

GOOD PRACTICE GUIDE

A guide to establishing a PMO in an HE environment



Universities and Colleges
Information Systems Association

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1 Purpose of document

The purpose of this document is to provide guidance for higher education institutions considering establishing a PMO function. It includes advice on designing your PMO, and on implementation, as well as providing a set of example artefacts. This guide particularly addresses the situation where the PMO is looking after business change and IT projects only, rather than a joint Estates/IT PMO, although much of the following will be applicable in both cases.

This guide forms part of a set of UCISA Project and Change Management publications including the [Major Project Governance Assessment Toolkit](#) and the guide to [Effective Risk Management for IT and Business Change Projects](#) and is intended to be used in conjunction with them.

2 Why set up a PMO?

2.1 What problems are we trying to solve?

IT projects in all environments have the reputation of failing all too often. Projects in HE institutions either fail or run into difficulties for the same reasons as in other environments but also because of the particular challenges inherent within an organisation where the power base is distributed. Causes of IT project failure within an HE environment include the following:

- Undertaking too many projects at once, through lack of effective prioritisation mechanisms
- Failure to allocate sufficient resources or resources with the right skills to a project
- Failing to follow good practice in project management and a general lack of rigour around project governance
- Using inexperienced project managers, often owing to a culture which does not regard project management as a discipline in its own right
- The need to seek consensus on requirements and solutions from largely autonomous user communities
- Diversity of approaches around fundamental business processes within the same institutions
- Limited availability of funding

All of this is set against a background of increasing demand by students and both academic and administrative staff for better services and higher quality outputs.

The annual investment in capital and IT projects in HE institutions is significant, hence the current drive to be more discriminating as to the projects undertaken and to improve the success rates of those which are selected. There is a need to bring IT projects under control and implement a consistent approach for funding approvals bodies and key stakeholders.

All of these points have led to many HE institutions (or the IT departments within HEIs) deciding that they need a team or individual focused on improving project management outcomes. However, in many cases the view as to what this team will do, and the benefits which can actually be achieved, is unclear; this paper attempts to help to clarify these points.

2.2 How will a PMO help to address these problems?

The PMO provides a single source of information about all projects. This means that the overall demand of the projects portfolio can easily be seen by governance groups, allowing them to take decisions around the number and priority of projects.

Having a central resource allocation process managed by the PMO will allow any resource contention to be highlighted and managed, and areas where new skills need to be developed. It should be noted, however, that this is a challenging area and it will take time and persistence to fully establish resource management.

The PMO, over time, builds up expert knowledge of what constitutes a successful business case within the institution, and can use this to guide sponsors and project managers and help to streamline the initiation of new projects. Similarly, PMO staff will build up expertise in how to engage with the different units around the university and the preferred approaches for each of these.

Improvement in standards of project management, along with guidance for project boards, will help to maximise benefits from projects and programmes, ensuring that the best value is obtained from the funding available.

An effective PMO will provide the following:

Processes to ensure all new project requests are logged centrally and assessed against agreed criteria

Assurance that projects have appropriate business justification throughout their lifetime

Process for post-project reviews to assess whether expected benefits have been achieved

Assurance that projects are run effectively and will deliver the planned benefits

Inculcation of excellent project practice – leading to improved project outcomes

Timely and accurate management information to support decision making and prioritisation

Template documentation and shared information repositories to support the running of projects

Mechanisms for measuring and reporting on project success

Central collation, filtering and sharing of lessons learned

For a PMO to be effective, however, it is essential that it has a champion at the senior management level.

2.3 The benefits of a PMO

The successful implementation of a PMO is expected to achieve the following benefits:

Better project outcomes and reduced likelihood of failure, as a result of improved project practice, achieved through the provision of:

- a centre of expertise for projects
- a central library of projects
- sharing knowledge among project managers
- project assurance service
- better communication and information about projects
- single point of contact for project management matters/advice
- standardised and regular reporting on all projects
- improved project visibility
- improved portfolio management resulting in
- more effective use of resources, both people and money and
- better prioritisation of projects
- improved alignment of projects to strategy, leading to better planning in general

See **Appendix A** for an example of a Business Case for setting up a PMO.

3 Designing your PMO

Your PMO needs to be designed to meet your own organisation’s needs. It is important to be clear about the scope and a plan to meet the agreed priorities based on realistic estimates given the available resources. The steps are illustrated below:



3.1 What do you want the PMO to do?

The term PMO is a generic term which may mean Project Management Office, Programme Management Office or Portfolio Management Office: what each of these does differs widely. The model which is most appropriate for an institution will depend to some extent on the degree of maturity of project management processes and understanding within the organisation, as well as the nature of its projects portfolio. Rather than trying to fit into a predefined model, the HE institution should decide on its requirements and develop a function to meet these, and call the PMO whatever makes sense for its purposes. However, typical differences are as follows:

PMO Type	Purpose
Project Management Office	a local function to set project management standards, produce reports on progress, risks, and finances and carry out support activities (such as managing the risk register and maintaining the project plan) for a specific project
Programme Management Office	a function local to a specific programme to set project and programme management standards, maintain programme level plans, risks, lessons and benefits registers, and collate reports on progress, risks, finances and benefits achievement across the programme
Portfolio Management Office	a central function which collates information from across the different programmes ¹ and carries out analysis to support decisions around which projects and programmes to progress or stop, the priorities to be accorded to each and how resources and funding should be shared out

As a first step, requirements should be sought from key stakeholders. This should include agreed priorities, as a PMO will take time to establish and mature. It will be necessary to identify those activities that will bring benefits immediately, and will be quick and easy to implement, as well as to plan activities to meet the longer term vision.

Quick wins might include:

- the compilation of a definitive list of projects with a few items of key information (sponsor, project manager, budget, timescale) with links to the main documents where they exist and are easily accessible
- the regular production of a dashboard report for management showing a RAG status for each project against time, cost and scope

¹ Note that the term portfolio is often used to include operational activities as well as projects and programmes but for the purposes of this document, it is limited to projects and programmes.

Typical types of activity different PMOs may carry out include:

Activity	Project Mgt Office	Programme Mgt Office	Portfolio Mgt Office
Setting project management standards, including processes, methodologies, and templates	X	X	X
Providing guidance around the standards and in general project and programme management practice	X	X	X
Maintaining a register of current and proposed projects.	X	X	X
Maintaining a library of key project documents	X	X	X
Reporting progress and finances across projects and programmes		X	X
Collecting and reporting on metrics across the portfolio of projects and programmes		X	X
Identifying and managing dependencies, benefits and risks across projects and programmes, and between programmes and their component projects		X	X
Carrying out a range of project support activities, for example, maintaining project plans and risk registers, and organising and facilitating workshops	X		
Assisting with financial management on projects.	X		
Allocating resources to projects, maintaining a pipeline of resource skills and requirements and arbitrating on resource conflicts in line with priorities set by senior management	X	X	X
Managing Project Management as a professional discipline, keeping up to date with new approaches and techniques, and arranging forums and discussion groups	X	X	X
Providing training and induction for new PMs, teams and project boards	X	X	X
Carrying out reviews of lessons learned and feeding these back into project management processes	X	X	X
Acting as a knowledge centre, making available project and programme management related information, such as how projects progress through the approvals process	X	X	X
Supporting the initiation of new projects, helping to identify priorities and ensuring that project proposals are aligned with strategy, and that this process is transparent and communicated effectively		X	X
Ensuring that there is a focus on benefits realisation, including advice on, and scrutiny of, business cases, and ensuring that benefits reviews are carried out following project closure	X	X	X
Providing overall project assurance as well as quality assurance of project documents	X	X	
Continually evaluating the portfolio and recommending that projects are halted, deferred or further progressed, according to their criticality and impact on the organization, and in order to ensure a balanced portfolio			X
Planning the future portfolio and contributing to long term financial plans, helping to prioritise those which are more strategically aligned			X

This is not an exhaustive list and a real world PMO may deliver a mix of project, programme and portfolio activities.

Case studies illustrating different real life PMOs can be found in **Appendix B**.

It may also be that project managers and other project delivery staff are line managed by the PMO. In other cases, the PMO is completely independent of the project delivery staff.

The advantages of the project managers being part of the PMO are:

- the PMO can tap into their experience for reviewing documentation and informing new processes
- they can assist in developing standards, guidance documents and templates and will be particularly motivated to ensure that these are usable and effective
- they are more likely to buy in to the standard approaches and to follow the PMO processes because they have some opportunity for influencing these
- they have links with those involved in projects across the university and so can help to spread (and gather) good practice beyond the department
- they are less likely to regard the PMO as a policing function and so are more likely to be open about project issues

The disadvantages of the project managers being part of the PMO are:

- it can be difficult to scrutinise and provide feedback on documents and progress where the relationship is too close
- project managers will have more of a say about the standards which are implemented and it can be difficult to get a consensus view (whereas a separate PMO is in a stronger position to impose a standard)
- the PMO may be *stretched too thin* and struggle to balance its PMO and project delivery responsibilities

It is essential that everyone understands what exactly the PMO is there to do. The PMO is not an audit function – the focus should be on supporting the successful delivery of projects and helping to improve the project process, rather than reporting on failure.

3.2 Resourcing

A PMO will ideally be staffed by a dedicated team. More frequently, however, within HE environments, PMO activities have to be carried out by those who are involved in project delivery or other roles. Therefore, it is necessary to be realistic about the amount of time which can be allocated to PMO activities and to ringfence a proportion of time for those staff involved.

One of the biggest challenges is in identifying the number of staff needed for a PMO, as there seems to be a dearth of benchmarking data around sizing. The size of the PMO is, therefore, often driven by what is acceptable to the organisation and the functionality of the PMO is scoped to match the available resourcing. One option which has been successfully used to allow the PMO to subsequently expand as needed involves adding a small levy to each project which then ties the scale of the PMO into the scale of the portfolio. Other institutions have clearly defined their PMO as a service and can demonstrate a history of the costs of the service against the benefits, allowing them to make the case for increasing the staff in the PMO. Generally, it is necessary to start with a skeleton staff and prove the value before the staffing requirements become clear and before a case can successfully be made for the optimum team size.

PMOs in HE institutions are a relatively new concept; as a result, experienced PMO staff with HE experience are in very short supply. Bringing in those from a commercial background presents its own problems in that it takes time to understand the HE culture and the practicalities of working in an environment where decisions are not imposed from the centre but are the result of extensive consultation. On the other hand, these non-HE staff should bring a professional approach and experience of excellent project management practice.

Whoever is heading the PMO will need to not only have extensive experience of project management but also resilience, determination and the ability to influence. Generally, they will not be in a position to dictate project management practices but will need to rely on personal influence and good relationships in order to encourage adoption of practices which may be seen as unnecessarily bureaucratic by many in the HE world.

What if there is no resource available?

While the ideal is to have a dedicated PMO team, if funding for this is not available, organisations can still obtain some of the benefits. Project managers themselves, whether within or outside of the PMO can often be used as an additional resource for developing project management materials or assuring projects. Examples of good project documents can be used to form the basis for templates. Implementing a peer review process can achieve quality assurance in the situations where PMO resource is constrained. An administrator with the occasional hour to spare might be persuaded to maintain a rudimentary project register or to compile a simple dashboard report.

3.3 Thorny questions

There are a number of questions which need to be answered before the PMO is designed and, although these are simple questions, arriving at a consensus view can be difficult.

1. What is to be considered *a project* for the purposes of PMO processes? Often the answer is based on the project cost (e.g. if it is over £30k, then we will treat it as a project; otherwise it is a work request). One of the issues with this is that the costs are not always obvious right at the start so an initiative may need to become a formal project later on, once the true costs are understood, and a process is needed to accommodate this. Also, one project may be costly but straightforward (e.g. the replacement of hardware) while another involves little cost but its success might impact on the reputation of the organisation or may involve a change to meet legislation with a risk of a penalty for the organisation. A better approach might be to base the decision on the level of risk, taking into account such factors as the number of users, potential reputational damage, likely cost. An example of a risk evaluation table can be found in **Appendix C**.
2. What will happen to those initiatives which fall outside of this definition and are deemed not to be projects? While these may not be the concern of the PMO, it is important that the organisation puts in place a process to take these forward.
3. What information will the PMO need to gather and report? Typically, PMOs report on projects assessed as either red, amber or green – a *RAG status*. It is essential that rules are agreed around the meaning of these and the action which each status should trigger. Will there be any consequences, e.g. reference to a more senior committee, for those projects which repeatedly report a red status, for example?
4. Are there Key Performance Indicators which the PMO needs to gather? An example would be the number of projects which do or do not deliver to budget. It is far easier to develop a process to collect this information at the outset than to have to trawl through dozens of closure reports at the end of the year to produce the metrics required.

4 Implementing the PMO

4.1 Stage One – the embryonic PMO (*the early months*)

There are a few fundamentals that a PMO will need to establish and getting these right will provide a firm foundation for the more visible outcomes. Some organisations will be able to implement these more quickly than others.

4.1.1 Deliverables:

Aim to achieve the following:

- A clear definition of what constitutes a project which falls within the remit of the PMO – **Appendix D** provides an example of a PMO Charter.
- An accurate list of all current and proposed projects, and a process to ensure that this remains up to date.
- The establishment of a basic reporting cycle and a standard reporting format – see example dashboard in **Appendix E**.
- A documented process for the initiation of projects.
- An understanding of the project funding model and the ability to explain this.
- A repository for PMO documentation and naming conventions.
- A means of publishing information (e.g. a website), at least, and/or, ideally, a collaborative site (e.g. Wiki or Sharepoint).
- A view as to whether to adopt an off the shelf methodology (and which one) or create your own, plus a basic set of templates for mandatory documents (e.g. Project Brief, PID or Project Charter, End Project Report, Risk and Issues Log etc).

4.1.2 Tools and technologies:

- Manual processes and the use of spreadsheets rather than sophisticated PPM tools are fine as the processes will inevitably have to be tweaked.
- If time is internally charged and staff are already used to recording their time, it may be worth investing in a simple timesheet tools which can provide useful reporting.

4.1.3 Stakeholder engagement:

- Establish connections and ongoing communications with other groups such as Strategy, Finance, Senior Management, governance bodies.
- Get to know the project managers and their problems. What can you do help address these issues?
- Secure a senior management champion – someone who will support the PMO's aims and will promote its use amongst their peers.

4.1.4 Risks:

- There are insufficient resources to complete Stage 1.
- Lack of buy-in from those running projects means that information gathered is incomplete or reporting inaccurate.

4.1.5 Key Points:

- Keep documentation to a minimum set and concentrate on the quality.
- Accuracy of reporting is essential to the credibility of the PMO.

4.2 Stage Two – the evolving PMO (*over the following year*)

4.2.1 Deliverables

Aim to achieve the following:

- Cross project reporting on finances and a number of metrics showing project performance.
- A methodology, which includes guidelines, processes and a comprehensive set of templates.
- Processes for learning lessons from projects and a means of feeding these back into the methodology.
- Benefits definition and measurement processes.
- Training in project processes for project managers, project teams and project boards.
- A means of project managers sharing information and support (e.g. monthly forums, discussion boards, peer reviews).
- Resource allocation processes and reporting.
- Basic assurance activities.

4.2.2 Tools and technologies:

- Start to consider PPM tools once processes are firmly established.
- If time is internally charged and staff are already used to recording their time, it may be worth investing in a simple timesheet tool which can provide useful reporting.

4.2.3 Stakeholder engagement:

- Begin to work with Project Boards. What can you do to help them? They may want help with assurance, identifying risks and lessons learned, or may have some specific reporting needs. At a minimum, the PMO should be able to explain to Project Board members their role and responsibilities, and provide an overview of the project management and approval processes to be followed.

4.2.4 Risks:

- Senior management reporting requirements escalate beyond the capacity of the PMO to provide.
- The PMO seen as *interfering* rather than as supportive and useful.
- The information revealed by open reporting causes consternation.

4.2.5 Key points:

- Maintain hard won buy-in from stakeholders by regular engagement.
- The cost of PPM tools may be a shock to senior management – you will need to work hard on the business case.

4.3 Stage Three – the established PMO (18 months plus)

- By this stage, the PMO should be established to the extent that it is seen as the primary point of information about projects, project managers are used to working with the support and standards it provides and management value the insights provided. From this stage, some of those activities which provide increased benefits to the University but which require a greater maturity of project management practice can gradually be introduced. This may include activities commonly associated with portfolio management, such as providing decision support to develop a balanced portfolio, and greater responsibility for resource management. Better information will be available and the demands for providing data in different ways to support senior management and governing board decisions will increase.

4.3.1 Tools and technologies:

- Maximise use of PPM toolset so that PMO time is concentrated on high value activities.

4.3.2 Stakeholder engagement:

- Look for ways to keep the engagement fresh.

4.3.3 Risks:

- The PMO is too remote from the project managers and is no longer seen as a *critical friend*.
- With higher end activities (more portfolio management than project support) comes the need for staff in the PMO with more specialist skills.

4.3.4 Key points:

- The PMO needs to be seen as being of high value by both senior management and project managers by this stage, and should be able to demonstrate measurable improvements in project delivery.

It is worth carrying out a maturity assessment annually to evaluate the progression of the PMO and inform the following year's goals. More information is available at **Appendix F**.

Appendix A: Business case for a PMO

Business case

1. Background

IT Services is involved in the delivery of approximately projects to the value of £15m each year in order to maintain its services and respond to the rapidly changing requirements of the University. This portfolio of projects represents a major investment and there is a need to ensure that there is a sound basis for the investment in each case, that risks are being managed effectively and that adequate resources and processes are in place to support and assure delivery.

2. Objectives

The objective of this proposal is to establish a Project Management Office, reporting to the Head of Information Systems, which will provide the information needed for an effective approvals process and an overall framework, assurance and support for the implementation of business change and IT projects. The Project Management Office will be led by an experienced project practitioner, supported by two project analysts and an administrator. The Project Management Office will work closely with the Information Security team, project managers, IT senior managers, governance groups and senior stakeholders from across the University to ensure that the portfolio of business change and IT projects is aligned to University strategic objectives and that projects follow best practice processes.

The proposal also covers investment required to provide software tools and systems to support the activity of the office.

The Project Management Office will provide:

- A portfolio management process such that all new requests can be logged centrally and filtered against agreed criteria.
- Assurance that projects undertaken throughout IT Services have appropriate business justification, that this justification is questioned and reassessed throughout the lifetime of the project and that post-project reviews are carried out to ensure expected benefits have been achieved.
- Assurance that projects are run effectively and deliver the planned benefits.
- The inculcation of excellent project practice in key people both within and outside of the PMO.
- A system that all IT Services staff will use to record time spent on various activities to enable improved financial accounting, project planning and estimating.
- Timely and accurate management information to support decision making and prioritisation.
- Dissemination of project management best practice to the rest of IT Services and other parts of the University as appropriate.
- Provision of a standard methodology including templates, guides and other documentation along with shared information repositories to support the running of projects.

3. Outline Business case

3.1 Benefits

The successful implementation of a Project Management Office is expected to achieve the following benefits:

Benefit	Target	Current metric	Value ²
All projects aligned with the University strategy	100%	None	
Improved rates of project delivery to time and budget	50% of projects delivered within time and budget	% of projects meeting both time and budget = 35%	£
Cost savings through reduced overrun due to better estimating, planning and risk management, and avoidance of resource conflicts through better planning across the portfolio	Average overrun <5%	Average overrun is 10%	£
More projects meet their objectives with deliverables meeting user acceptance criteria, resulting in a cost saving	Percentage of projects signed off as satisfactory, without follow-on work, exceeds 95%	10% of projects require additional work in order to secure sign off by sponsors	£
More optimised resource allocation, leading to improved productivity, a reduction in overtime payment requests and reduced reliability on external resources	Project staff fully allocated to projects > 175 days per year	None but project staff complain of peaks and troughs	£
Projects which are non-viable are identified and withdrawn at an earlier stage through regular and thorough reappraisal of business case	95% projects shown to have delivered benefits	No projects withdrawn but 10% do not deliver sufficient benefits	
Improved stakeholder perception of projects	Stakeholder survey shows 90% satisfaction	Anecdotal and several complaints to Director	

3.2 Costs

Cost elements	Initial setup	Ongoing p.a.
Staff costs – PMO staff	£	£
Training – professional qualifications for PMO staff and maintenance of qualifications	£	£
Initial software purchase and implementation	£	
Software licences and hosting charges		£
Totals	£	£

3.3 Risks

The risks around setting up a Project Management Office are mainly concerned with the level of acceptance from project managers and project sponsors. Stakeholder management and consultation will be essential to the successful implementation, and a senior level champion is key to addressing these risks.

Risk	Severity	Mitigation
Initial lack of acceptance by project managers – PMO seen as policing rather than supporting	Medium	<p>Involvement of project managers in the setup of the PMO</p> <p>Requirements gathering to include the needs of project managers</p> <p>Ongoing feedback to be sought</p>

² Wherever possible a financial value should be calculated against benefits

Risk	Severity	Mitigation
Processes seen as bureaucratic by stakeholders	Medium	Frequent consultation and a communications plan which addresses the needs of this group and sells the benefits to them and the organisation Senior management support is visible
PMO does not meet the expectations of senior management	High	Realistic benefits and timescales set out and regular reporting against these
The concept of a PMO does not fit well with the University's culture making it difficult to achieve benefits	High	PMO is designed to work with the University and is aiming for incremental improvements in project delivery Sponsors and project boards to be trained and given ongoing coaching. Reporting designed to meet senior management priorities
Unable to attract or retain suitable PMO staff	Medium	Job design needs to ensure that work is varied and that clear development paths are identified

Appendix B: Case studies

The following three case studies illustrate different types of PMO implemented in HE and different approaches to establishing them. Case Study 1 illustrates what can be achieved even where PMO resource is very limited, Case Study 2 demonstrates that an established PMO may need to alter its purpose to meet a changing context, and Case Study 3 shows an evolutionary approach to establishing a PMO, beginning with the needs of a particular project.

Case Study 1 – Implementing a small scale PMO (University of Warwick)

A University IT services department employed one experienced and qualified project manager, who followed PRINCE2 as his preferred methodology. He took on responsibility for managing the major IT projects and was extremely successful at delivering projects to the satisfaction of users across the university; many smaller projects were carried out by other members of the IT department typically without training or following an established methodology. This worked fairly well until the growth in IT usage and demand for new functionality and new services led to an increased need to initiate large change projects, leading the IT department to employ additional project managers, each of whom was experienced and qualified but followed very different processes and methodologies for delivery. Governance groups and stakeholders became confused when confronted with a range of different styles and documents for project delivery and their confidence in the delivery process reduced. In addition, with the larger number of projects ongoing at any time, the senior managers within the IT department found that they had little management information about the department's total commitment (in terms of both resources and budgets) to projects and that projects reported in different ways and to different timetables so it was difficult to pull together a view of progress.

One of the senior managers identified the need for a project management office which would determine standards, support the project managers and provide the reporting needed by the department's managers. One of the current project managers was appointed as PMO Manager with the remit of establishing a PMO and line managing the project managers, as well as continuing to manage projects herself. A PMO administrator was also appointed to maintain project information, templates, finance reports and organise the governance meetings with the senior management team. Hence the PMO consisted of 35% of the PMO Manager's time and one full-time administrator.

Owing to the lack of specific PMO resource, the existing project managers were engaged in the development of an agreed set of templates and processes. This had the beneficial effect that they were already bought in to the processes they subsequently were required to follow, and made good use of the extensive experience of these individuals. As a result of their strong professional experience and their previous training and qualifications, it was possible to introduce a relatively sophisticated set of templates and processes.

The main focus of the PMO was on reporting across the projects, introducing a consistent approach and ensuring that projects adhered to the agreed approvals process. The size of the PMO (1.35 FTE) meant that there was little scope to offer project support, produce adhoc reports or analysis of statistics but the main aims for that department were achieved (standard approach, basic management reporting, proper governance for projects) and a professional project management service was introduced.

A small scale PMO needs to be very focused – rather than carry out an extensive range of activities, it is preferable to excel in delivering a more limited range of services and build on this over time.

Case Study 2 – Re-purposing an existing PMO (University of Oxford)

The University merged three IT departments, each having very different cultures and processes, to produce a single central IT Services department. One of the component departments had a well-established Programme Management Office offering a standard methodology and project support to its project managers and producing a weekly dashboard for senior management, and projects were run by experienced project managers. The other two departments did not have any formal PMO function although some PMO functions were carried out by various individuals as part of their roles and projects were managed by subject matter experts with differing levels of project management experience. The approach to project approvals was different across the three departments with funding obtained from different bodies.

Until this time, the current PMO had been heavily focussed on providing project and administrative support to projects, ensuring compliance with its complex methodology and administering the PPM tool, MS Project Server. It was resourced by two administrators, one analyst and a manager. While the project managers did not report in to the PMO, the PMO and project managers reported to the same director.

The existing PMO would now support projects across the new department but needed to do this without increasing its headcount. The PMO team therefore found themselves facing a significantly increased number of projects, of a wider variety which would be managed by people with varying levels of project management expertise. It

was, therefore, necessary to change the objectives of the PMO, withdrawing administrative and hands on project support to the project managers and focusing on the broader portfolio. The PMO from that point became a Portfolio Management Office and its reporting line was moved to the CIO's Office to ensure that it was independent of the project managers.

Its primary focus initially was on producing an accurate project register which included all projects from across the three component departments. The first challenge was to define what would be considered a *project* and gather a list of all activities within the new department that met that definition. It was clear that there were many different views as to what constituted a project and this activity took several months and some negotiation. A number of activities that might be considered projects were at this stage still below the radar but many of these surfaced once they needed to seek funding.

Alongside this, the PMO set up a reporting cycle with all projects sending in monthly highlight reports from which key information was collated into a portfolio dashboard and issued to senior management. As this practice was new to some of those managing projects, the PMO took a pragmatic attitude towards the quality of the reports until the practice of monthly reporting was fully inculcated.

During the first year of the new department, project funding was still being provided from two separate funding groups with very different financial reporting. The PMO worked closely with the Finance Team to monitor approvals and spend over the year against the two separate envelopes. After the end of that year, finances were simplified by having a single funding body but recharging resource time to projects was introduced and the PMO worked with Finance to deal with the many concerns arising from this.

A number of project templates were quickly produced for use across the department but a standard methodology which would be applicable to a wider range of project types was introduced in the following year. Statistics taken before and after implementation of the methodology show that project delivery success has increased since implementation.

Three years on, the PMO has established itself firmly as the source of information for all projects, its reports are relied upon by senior management and governance groups and the project methodology is helping to improve success rates. The next challenges are to introduce an assurance framework to improve delivery further and to introduce better information to support portfolio management.

Case Study 3 – Establishing a Portfolio Office (University of Derby)

The IT department employed project managers whose remit was to deliver IT strategic projects, for example, installation of infrastructure such as the telephony system. This was sometimes done in a reactive way with little future planning.

In 2006, the University undertook a large scale project to replace the student records and finance system. This project required staff from across the University and a third party delivery supplier, releasing University staff from their jobs in Finance, IT and Student Administration. These staff formed a large project team for 18 months, creating new roles and specialists to disseminate knowledge about the system to the wider University.

In 2010, the IT Director restructured IT Services and created the Business Analysis and Project Management team, there was a need for Business Analysts so that the Project Managers could focus on delivering projects, saving time and streamlining the project management process. In 2012 the team changed its focus to a more strategic one, looking at projects with IT involvement across the business, and changed its name to IT Portfolio Office (ITPO). This was as a result of the creation of the Executive-led IT Steering Group comprised of Corporate Management Team business managers whose role is to oversee the priority list for IT developments across the University in relation to corporate and local plans and to resolve conflicts of priority. The ITPO changed focus in order to support the IT Steering Group, to provide management information regarding the status of current and pipeline projects and to deliver the approved projects. To assist with this, the Project Management Framework was created along with templates for project documentation and the Portfolio Specialist role was created to track and report on the IT Portfolio and ensure consistency in running projects across ITS.

The core ITPO team now consists of two Business Analysts, three Project Managers, three Project Officers, a Portfolio Manager and a Portfolio Specialist. All staff are cross trained, all are now Prince2 Practitioner qualified, the Business Analysts are IIBA or ISEB trained and the Project Managers and Project Officers are training to be similarly qualified in Business Analysis.

The ITPO vision was that 'the University business will come to the IT Portfolio Office when it needs to conceptualise, deliver and monitor Enterprise or Strategic Projects'. The following activities were prioritised:

Activities were given explicit deadlines and these are proactively chased and closed if necessary. Deadlines are communicated via project status information, documentation and updated risk and issue registers for a bi-monthly reports.

The focus of activity moved from tactical to strategic, and internal IT projects are only managed by the ITPO in exceptional circumstances, such as where there would be a reputational or political impact from the project that would require an experienced Business Analyst or Project Manager to progress the work. The team is now focussed on the delivery of strategic projects for the business and internal IT projects are generally delivered by IT staff outside of the ITPO.

Individual Specialists or Subject Matter Experts have been created within the team, and the Business Analysts have become domain experts in some of the core systems that the University use.

Benefits measurement and the articulation of Portfolios, Programmes, Projects and Analysis needs are communicated to the business via bi monthly status reports that are sent to ITS Leadership and a Portfolio Review held with the IT Director at the end of every month.

The culmination of these activities has meant that ITPO can now provide reports to inform decision making at CMT and Executive level, ensure that strategic projects and programmes can be prioritised and ITS resource can be better managed.

Appendix C: Risk Assessment

The purpose of the following matrix is to identify the inherent risk of a project at initiation by evaluating a number of factors that typically affect complexity and providing an overall score. This moves away from the standard approach of evaluation based on cost alone, and allows the highest risk projects to be identified so that extra assurance and oversight can be applied, regardless of scale. Note that this is only evaluating underlying risk factors, not how well those risks are managed during the project lifecycle. See the UCISA guide to [Effective Risk Management for IT and Business Change Projects](#) for guidance on risk management.

An explanation of each of the factors is as follows:

Business continuity following implementation – an estimate of the degree to which the normal university operations would be impacted in the event of the new or changed service failing. For those services which are used only at particular times of the year (e.g. admissions systems), the university's ability to manage without the system during the normal period of use should be assessed.

Complexity – the complexity of the solution in terms of the number of interfaces and the degree of business change to be experienced by the users.

Degree of innovation – where the proposed technical solution has been implemented previously and how well-proven the technology is.

Business scale – the number of areas within the university which will be impacted by the solution.

Reputational risk – the breadth of reputational damage in the event of either project or programme failure or of the failure of the implemented solution.

Duration – the length of the project or programme (not the effort). Projects which take longer (regardless of the effort required) are more likely to fail for a number of reasons including loss of momentum and changes to the business during the project.

Staffing – where a project is to be delivered entirely by one team, there are likely to be fewer areas of uncertainty or conflicting priorities or motivation. The greater the number of different teams involved, the more difficult it is to control the project.

Compliance requirements – risks around implementing a service which needs to comply with particular regulations or where the data is to be submitted to an external body, for example, for funding purposes.

Cost – includes the cost of developing and implementing the service only (i.e. the project costs, not the ongoing costs. Although these must have been included in the business case and approved, there is no greater risk *to the project* if these are high).

Risk factor	Business continuity following implementation	Complexity	Degree of innovation	Business scale	Reputational risk	Duration	Staffing	Compliance requirements	Cost
Weighting	1	1.5	1	1	1.5	1	1	1	1.5
0	University could continue to operate effectively with workarounds for more than a month	No interfaces, very little business change	Proven technology currently used in a university	One section	Limited to IT department	<3 months	Team	None	<£100k
1	University operations could continue for a period of up to 2 weeks	<4 interfaces, moderate amount of business change (processes only)	Proven technology currently used in public sector	One division	Local	3–6 months	Multi-team within IT department	Internal only	£100k–£250k
2	University operations would be seriously impacted if the system were lost for more than 2 days	5 or more interfaces, significant business changes (structure, roles and responsibilities)	Unproven technology (leading edge), new to the university and public sector	Multiple divisions	National/ international	6–12 months	Beyond IT department	Regulatory or reporting to external bodies e.g. HEFCE, REF	£250k+
Score	1	1.5	2	1	1.5	2	2	0	1.5
								Total:	12.5

Appendix D: Example PMO Charter

This is an example of a charter for a small project management office staffed by a dedicated team. It includes examples of the team's objectives and KPIs.

PMO Charter

1 Purpose and remit

The purpose of the PMO is to enable the successful implementation of business change and IT projects and programmes through:

- setting and embedding standards to ensure a common approach to project delivery
- managing cross programme risks and dependencies
- regular project reporting to manage costs, resources, timescales, and quality
- providing resources, support and guidance to project teams, and
- promoting continuous improvement across programmes and projects

Key activities:

- Defining standards for managing programmes and projects within IT Services and ensuring adherence to these
- Allocation of resources (including business analysts and project managers) for IT programmes and projects
- The provision of project support comprising advice and guidance on the methodology, use of information repositories, timesheets and PMO processes as well as administrative activities
- Providing guidance on project related matters and advice on project management training and development
- Collation of financial information
- Dissemination of best project management practice for IT Services and key stakeholders, including induction for Project Boards
- The provision of templates, process charts, and shared information repositories to support the running of projects
- The provision of timely and accurate management information on projects and resources to support decision-making and prioritisation
- Maintenance of a register of business change and IT projects and management of the pipeline of new project requests
- Internal project health checks and coordination of independent assurance activity

2 Key stakeholders

- Project sponsors from university departments
- IT Services Management team
- IT Services finance administrator
- Programme/Project managers for IT programmes and projects
- Business Analysts
- IT Services Training team
- Users of the timesheet system

3 Staffing

The PMO team comprises the following roles:

- i. PMO Manager – manages the day to day operation of the PMO, defines PMO strategy and line manages PMO staff
- ii. PMO Analyst(s) – assisting with the definition of, and ensuring compliance with, project management standards and processes, providing advice to project managers and producing reports for senior management and governance groups
- iii. PMO Administrator – maintaining portfolio registers, producing the monthly dashboard, supporting the assurance group
- iv. Programme Support Officer(s) – working within a specific programme maintaining plans and budgets, collating monthly reports and providing assistance to the programme manager(s)

4 Key objectives

Objective	Rationale	Activities
1. Develop the Programme Management Office as a centre of excellence for management of all types of IT projects and programmes	To support programme and project managers by providing tried and tested ways of working, building on PMs' collective experience of project delivery	<ul style="list-style-type: none"> ● Maintain a repository of good practice information, tools, techniques and templates on project and programme management topics (such as stakeholder management, communications planning, estimating) ● Maintain knowledge of PM practice in other organisations and across the HE sector ● Establish and maintain a list of common lessons learned and update the methodology to ensure that lessons learned are reviewed before a new project is initiated
2. Review the project approvals process	<p>To ensure that investment in projects has a sound basis</p> <p>To minimise duplication of solutions for different customers and ensure that solutions fit with technical roadmaps</p> <p>To provide a basis for prioritising projects when IT Services or customer resources are limited</p>	<ul style="list-style-type: none"> ● Review the existing processes for approval both within and beyond IT Services and update these ● Make available good examples of Business Case documents ● Monitor support from the management team and external Boards ● Brief the appropriate groups and review feedback
3. Improve capability to manage projects using an agile methodology	To meet the demand from our customers to deliver IT changes more rapidly and achieve benefits earlier	<ul style="list-style-type: none"> ● Establish the supporting processes and methodology ● Ensure that project managers gain experience of managing agile projects as opportunities arise ● Incorporate changes indicated by lessons learned reviews and other feedback ● Promote the agile approach with sponsors and other key stakeholders and respond to their feedback
4. Improve the processes for managing resources	<p>To forecast future needs and ensure that appropriately skilled resources are available to work on programmes when required</p> <p>To ensure optimum cost recovery</p>	<ul style="list-style-type: none"> ● Maintain a project register incorporating current and potential projects and programmes ● Select and implement a new resource management tool ● Redefine processes for planning and review these with the PMs to ensure that they are workable ● Define reporting
5. Implement tools and processes for document management and collaborative working across IT Services initially	<p>To increase efficiency through easy retrieval of project artefacts and improved version control</p> <p>To share best practice and support, encourage scrutiny and challenge, and increase participation in programme initiatives</p>	<ul style="list-style-type: none"> ● Implement a document repository and agree the supporting processes and resources ● Use the recent pilot to identify the best way to structure content and gain the buy-in of stakeholders ● Champion the effective use by making it the default communication/collaboration method for all PMO activities

Objective	Rationale	Activities
6. Improve reporting on projects and programmes	To provide consolidated management information on a highlight and exception basis, allowing successes to be celebrated and mitigating actions to be agreed	<ul style="list-style-type: none"> ● Establish management requirements for dashboard information and ensure that regular project reporting supports these ● Work with the project managers to improve the consistency and standard of project reporting ● Gather metrics on key performance indicators ● Set up a process for maintaining project information on the web
7. Establish a programme of project health checks and coordinate independent assurance	<p>To identify good practice which can be adopted for other programmes</p> <p>To identify factors which may lead to project failure and to provide mentoring and support to PMs so that these can be addressed</p>	<ul style="list-style-type: none"> ● Publish the project healthcheck process ● Schedule healthchecks for all small projects ● Agree reporting on these
8. Maintain effective governance business change and IT projects and programmes	To measure the success or otherwise of projects and programmes and use this to improve future performance	<ul style="list-style-type: none"> ● Maintain the gate review process and use the collated results to identify areas for development ● Run the project plan audit and identify reasons for poor results (below 85%)
9. Maintain and continuously improve the IT development methodology	To ensure that the methodology is relevant for and incorporates lessons learned from projects over time thereby increasing the likelihood of project success	<ul style="list-style-type: none"> ● Launch an updated variant of the project methodology incorporating audit recommendations and feedback from PMs ● Implement programme variant of the methodology
10. Track dependencies, risks and resourcing conflicts across the portfolio	To identify potential conflicts and impediments so that the management team can address these	<ul style="list-style-type: none"> ● Maintain the portfolio risks log and monitor progress against actions agreed by the management team ● Map out dependencies between programmes (including key BAU commitments and business cycles) and highlight any major concerns ● Map out resource requirements against all programme plans and highlight areas of concern
11. Establish a process of focussing on benefits throughout programmes	<p>To ensure that value is delivered for our customers</p> <p>To provide the information to support the decision to halt, re-scope or re-plan a project which is unlikely to deliver value</p>	<ul style="list-style-type: none"> ● Incorporate business case reviews into key stages of the methodology and the gate reviews ● Review benefits realisation plans at the outset of projects. ● Carry out benefits reviews after projects have closed ● Collate metrics on achievement of benefits ● Brief PMs on the process
12. Develop and retain a team which has the appropriate competencies to deliver and develop the PMO service	<p>To maintain the credibility and resulting effectiveness of the PMO</p> <p>To ensure that PMO staff are motivated and are able to effectively contribute to the development of the PMO</p>	<ul style="list-style-type: none"> ● Identify and respond to development needs and aspirations where possible ● Redefine the PMO roles to meet new ways of working and recruit or develop to meet these ● Focus on effective recruitment of both permanent and temporary staff to engage high calibre individuals

5. PMO metrics

The following information will be gathered for projects and programmes on a monthly basis and collated for an annual report:

Metric	Purpose
Number of projects delivered to timescales defined in Project Initiation Document	Identifying any issues with estimating time/cost or managing scope and to build up knowledge over time which will help to improve these
Number of projects delivered to budget defined in Project Initiation Document	
Number of projects raising a change request for budget and/or timescales	
Average value of budget change requested	
Value of benefits delivered	Identifying reasons for, and frequency of, benefits not being achieved - for example, may show that business cases are insufficiently thought through or problems in identifying requirements, so improvements can be fed into PMO processes
Number of projects achieving the defined benefits within two years	
Number of projects rejected, deferred, re-scoped, or cancelled and at what stage	Identifying the overall success of the approvals process – e.g. are non-viable projects weeded out at an early stage? Are we too inflexible?
Scores for gateway reviews	Taken with the other metrics, identifying the correlation between following the methodology and project success (in terms of time, budget and quality achieved)
Customer satisfaction ratings at end of projects	To identify any issues such as unmanaged customer expectations. This qualitative data should always be reviewed alongside the other metrics
Level of compliance to project methodology	To identify whether projects are following the agreed processes. May be used in conjunction with earlier metrics to identify the correlation between following methodology and project success

Appendix E: Example Projects Dashboard

IT Programme and Project Summary Dashboard (w/e 30 April 2015)															
Project ID	Project	Timeline			Financials			Project stage	Overall status this month	RAG status indicators					Summary
		Start	Original end date	Revised end date	Approved budget	Spend to date	Total expected spend			Budget	Timeline	Scope	Risk	Issues	
PMO001	Examination Marks	Jun-14	Apr-15	Jun-15	£193,479	£158,113	£194,984	Early Life Support and Closure	G	G	G	G	G	G	The team is now fully engaged on running th Early Life Support for the new Examinations system. New processes have been embedded and all staff trained.
PMO003	Service Desk Tool Enhancements	Nov-14	Jun-15		£69,483	£52,051	£68,012	Delivery	A	G	A	G	A	G	Delays due to resource contentionwith BAU work mean completion timescales are at risk. Plan is being re-baselined.
PMO004	Degree Ceremonies	Feb-15	Dec-15		£112,526	£5,850	£112,526	Analysis and Planning	G	G	G	G	G	G	Initial meetings with college representatives have been completed. PID under development.
PMO005	Exam Timetables	May-14	Dec-15		£172,134	£84,812	£172,134	Delivery	G	G	G	G	A	G	Risks around SSO solution design have been identified but mitigation has been proposed.
PMO006	HR Upgrade	Feb-14	Jul-15	Aug-15	£113,600	£109,696	£113,600	Delivery	R	G	R	G	A	R	1 X P1 and 1 X P2 defects still to be resolved before go live. Delay in implementation is forecast and alternative dates being agreed with users.
PMO007	Purchasing Database	Jan-14	Sep-15		£83,042	£44,585	£81,032	Delivery	G	G	G	G	G	G	Technical Servicesworking on the provision of the TEST, TRAIN and UAT environments. UAT is nearing completion.
PMO009	Alumni Online Experience	Apr-14	Oct-15		£35,205	£44,585	£35,205	Delivery	G	G	A	G	G	G	Release 2 was loaded and tested successfully, but there is an issue with the availability of the technical resource responsible for implementing the change to the live service. This is not expected to affect the overall timescales significantly.
PMO010	Case Management System	May-15	Oct-15		£115,032	£12,855	£90,239	Analysis and Planning	G	U	G	G	G	G	Project Brief approved on 20th April. Budget changed to PURPLE since the forecast is now 11% underspend. The forecast underspend is due to full tendering no longer needed.
PMO011	Casual Payroll	Apr-14	Apr-15	Jun-15	£172,917	£140,325	£166,073	Delivery	R	A	A	A	G	R	Implementation of the solution into the various test environments has been inconsistent and unreliable. UAT identified a major defect so implementation could not proceed. Implementation has had to be delayed until June.
PMO012	CMS Service – Phase 3	Apr-15	Jan-16		£131,495	£22,638	£133,270	Scoping	G	G	G	G	G	G	The project manager is engaging the relevant teams to agree the project approach in areas such as: Information Security, Change Management, Service transition, Training and Testing. The PID for the next phase is expected to be reviewed by the Project Board on the 1st June.

Appendix F: Maturity assessment

There are a number of maturity assessments available, of which some are free for anyone to use providing they register their details with the organisation which owns them. The free options offer a set of questions which you self-score. However, organisations such as Gartner, can also provide a service whereby an analyst facilitates an assessment and then provides advice based on the outcome.

The assessments identify key capabilities and behaviours which indicate the degree of maturity of a PMO and can act as a useful guide to position how effective your PMO is. Of course, moving up the maturity levels generally involves a significant investment in terms of time and money which is not necessarily easy to justify in a cash strapped HE environment. It may be that reaching the top level of maturity is not even desirable if other practices in the organisation are immature.

The concept of PMOs (and even formal project management) is relatively new to many HE institutions, and there is considerable scepticism to overcome, so a low maturity score is typical.

It is recommended that you carry out an assessment of programme management and project management maturity alongside the PMO maturity assessment, as these need to be aligned. The same organisations provide models for these.

A couple of examples of maturity models are:

<https://www.axelos.com/best-practice-solutions/p3m3/p3m3-maturity-model.aspx>

<https://www.gartner.com/doc/2837917/itscore-overview-program-portfolio-management>

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