



Research PMOaaS



Research Project Management Office as a Service

A PMO Package for Research Institutions

Web: www.NJM-Consulting.com
Email: info@njm-consulting.com
Tel UK: 0044 (0)1223 926 636
Tel NL : 0031 (0) 621 356 041

NJM Consulting PMO Limited
Allia Future Business Centre
London Road
Peterborough, PE2 8AN

Document Information

Project Name:	PMO as a Service – Research PMO	Document Version No.:	V1.3
Document Title:	NJM_01_PO_NJM-Consulting-ResearchPMO	Document Version Date:	1 Dec 2017
Prepared By:		Review Date:	1 June 2018
Title:			
Reviewed By:			

Version History

Ver. No.	Ver. Date	Revised By	Reviewed By	Description
0.1	25-Oct-2017	Nik Morris	Nigel Hillman, Shane Barrington-kendle	First draft
1.0	30-Nov-2017	Nik Morris	Nigel Hillman, Shane Barrington-kendle	Second draft
1.3	01-Dec-2017	Nik Morris	Nigel Hillman, Shane Barrington-kendle	Published

Table of Contents

1	Introduction - NJMC Research PMOaaS	3
2	Why Use PMO as a Service?	3
3	Summary - NJMC Research PMO as a Service	4
	Governance	4
	Schedule Management	4
	Finance Management	4
	Project Reporting	4
	Project Risk Management	5
	Project Issue Management	5
	Project Change Management	5
4	Detail - NJMC Research PMO as a Service	5
	Schedule Management	5
	Project Plans	6
	Risk Management	6
5	Project Financial Management	7
	Project Close	8
& FooterError! Bookmark not defined.	
6.1	APPENDIX	8

1 Introduction - NJMC Research PMOaaS

Our Research PMOaaS package is specifically designed for Universities, Colleges, Academic R&D teams. While the package can be used in most research environments it was specifically designed with the following in mind:

- Robotics
- Internet of Things
- Artificial Intelligence
- Machine Learning
- Smart-City

The successful management of a research project depends upon the researcher's ability to plan, coordinate and perform the research. All research projects need structure, a system to be used to provide good and systematic governance.

One of the challenges that people face when trying to manage research is that they might feel that the managing the multiple management elements is not doing work that they are best suited for and that learning how to do it is entirely an overhead. Unless you have experience in **project management**, this skill is something you and/or someone else will have to learn while working as a researcher. This is not always a terribly efficient use of a highly skilled and specialized resource.

A Project Management Office provides a pool of very skilled staff, experienced in programme & project management who can provide management skills that can free you and your staff up to focus on the cutting-edge research that society needs.

2 Why Use PMO as a Service?

To put it simply, using a PMO service can free your resources who are skilled in specialist areas to focus on what they know best. We provide value in this way while provide a central point to tie often disparately located teams together and avoid re-learning or unnecessarily repeating activities.

- Using PMO as a Service (PMOaaS) gives these advantages:
- The service can start within 48 hours of being requested.
- The service brings with it all the tools needed; Project Management software, supporting software (Office 365 E5), project data analytics, secure data storage (at rest and in transit).
- The service is backed by an entire team so there is no single point of failure
- GDPR experience
- Project Prioritisation services (NJMC's Portfolio & Project Engagement Service)
- Continuity across multiple project and/or programmes
- Partner companies that allow us to provide software and services at preferred rates.

3 Summary - NJMC Research PMO as a Service

NJMC is a PMO as a Service provider to business large and small and we work a lot in business incubator spaces in the UK and the Netherlands where many university spin-off start-ups take their first steps. From those incubator spaces and from those of our own staff who attend various university courses as part of their on-going education and development (even our staff who are approaching sixty attend) we recognised that research projects often needed better project support.

Governance

- Quality – Project Establishment – Charter, scope, finance.
- Project Gating – Start Up (ORR – Operational Readiness Review).
- Project Gating – Start-up, Execution (PIR – Post Implementation Review).
- Scope management: Tracking the distinction between outputs and outcomes.
- E-Research – Management & integration
- Data Life Cycle – effective working with data across the research programme life cycle
- CONTINUITY – in the commercial world we would call this Business Continuity, the ability to provide core knowledge even as staffing shifts and flows at an increasing pace.

Schedule Management

In traditional project management the approach taken to planning would be to try and plan as much of the project at the start as possible. However, in a research environment this is much more difficult as the project will evolve significantly as the research progresses. One approach to managing this is to develop a rolling wave plan, though it is by no means the only solution. We strongly advocate the use of a work breakdown structure (WBS).

Also see Schedule Management section below.

Finance Management

- Monitor weekly project financial status.
- Report on project finances.
- Provide project forecast/spend/exposure.
- Report on programme finances.
- Provide programme forecast/spend/exposure.
- Inclusion of any change requests to be included as an additional cost/spend.

Also see Finance Management section below.

Project Reporting

- Creation of a “Book of Work” (BoW).
- Daily/Weekly update of BoW.
- Missing projects weekly status update.
- Milestone generation & reporting.
- Project pipeline list.
- PM Allocations Supply & Demand – Meeting, Prep and Follow-up.

- PM Allocations tracker.

Project Risk Management.

- Setup Risk Log
- QA of Risks.
- Risks into Log.
- Pre-board activities.
- Board meeting activities.
- Risk closure activities.

Also see Risk Management section below.

Project Issue Management.

- Setup Issue Log.
- QA of Issue.
- Issues into Log.
- Pre-board activities.
- Board meeting activities.
- Issues closure activities.

Project Change Management.

- Setup Change Log.
- QA of Change.
- Change into Log.
- Pre-board activities.
- Board meeting activities.
- Issues closure activities.

4 Detail - NJMC Research PMO as a Service

Schedule Management

In traditional project management the approach taken to planning is to try and plan as much of the project at the start as possible. However, in a research environment this is much more difficult as the project will evolve significantly as the research progresses.

One approach to managing this is to use a rolling wave plan:

1. Plan an understanding of the overall project without adding in detail tasks.
2. Every month the project manager completes the detailed schedule which is then communicated by the PMO.

The PMO is best placed by way of experience to develop and deploy an effective work breakdown structure (WBS):

1. Understanding exactly what is involved in the project Identifying key tasks
2. Provides a framework for delegation and resource identification

3. Provides a method to manage and measure progress
4. Provides a basis tracking burn rates and for developing cost estimates

Project Plans

Every project needs a plan and the PMO, by drawing upon its experience, can assist in developing project plans by:

- Assisting in designing a project so that activities can run concurrently where resources allow. This allows the researchers to work on more than one task at a time which can help with their motivation especially when the work contains repetitive experimental work.
- Monitor dependencies & constraints between tasks that describe the logical order in which a researcher should do the activities. At times these may be beyond control, for example gaining ethical approval before starting the work.

There are any number of software packages available for helping researchers construct a suitable project plan in a Gantt chart but the PMO can assist in picking the right one for the job, the circumstances and budget.

Risk Management

Every project carries risks which if they occur would impact on the success of the project. Some examples might be:

- Cyber security breach
- Physical security breach
- One of the research team leaving before their contract finishes (some resources are more critical to a project than others, some may be a single point of failure)
- Key pieces of research equipment breakdown or fail completely
- Poor quality research data is obtained
- Data loss
- Someone else publishes work very similar to your before you publish your work.

Managing the Risks Effectively

There are many factors involved in managing risk well:

- Having Risk Management staff who know and understand subject, such as those found in a PMO
- Assign a Risk Manager to coordinate risk activities (again, typical a PMO function)
- Be pro-active, hold a regular Risk Management meeting with the team to identify new risks and take mitigating actions
- At the start of the project the Risk Manager should hold a team brainstorming meeting in to identify potential risk

Potential Impact of Risks

When considering what may pose a risk to your research project one needs to consider the following:

- GDPR compliance – research projects involving human subjects must be GDPR compliant, failure to be compliant will have profound consequences legally, financially and to institutional reputation. The Risk Manager must work closely with the appointed Data Protection Officer (under GDPR) to monitor and mitigate risk
- Ethical Compliance – Many research projects, will require ethical approval and compliance (ie [Oxford University CUREC](#))
- Research projects involving animals are regulated under the [Animals \(Scientific Procedures\) Act 1986](#) (ASPA) risks that might result in a breach of regulations must be managed
- Schedule risks – staff loss, access to physical research facilities or equipment
- Financial risks
- If the research is funded in whole or in part by the Economic and Social Research Council (ESRC) are there any risk that published guidelines could be breached
- Reputational risk – is there risk the [Universities UK Concordat](#) (UUKC) could be breached

NJMC's PMO will provide experienced risk management to assist your research teams in scoring:

- Impact
- Likelihood

The PMO would keep an active and tracked Risk Log showing each risk raised, it's owner and the mitigation steps for those.

5 Project Financial Management

Research project unlike commercial projects receive funding from:

- For profit entities (Companies)
- Not for profit entities such as Charities
- Government or quasi-governmental entities
- Private funders

In research projects the rules governing exactly how you should manage your budget will depend upon your funder, but some basic concepts apply to all budget management. Each of these will expect the project researcher to be able to properly account for project spending and almost certainly wish to see projected spend at any given point

Your PMO will track project spending and the project burn rate about:

- Staff resources
- Facilities charges
- Equipment charges
- Licensing costs for software tools, cyber security tools, data storage services, communications.

From these metrics the PMO will produce a monthly financial summary of the project.

Project Close

The PMO would also ensure that a project is correctly closed financially, an often-overlooked function:

- Close service agreements for IT, software licenses, hardware, equipment, facilities.
- Correctly financially terminate temporary staff.
- Provide the final project financial report.

6.1 APPENDIX

Links

- [Universities UK](#)
- [The concordat to support research integrity](#)
- [Research ethics \(including CUREC\)](#)
- [UK Gov Animal testing and research](#)
- [Economic and Social Research Council](#)