</b> easurable -	enabling progress and achievement to be measured
<b>A</b> chievable -	taking into account the competencies of the staff member
<b>R</b> ealistic	bear in mind conditions such as resource availability
<b>T</b> ime bound	specifying a timescale.

### 7.3 Project scope

It is important to understand at the start of a project what is and isn't in scope. The scope statement must therefore clearly define what the project will and will not do. A well defined scope statement will ensure that everyone involved has a clear understanding and will help prevent misunderstanding.

## 7.4 Business benefits

Benefits to the business can be thought of in two ways:

- Tangible,
- Intangible.

Tangible benefits are those to which a financial figure can be associated. For example, after implementing the new system the same number of staff will be able to complete 50% more work; this extra work will result in an increase of sales by 50%, thus increasing profits by £30,000.

Intangible benefits are those benefits to which it is more difficult to assign a cost although speculative figures can be added. For example, implementing these changes will improve our reputation in the market place; an improved reputation could increase new business by as much as 20%, increasing profits by £18,000.

## 7.5 Costs

Costs for the project need to be predicted. This can often be difficult but it is imperative that all costs are estimated as accurately as possible. Allow a small contingency factor to cover unplanned costs. It is normal to agree a tolerance with the Project Board, say 5% for each stage. If costs look to exceed this tolerance, the Project Board must be informed.

## 7.6 Project organisation

The organisation of the project must be defined; who is undertaking each role and what is expected of them.

## 7.7 Schedule

A Gantt chart or similar schedule should be compiled. This presents a visual indication of what is happening and when.

## 7.8 Risk Assessment

By identifying potential risks early in the project, mitigating actions can also be identified. Risks can be categorised into one of the following:

- B (Business)
- P (Project)
- S (Stage)

Once the risks are identified, rank them according to their impact and apply a weighting. Then assess them for their likelihood and again apply a weighting. Multiply the two together to come up with an overall score.

## Likelihood

- 3 The risk is occurring, or is very likely to do so
- 2 A significant likelihood exists that the risk will occur
- 1 A low likelihood exists that the risk will occur

## Impact

- 3 The project will fail.
- 2 There will be some effect on the project objectives, but the project will not fail
- 1 The impact will be minor on the project

Risks with a low likelihood and low impact do not require the same attention as risks with high likelihood and high impact.

## 7.9 Quality Assurance

The purpose of this section is to define how the project expects to deliver products that meet the organisations quality expectations. It must be concerned with building quality in rather than measuring quality at the end.

## 7.10 Configuration Management/ Change Control

Configuration management is the process of managing all parts of a system, so that the exact version of each part is known, and so that all parts are known to work together. Configuration management is management and assurance through control of changes made to hardware, software, firmware, documentation, test, test fixtures and test documentation. It should be applied to any complex system, especially any automated information system, throughout the development and operational life of a system. Version control of documents is an element of configuration management.

Change control is the formal process by which changes to the project (or to any component of a system) are introduced, assessed and recorded.

## 7.11 Monitoring and control

This section describes how the project will be monitored, so the process by which expected progress will be compared to actual progress. It also describes how differences between expected and actual progress will be managed.

## 7.12 Communications plan

The communications plan describes what will be reported, who it will be reported to and the frequency of the reporting.

### 7.13 Products and Deliverables

Deliverables can nearly always be divided into three groups:

- Project deliverables,
- Quality deliverables,
- Technical deliverables.

Project deliverables include such things as the project plan itself and checkpoint and highlight reports.

Quality deliverables are those concerned with quality assurance and could include a quality assurance plan, a risk assessment and test plans and scripts.

Technical deliverables are those things which the project has to create to deliver its benefits; such as the actual code in a software development project.

**Document Control**

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"I have read this **Training Module**, and agree that it meets the quality requirements of Audata Ltd and relevant industry standards".

**Anita Dray, Director, Audata Ltd**

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