

# **Project Management Overview**

**(Source: Higher Education Academy – ICT Subject Centre)**

This document provides a brief overview of project management. It does not aim to repeat the content and detail provided in the resources referenced but provides a context for a more detailed study of project management. The document is divided into the following sections:

**1 Introduction**

This section provides some examples of information and library projects. It also explores why a project management approach can be useful and beneficial for organizations and individuals.

**2 Project Life Cycle**

This section provides a brief description of three models of the project life cycle. Students are encouraged to read about these models to select the most suitable for their group assignment or workplace situation.

**3 Essential skills for managing projects**

This final section discusses the skills sets that are most useful for managing projects in the information sector.

# 1 Introduction

## Introduction

Project management is used increasingly in the information and library sector (ILS) as an effective approach for: developing new initiatives to improve service delivery; achieving goals within a framework of public sector management; managing change within information related organizations.

Project management can involve large and small scale projects but the common characteristics are that each will involve some form of change and innovation, have clear aims or purpose, and usually have a start and finish date. Several examples of ILS projects are listed below. Further details of some of these are given in the file for Case Studies.

### Examples of larger projects include:

- Merging several libraries or services that could involve moving the premises within libraries
- Developing new initiatives with partner organizations such as one stop shops, cultural events or outreach services
- Digitizing a large and important collection of resources that involves experts from several home and overseas organizations

### Examples of medium and smaller projects include:

- Creating a new intranet site or changing the library portal to synthesize with that of the host organization
- Re-cataloguing a special collection or resources
- Developing a set of resources for a web based learning course
- Creating a short-loan collection in an academic library
- Developing a public library summer activities programme for local children
- Developing training sessions for users of a specific group of resources such as legal or health databases or family history resources
- Creating a newsletter for users of a college library
- Planning an event such as an author visit for a primary or secondary school library

There are many more examples that could be listed here but these should convey the breadth and variety of projects within an information and library context. More detailed examples are provided by Allan (2004).

## **Why is a project management approach useful?**

There are many reasons why project management approaches are useful. Projects can bring clear benefits to organizations and the individuals employed in the project teams. A range of reasons are outlined below within four themes:

- 1. PM draws on knowledge and skills already used in the workplace**
- 2. PM provides a 'contained' approach to development or change**
- 3. PM can bring extra finance into the organization or service point**
- 4. PM approaches can be used for staff development**

### **1. PM draws on knowledge and skills already used in the workplace**

Project management techniques and processes draw on the wider knowledge and skills developed from organizational experience and studying management theory and practice. Many of the techniques used in project management such as teambuilding, decision making, financial management and delivering outcomes, are used regularly in the management of organizations and service delivery. Employees develop these skills through experience, staff training and education. However, when applied to project situations, these skills gain an energy that focuses on achievement and delivery over a specific time period. Also, projects are usually more visible than continual work. Some projects have a 'high profile' within an organizational or geographical community and there is continual emphasis on achievement, success and accountability of the project.

For some participants working on a project will enable them to demonstrate their current levels of ability while offering opportunities to develop their skills further. See also staff development below.

### **2. PM provides a 'contained' approach to development or change**

Project management encourages periods of concentrated activity in order to achieve goals. Sometimes this is driven by physical factors such as the completion of new premises or the demolition of old buildings. However, projects can also be influenced by financial constraints in situations where money cannot be transferred into different financial periods or budgets. Having restrictions and limits that are imposed by other organizations or partners can focus resources on the tasks to be achieved in order to fulfil the project goal. In some situations, using a project management approach will be more cost efficient.

Project management approaches can also be used for longer change activities such as reclassifying resources or digitizing a special collection of resources. If extra money is available for a project over a two year period, then it needs to be completed within the time that this money is available.

An alternative approach could be to accommodate these activities within the general management of the organization, perhaps running over a period of several years. In these circumstances, it is likely that some staff would work continually on reclassifying or digitizing resources, or perhaps only occasionally when staff availability and rotas made it possible. This could imply less importance than the ongoing service delivery of the library and extend the time taken to complete the tasks. Using a project management approach will provide a management framework that highlights the importance of the tasks and places resources where they are most effective to complete the project.

### **3. PM can bring extra finance into the organization or service point**

Funding for projects may be available from within organizations or from external organizations or partners. Sometimes, funding for projects is available when there is only limited funding for mainstream services. Perhaps extra staff can be employed specifically for a project even when there is a freeze on employing new staff on general posts across the organization. Whilst this could be seen as controversial, it is nevertheless a method for facilitating developments and change while other opportunities are limited. Details of sustainability of a new venture, after the project period, may need to be included in a project bid. This requirement can be used to encourage managers to think about integration and discourages chasing funds for the sole purposes of getting the money.

The advantage of using project management approaches for new services is that development costs can be higher than ongoing delivery costs. New equipment may need to be purchased or staff training arranged. Project funds can help to cover these higher costs enabling the organization to develop new initiatives even when finance is restricted. Sometimes the project period may serve as the pilot phase of a new service that moves to become an integrated service at the end of the project period.

### **4. PM approaches can be used for staff and student development**

Some project management skills such as financial management of large budgets, effective communication or managing a team, are usually developed over a period of several years and through experience and career progression. However these skills can also be developed through being involved in small scale, perhaps social projects. These might include planning visits to another library that has developed an innovative approach to service delivery; arranging a celebration meal at a local restaurant; planning an 'away day' event for staff training or a series of author visits and workshops. All of these examples require careful planning, negotiation and communication, some financial management and perhaps evaluation of the event.

Where project management is taught on academic courses, students can first be asked to think about what is needed for planning family and social events. These could be real or imaginary events such as a family celebration, a picnic with a group of friends or a short holiday. Discussing the practical and social nature of these events can help to motivate students to succeed to higher levels than a more conventional assignment. Ideas and experience can be transferred to a more challenging task such as planning conference for a group of professionals. Some reflection and analysis should be included in the assignment processes. This can be through peer discussion as well as through written evidence. Reflection on what worked well and what could be improved will help them to understand how to avoid repeating the same mistakes in the future.

Being involved in project teams in the workplace or on academic courses, provides staff and students with useful opportunities for learning about what makes project management effective and successful. It also facilitates the transfer of knowledge and skills to future projects that will be useful for all participants in their careers and possibly as future project managers and leaders.

To conclude this section, project management draws on skills that are already available within the workplace but it also offers further opportunities for learning, and improving these skills within a more focussed management framework. Section 3 below explores essential skills for project management in more detail.

## 2 The Project Life Cycle

In the project management literature, projects are described as having a 'life cycle' that covers a range of activities from the project ideas and initiation through to delivery and completion. This life cycle is divided into several stages that enable everyone involved to ensure that all aspects of the project are considered and dealt with as efficiently and effectively as possible.

Using a staged approach helps everyone involved to recognise the sequence of tasks. The need for a developmental approach encourages commitment and energy, especially at key stages of pressure to deliver. It is unusual for each stage to be worked on in isolation, there will inevitably be some overlap as one stage draws to a close and another begins. However, a staged approach encourages analysis, reflection and review as the work progresses. It can also facilitate problem solving by ensuring that issues are resolved fairly quickly and before they become major problems. Stages can be re-visited and reviewed if problems arise. It can sometimes be useful to take a problem back to its source rather than to try to solve the consequences of the problem. A staged approach can also improve staff morale. It can be motivational to see some evidence of progress, especially if the project runs over several months. A staged approach helps achievements to be more visible and celebrated if appropriate.

There are several models of the project life cycle and organizations may have preferences for which model to use. Indeed, some organizations may have developed their internal systems and models for managing projects and reporting progress. This approach encourages some synergy between projects throughout the organization and ensures accountability and a culture of delivery and completion.

For the purposes of this document, 3 examples have been chosen:

1. Allen (2004: 17) describes a project life cycle of 4 stages:
  - Project analysis
  - Project plan
  - Project implementation
  - Project evaluation and dissemination

Within these stages she provides details of essential and useful activities. This book is written for ILS professionals so staff and students can be encouraged to use it as a reference tool throughout the module or training period.

2. A slightly different approach is promoted by The Project Agency which uses a 5 stage model:

Stage 1: Set up Initiation  
Stage 2: Set up Definition  
Stage 3: Delivery Planning

Stage 4: Delivery (monitoring and control)  
Stage 5: Closedown and Review.

Project manuals and templates have been developed to monitor the activities within each of these stages. The Project Agency has examples on their website at <http://www.projectagency.co.uk>

3. An even longer, 7 stage model is outlined on the [www.businessballs.com](http://www.businessballs.com) website. This is summarised as:
  1. Agree precise specification for the project.
  2. Plan the project: time, team, activities, resources, finance.
  3. Communicate the project plan to the project team.
  4. Agree and delegate project actions.
  5. Manage, motivate, inform, encourage, and enable the project team.
  6. Check, measure, review progress, adjust plans and communicate changes.
  7. Complete project; review and report on performance.

When reading about these models, it is interesting to note that almost half of the time in each model is allocated to stages for analysis, definition and planning. This could feel frustrating to the individuals who prefer a 'hands on' approach; those people, who prefer action to thought; who believe results come from activities rather than from ideas. What it does signify is the importance of preparation and planning to ensure the project is delivered on time and to a high standard. Good preparation and planning also contribute towards the most effective use of resources. This is important for all project management situations but especially for many ILS projects which may have limited financial support.

Whichever model is chosen for managing a project, it is important to recognise that each stage is composed of several tasks and activities. Each of the models outlined above contain detailed lists of tasks for each stage. Rather than repeat details of these tasks here, it is suggested that students will find it useful to read through these lists in the references provided. This will help to identify those tasks relevant to a specific project. Identifying essential tasks will also help the process for allocating areas of responsibilities within the project team.

It is however important to remember that in many ILS projects, there may be only one or two people available to take full responsibility for everything involved with the project. If this is the case, it will still be useful to read and identify the relevant tasks to gain a clear understanding of everything involved. Sometimes, these lists can seem overwhelming but they do offer a realistic picture of the scale of a project and may help to set more achievable goals and completion dates.

### 3 Essential skills for managing projects

There are a wide range of skills that contribute to effective project management. Many management skills are essential for managing projects such as: planning, organizing, leading and motivating staff, time management, communicating, analysing, decision making and evaluating. Students can explore these skills in more detail in the management literature. How these skills contribute to project management is outlined in the resources on the reading list for these documents. (Allan 2004: 179-184) Each project is unique so it can be more useful to talk about skills sets that contribute or are essential for managing projects.

Whilst the organizational context of a project will influence the skills sets needed, there are nevertheless some skills common to all projects. Some of these are described as 'hard skills' such as planning, financial management or evaluation systems that focus on tasks and end products. However, 'soft skills' also play an important part in the success of a project. (Harrin 2007:100). These soft skills involve managing people, creative thinking and making effective decisions. They also relate to the personality of individuals, their experience and interactions with colleagues and stakeholders.

There are individuals who choose to work as project managers across a wide range of sectors or subject areas. Project management is now recognised as a set of professional skills and behaviours that can be transferred across employment sectors and situations. For some projects, individuals with expert knowledge can play an important role in a team but the project can be managed by a generic but experienced project manager.

Whilst there are an increasing number of experienced project managers, realistically, very few individuals have all of the skills needed, which is why team working can be so important and effective in project situations. In the ILS sector, project teams may be composed of staff from different parts of an organization that bring specialist knowledge to the project. The project manager is usually one of the more senior team members or someone whose organizational role has some overall responsibility for the service that the project contributes to. An alternative model involves partnership working with related organizations that can make useful contributions to the project and where the stakeholders will gain greater benefit from a shared approach. In the public sector, projects have been used to develop what is described as more 'joined up' service delivery. For these types of projects, the project manager could be the most senior person on the team but it could also be a middle manager who is given the role for the opportunity of staff development yet is supported by a more senior colleague who brings influence or resources to the team.

There are however, many situations when an information professional is the only person working on the project. These people will need to be self motivated with a wide range of skills to ensure the project is a success. When they lack specialist skills, they may be able to draw on these from colleagues in the organization such as a finance or marketing officer. Although these colleagues are not part of a

project team, they may be willing to contribute their expertise. Locating and gaining these sources of help is a skill in itself. If the information professional is respected in the organization, is seen as doing a worthwhile job and is persistent in seeking specialist help, they will be able to achieve much more than working in total isolation. All 'lone professionals' need advocates and asking for help with projects that are delivered successfully is a useful method for developing these advocates.

For convenience and brevity, the skills sets are outlined under the following headings:

- Leadership**
- Management and organizational skills**
- Financial management**
- Communication skills**
- Thinking skills**
- Understanding organizations**
- Understanding stakeholders**

## **Leadership and project management**

The literature on project management discusses the importance of the role of the 'Project Manager'. (Allan 2004:179) (Harrin 2007: 153-186). There has been a large amount of research into the differences between management and leadership with some conclusion that management involves the 'hard skills' whereas leadership uses more of the 'soft skills'. There is no space in these documents for deeper discussion of these differences. What is important here is to recognise how the project manager or leader will need skills from both of these sets but the need may vary with each project and also with the organizational context.

Primarily, the leader will need vision that not only comes from creative thinking but also from their ability to live with uncertainty and manage change. (See below). They will need to be persistent and have a determination to succeed, even when problems seem to claim more time and energy than development. Some individuals may prefer the ideas and planning stage of projects but effective leaders need to 'see a project through to the end'. They need the ability to deliver and sustain that delivery until the project is completed or becomes part of an established or newly evolved service.

A project leader will need to be an effective communicator so that they can make themselves understood. This sounds naïve but is essential when working with stakeholders, or campaigning for resources, staff support and commitment. Communication skills are discussed below. When the project leader communicates, they will need to impress, inspire respect and motivate everyone involved in the project.

Team motivation is important and a project leader needs to be able to sustain motivation for the life of the project. Highly motivated individuals will use their experience from being in the project team for their own career development. A leader who motivates is a positive role model for everyone involved with the project. Some motivation can be inspired through delegation. A good leader understands when to delegate and share the responsibility for certain aspects of a project. However, delegation of tasks can require sensitivity to individuals' self belief. Perhaps training can be given to support team members with limited experience. Opportunities for review and reflection of progress during the project life cycle will be useful for all members and can help to improve the final project outcomes. Further comments about a leader's skills are also included in the sections below.

'Followership' is an emerging concept in leadership research and it is interesting to explore this in the context of project teams. Strong teams are usually composed of several individuals with experience and knowledge that benefits the project. Team members would be expected to contribute, perhaps even challenge ideas rather than meekly follow the ideas and suggestions of the project leader or most dominant members of the team. However, too much challenge and conflict can waste precious time, divide the group and produce weaker outcomes. The dynamics of the team are usually very important to team success. Members need to judge when it is best to challenge but also when it is best to accept decisions and just get on with working towards the agreed goal. Some leaders inspire followership through having the skills discussed above. Some individuals are more willing followers than others who tend to take an oppositional stance. Inevitably, team problems may occur but an effective project manager will reduce the chances of these happening through using a wide range of leadership skills and management experience.

## **Management and organizational skills**

These are the skills that follow a more scientific management approach. They use systems, patterns and models to plan, store, record, understand and explain information and knowledge. These skills form the basis of information retrieval systems so it can be expected that many ILM professionals will use these skills in their daily, professional lives.

Good organization will be essential for all projects but the larger and more complex the project, the greater the need for effective systems to be established. These skills will be essential for all members of the project team, who may be responsible for specific tasks however the type of organizational skills might vary with these tasks. For example, the person responsible for co-ordinating the finances will need to keep accurate records of expenditure, perhaps within different budget headings, as the project progresses. However, the person dealing with the marketing and promotion aspects of the project will need to be efficient and organized but they will also need to take a creative approach to the tasks. The project leader may have reasonable organizational skills but be happy to delegate the tasks that require more detailed control. The leader's role is to understand the big picture so that she

can concentrate on the people or creative aspects of the project. (Harrin 2007: 159-162). Perhaps the best way to understand this skills set is to recognize that all projects need to be well organized and efficiently managed but the organizational skills should contribute to the success of the project rather than dominate or restrict the outcomes. Too much emphasis on organization at the expense of creativity and innovation will claim time and energy from the team and almost certainly limit the project outcomes. A sensible balance is essential.

## **Financial management**

Good financial management is really part of the skills set outlined above. However, project finances can be fraught with difficulties so some discussion is useful here to show the importance of managing the budget to achieve the goals within the restrictions set by the funders. Understandably, the size of the budget will influence the types of skills and tasks involved but it will almost certainly involve allocating funds to different costs on the project and prioritising where the money should be spent. Monitoring costs will be crucial and larger projects will need efficient accounting software that can produce ongoing spending and forecasts at key stages of the project. (Allen 2004: 93-1107). (Harrin 2007: 1-20).

In some ILM situations the financial support may be very limited so the need of resources may involve searching for free resources from the wider community. If sponsors are involved, they will probably want to know how their contribution has been used so good financial management will convey a sense of trust and value to their support. Where an ILM professional is working on a project alone, the finances may be managed by the finance manager of the host organization. However, ongoing costs will need to be recorded and systems used for monitoring project progress to fit within the financial year and appropriate budget headings.

Whatever the size and complexity of a project, it is always important to have good financial management. Critics usually remember when a project has overspent, even when they cannot recall the social value and impact of the project outcomes.

## **Communication skills**

Effective communication in project management is so much more than just a set of skills and processes. (Harrin 2007: 90). Clear communication is essential for everyone involved. They need to understand exactly what needs to be done and when. It is also essential to understand what needs to be communicated (the message), how (the medium) and to whom (the audience).

At the start of a project, the communication systems will need to be set up and protocols established so that all team members are continually updated on issues and progress. This is especially important if the team members have other roles, are dispersed within the organization or across several organizations. However, with developments in ICT this does not need to be a problem. The challenge for the leader and project team is to prevent communication overload. With the volume of e-

mails increasing steadily, it is important to establish a pattern of communication on a 'need to know' basis that has real value to team members rather than becoming an irritant.

Communication with stakeholders will be important at key stages of the project and how this is done will need to be agreed at the start of the project. Consistency in what is communicated to all stakeholders will also need to be agreed. People soon become disenchanted and confused when they receive 'mixed messages'.

### **Thinking skills / big picture / small picture thinking**

Most projects benefit from a blend of thinking skills and styles. Some individuals may have good organizational skills for managing the detail yet fail to grasp the significance of factors in the wider picture. (Harrin 2007: 159-162). An example could be where the project goal is to raise the profile of a branch library in a socially deprived part of a city, urban or rural area. Perhaps it has become shabby with few regular users yet the population would benefit from the support that the branch could offer to raise literacy levels. The 'hard' skills of a refurbishment project will involve planning; buying equipment, managing people such as painters and electricians or perhaps a library refurbishing firm that has been given the contract.

However, refurbished premises will not automatically result in more users. At the start of the project some research will be needed to understand existing user perceptions. Perhaps they find the staff unhelpful or unfriendly. Maybe bus services have been reduced or bus routes changed that are less convenient for the library opening times. These aspects of the project will require the 'soft skills'. Understanding the bigger picture plus user attitudes and staff behaviours, will help the project manager to understand the service point within the community. The success of this aspect of the project will not only depend on careful planning and research; it will also need some creative thinking that helps the team to achieve attitudinal and behavioural change. Changing the physical aspects of the branch is only part of the project. Changing human perceptions, attitudes and behaviours that can be sustained beyond an initial period of curiosity, is the real challenge of the project. Making this happen will require some lateral or creative thinking, not only from the project manager but also from some of the team members.

The popular phrase for this is 'thinking outside of the box' which means just that. Whilst logical thinking is essential for all projects, insight and creativity will be important for solving problems or producing innovations that give the project a 'wow' factor. It is unusual for any project to follow the stages in a linear sequence. Most projects will take different directions and have some unexpected developments during their life cycle. Lateral thinkers are usually able to live with and manage uncertainties. They can turn problems into opportunities. Change is central to most project situations so managing or being part of this change is crucial to success.

## **Understanding organizations**

It is difficult to explain this as a set of skills but an understanding of how organizations work will definitely contribute to the success of a project. It will be important for all team members to have this understanding so that they can call on expertise and resources from different parts of their organizations when needed. (Harrin 2007: 148-150). It will be absolutely essential for a project manager to understand the structures and cultures of the host organization and indeed that of any partners for the project. Organizational politics will almost certainly influence the progress of a project and perhaps the success of the outcomes. Having this understanding may prevent problems, embarrassments and mistakes from happening. Some of this understanding can only be gained through experience of working in organizations but training in project management and a wider knowledge of management theory and practise will also help. A project manager from outside of the organization can gain useful knowledge quickly by studying charts of the structure, internal documents, the intranet or other resources that outline organizational history and performance.

This understanding of an organization will improve the ability to understand the wider context of the project and almost certainly contribute to its sustainability beyond the allotted time for development. It is common for financial support to be given only if sustainability is demonstrated in the project bid. Frequently, the project forms a pilot for a product or service that is intended to be part of a wider portfolio of services. Project teams that understand how organizations operate and interact with their external environments will almost certainly help to ensure sustainability of the project goal beyond the project life cycle.

## **Understanding stakeholders**

This set of skills could be covered in the section Understanding Organizations because in many project situations, organizations are stakeholders. However, the importance of stakeholders cannot be overemphasised. (Harrin 2007: 83-87, 119-120). Some discussion of this is also provided under the previous heading, 'Thinking skills' but understanding stakeholders does merit some separate discussion here.

It can be useful to view the stakeholders as a circle that surrounds a project. Wheels with spokes or a cake cut into portions are useful images. Each spoke or portion can represent the different groups of people who are involved or will benefit from the project outcomes. Whilst everyone will matter, an image could be created to show the size of different stakeholder groups. Size does not necessarily mean power but some analysis of the strength of the group could be useful, especially at the planning stage. Research for a stakeholder analysis can provide evidence to identify their needs, perceptions and attitudes to the project goal. This evidence can then influence the actions developed to work with different groups. (Allan 2004: 21) (Harrin 2007: 109-114).

Team members working on project tasks, will inevitably focus on the task but understanding the eventual impact on the user is vital.

Exploring different perceptions on refurbishment is useful here. Refurbishments of public sector premises can be interpreted by stakeholders in several different positive and negative ways. It can be seen as: a demonstration of how that user group is valued by the organization delivering the service; as a method of spending money quickly; or as a waste of public money. By contrast, refurbishment of retail sector premises can be seen as; a demonstration of the success of the company and a way of spending the profits by putting them back into the system; a method of improving the customer experience; a method for attracting new customers.

The project team members and especially the project leader will need to use their interpersonal skills to develop a real understanding of the different perceptions and positions of their stakeholders. Effective communication, wise use of resources and successful project outcomes will be impressive but the overall value of the project to stakeholders will provide the lasting impression.

## **Conclusion to this document**

Project management offers challenges that can be more visible and accountable than the more mainstream activities within an organization. Projects within organizations can bring disparate parts together through team members who represent their specialisms. Innovation and change has generated increased partnership working across public sector organizations. This emphasizes the importance of project management techniques to manage the complexities of these types of projects. Whilst project management draws on generic management skills it is the adaptability of these skills in the context of a project that generates the need for quality, energy and commitment. Aiming for excellence is the key to a successful project.

## **References**

Allen, B. (2004) Project Management: Tools and techniques for today's ILS professional. London: Facet Publishing.

Business balls (2008). Project management. [ online ]. Available from: <http://www.businessballs.com/project.htm> [ Accessed 21 January 2008].

Harrin, E. (2007) Project Management in the Real World. Swindon: The British Computer Society.

Project agency (2008). Homepage. [ online ]. Available from: <http://www.projectagency.co.uk/index.html> [ Accessed 21 January 2008].