

Project Management 101

Organisations run projects. The aim of a project is to produce desired results in an established time frame and with specific resources.

Projects can be big or can be small. A project might change the way an organisation works, produce a new product or service or review a service already offered. On a personal level a project might involve planning a holiday, redecorating a room or organising your music collection into alphabetical order (by artist, obviously...).

What makes a project?

A project is a temporary undertaking rather than a day to day routine task. It may not be completely unique but it's not something you do everyday. Making dinner isn't a project; organising a party for a 18th birthday may be.

Projects have aims or outcomes that they seek to achieve. These aims are set before the project begins and are termed the **scope** of the project.

Projects also have specified time frames associated with them. They start at specified times and should operate within a known timeframe - i.e. there should be a specific completion date associated with the project. This might be termed the project **schedule** and should include clearly defined start and end dates.

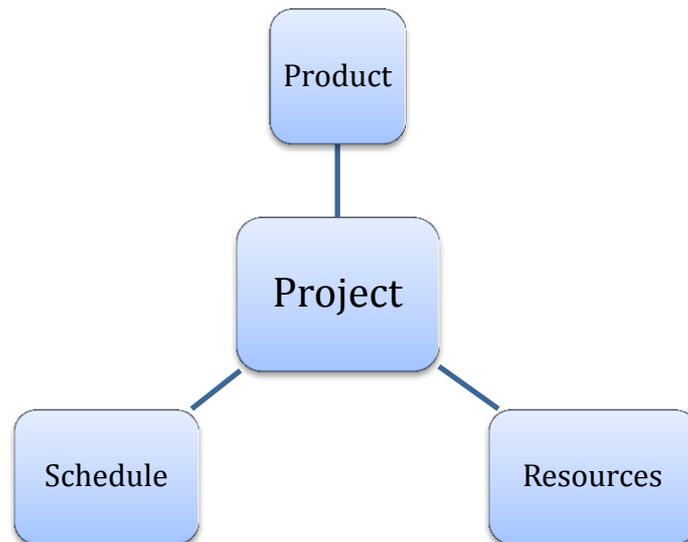
Resources are also required for the completion of projects. These include people, money, materials and other resources. If these can be established at the planning stage the project is likely to run more effectively.

One of the key things to remember is that projects only exist to produce the results defined in their scope. Good project managers keep this requirement in mind.

Summary

Projects are temporary undertakings performed to produce a product, service or result. Projects always have

- Specific scope
- Schedule
- Required resources



The three key aspects of projects are clearly related. The right resources need to be available to produce the required results. If resources are cut then results may be effected. If the end date for a project is moved up the other resources may be required, for example more money to pay staff overtime.

Within the IT industry projects are commonplace. Typical projects might include undertakings such as producing a website, developing software applications, creating a computer network, producing a report into the possibilities for social media use in an organisation or training users in a software suite.

Project Quality:

A Guide to the Project Management Body of Knowledge emphasises that:

*The product includes the basic nature of what is to be produced as well as it's required characteristics. This is termed the **quality** of the product.*

A Guide to the Project Management Body of Knowledge is the project management bible. It's produced by the Project Management Institute and contains all the key theoretical understanding that underpins project management.

Project management is not just an IT skill...

Almost all organisations run projects, and good projects require effective project managers. If you know about project management and have an understanding of the skills and tasks necessary to run an effective project you have transferable skills which can be used in a wide range of situations. There are even exams you can do specifically in project management.

Good project managers are in demand!

The stages of a project

The ways in which projects can be broken down into stages vary. There are generally considered to be four key project stages. These are sometimes called the **Project Life Cycle**.

1. Starting the project
2. Organising and preparing
3. Carrying out the work
4. Closing the project

Starting - frame the business case for the project and evaluate whether the project is potentially viable. Rough estimates of time and cost and identification of possible stakeholders and participants. Identify the general approach to carrying out project.

Organising and preparing - developing a plan which identifies the desired results, what needs to be done and the time and resources available to do it. Identify the key risks and plan for mitigation. and deploys resources. Outputs from this stage may include a project plan documenting the intended results and how they will be achieved.

Carrying out - build the team and put the plan into action. A key to project management is monitoring the plan. Are deadlines being kept to, are resources being used efficiently, are extra resources required, is the budget being kept to etc... The project needs to be controlled effectively.

Closing - assess the results and evaluate the projects success - perhaps against success criteria which may have been developed at stage 2. Budget closed, team members transitioned to new projects, handover to client etc...

For small projects this cycle might last a few days or even hours. For long projects it might take years.

Although the stages of a project seem to be fixed they should be seen as dynamic as well. It is entirely possible that as a team progresses through a project they may learn things about the project which cause them to reappraise some of the aims or scope of the project. The client might change their mind or add (or remove) elements required for the project and resources may become available (or be denied). All of these things may lead to changes being made to the project.

Increasingly, IT projects are seen as following an **iterative** process. This requires continual cycling through project stages, particularly the preparing and carrying out stages. Rigorous testing of products throughout the production process is a key element of this type of approach.

Project Management Processes

Project Management is the process of guiding a project through its stages.

Processes are a series of (fairly) routine steps to perform a specific function. Follow the steps and you should complete the thing you're trying to do.

A project isn't a process – it's a one-time activity. But project management can be helped by sets of processes.

Project management includes five basic processes

- Initiating processes
- Planning processes
- Executing processes
- Monitoring and controlling processes
- Closing processes

Initiating processes – determining the overarching business needs and expectations of whoever ordered the project and clarifying the availability of budgets and other resources.

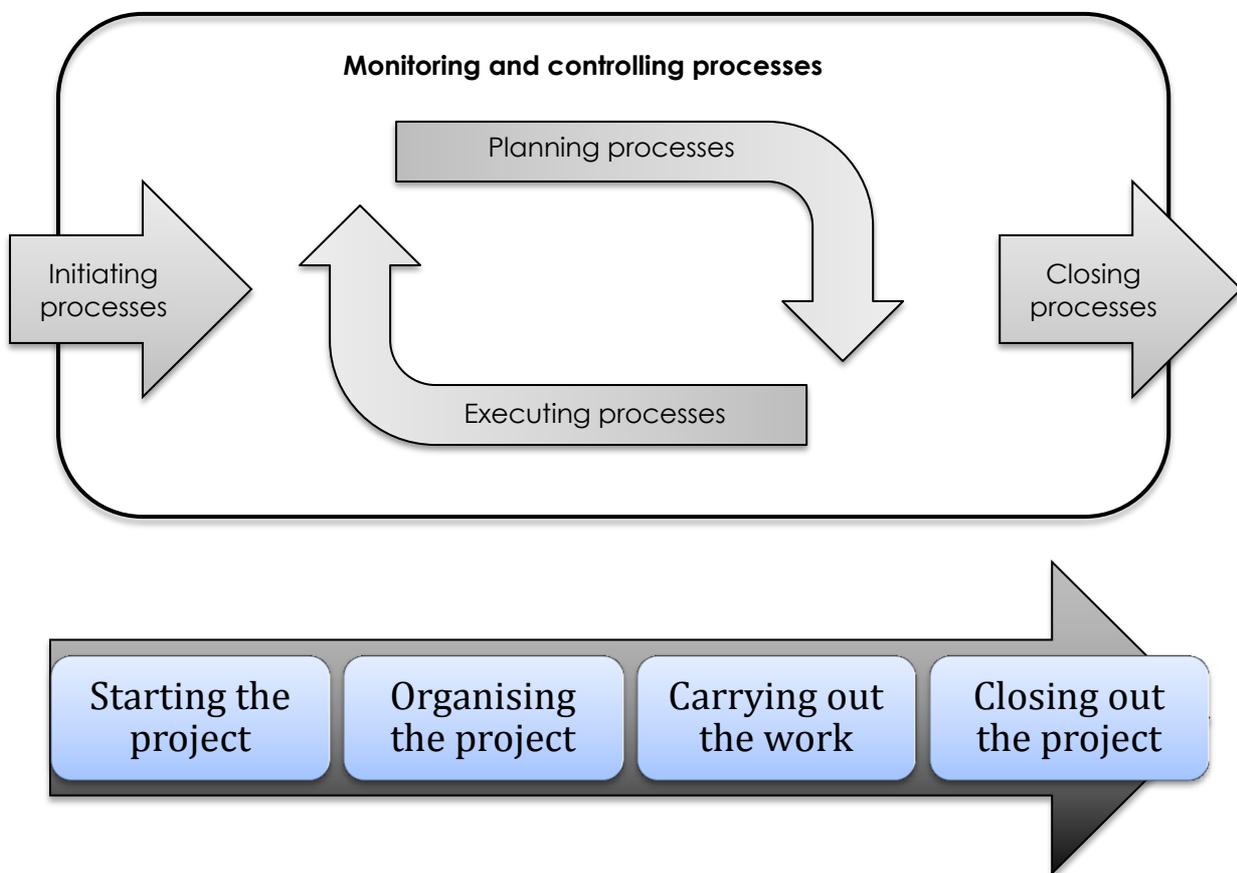
Planning processes – detailing the project scope, time frame and resources as well as risks which might be present. Producing detailed plans. Agreeing **protocols** for communication and any other aspects of the project which may be required.

Executing processes – establishing and managing the project team, communicating between the team and with clients. Implementing the project plans.

Monitoring and controlling processes – tracking performance and taking whatever action necessary to ensure plans are successfully implemented.

Closing processes – evaluating, handing over and other closing activities

These five process groups help support the project through the four stages of the project life cycle. They aren't different to the PLC – they actually help the project to go through the PLC stages.



The Project Manager

The project manager exists to facilitate the project – to get it from its initial brainstorm to completion.

They don't do the work (certainly not on a bit project) but make sure the work gets done. It's their job to know absolutely everything about the jobs that need to be done in general terms and to understand how they fit together.

This is a tough job on a big project. The PM needs to coordinate all the people working on the project – who may often be specialist professionals – to make sure the common goal of project is achieved. PMs often also coordinate communication between the client and the project team.

Good PMs are proactive. They get things done, by using the five groups of project management processes, and make sure that things get done.

Successfully performing the five process groups will probably require:

- **information** – accurate, timely and complete information for every stage of the project
- **communication** – clear, open and timely sharing of information with appropriate team members and clients
- **commitment** – to the project and from team members to ensure that they deliver agreed-upon results on time and within budget

The project manager has an obviously active role to play in the initiating and planning processes of a project. Key tasks here include leading on determining objectives, schedules and resource budgets, developing a project plan and identifying and managing risks. Project managers often have a key role to play in putting the project team together and determining roles and responsibilities as well as how the team will work.

During the execution of the project, PMs will tend to focus on the control and monitoring processes and managing the team effectively. They need to have an overview at this stage and to be able to intervene and apply any risk management strategies in a timely manner.

Defining the Scope

All projects are created for a reason.

One of the key steps at the start of a project is to determine the **project scope**. A good way to do this is to write a **Scope Statement**.

A scope statement is a written confirmation of the results the project will produce and the terms and conditions under which it will be done. The scope statement needs to be agreed by both the client and the project team.

One reason for writing a scope statement is so that no-one can be confused over the aims and objectives of the project. Having things agreed in writing should, in theory, stop clients (or marketing executives) from adding new "features" to a project.

A scope statement should include:

Justification – how and why the project came about, the business need(s) it aims to meet and how the project will fit within the other things the organisation does

Objectives – the products, services or results the project will produce. Sometimes objectives are known as deliverables

Product scope description – the features and functions of whatever it is your producing. This adds detail to the objectives

Product acceptance criteria – the criteria for accepting a completed product or service. This might be called the success criteria, although there's an inferred difference between the two things in many cases

Constraints – restrictions which limit what you can achieve with the project. These may be related to time or budget or how the project can be completed

Assumptions – any assumptions which have been made at the outset should be documented clearly

One of the aims of writing a scope statement is to be clear about where a project starts and where it stops. Sometimes it is appropriate to include things that the project will not do, particularly when requirements might be ambiguous. You might, for example, include that you will not be responsible for the marketing of the widget or that social media integration is not part of the project you are involved in.

Project Objectives

One of the key jobs when writing project objectives is to be brief and clear but complete. The more clearly you define your project objectives the more likely you are to achieve them.

Example project objective

Statement	Measures	Performance specifications
A report summarising monthly footfall figures for visitors to the museum	Content	Report must include figures for the last 12 months and include monthly and total footfall
	Schedule	Report must be handed over by 13 April
	Budget	Expenditure not to exceed £150
	Approvals	Report must be approved by assistant manager of the museums service