Share Academy

Guidance on planning and managing projects









How to plan a project

The Share Academy scoping exercise identified that the majority of museum and university projects developed in an ad hoc fashion. Whilst the projects developed were successful there were times where it was apparent that project planning, and the tools associated with it, would help been of benefit. This short guide has been developed to address the project planning needs, encourage best practice, and provide the museum's workforce and university academics with a broad framework within which to plan and manage projects.

Through careful planning and management museums and universities will be able to deliver successful projects which will engage their audiences and colleagues, deliver results and mark them out as competent organisations to funders and decision-makers.

This guidance is split into the following sections:

- What is a project?
- How to define success for your project
- The stages in a project
- Planning a project
- · Implementing and monitoring a project
- What can commonly go wrong with project management?
- Working on museums and HEI partnership projects
- Some useful books on project management

What is a project?

It's helpful to identify whether the work you are doing is actually a project. A project has the following qualities

- Clear start and finish points
- Specific goals
- Clearly planned outcomes
- It will result in change
- Unique
- Temporary
- Possibly contains opportunities for learning
- · Responsibility for delivery is clearly identified
- Dedicated resources (time, money, skills)

A project is a clearly defined piece of work that comes to an end and delivers clear outcomes. It's not just a repeated process. It can be large or small including just yourself or a large team, formal or informal, external or internal, legally or informally defined, business or personal. So preparing and presenting a workshop or a lecture is a project whereas presenting the same workshop or lecture on a number of different

occasions is not a project. Creating the original format and content did require defined resources and outcome and was a temporary piece of work with a specific deadline. But to then give that lecture or workshop on a number of different occasions is a repeated piece of work and becomes a routine. If it was the first time that you put together that workshop or lecture it may well have included some learning experiences for you e.g. presentation skills, subject knowledge, audience analysis.

So what is project management?

Project Management is guiding a project all the way from its initiation and design through to its execution and completion. It requires the identification of desired outcomes, planning of timetables and resources, organisations and allocation of roles and related responsibilities, managing communications, and monitoring and controlling to solve problems and deliver the desired goals. In short it is what it says on the tin – the careful management of projects.

How is success defined in a project?

We want projects to be successful otherwise there is no point doing them. But how do we define success?

Delivers the goal(s)

The most obvious success measure is that the outcomes that the project was promising to deliver actually appeared. This means you need to very clearly define your outcomes before you implement your project. They will be the guiding factors in the work programme for the project. This is particularly important when we consider museum and academic projects as both parties are coming from different sectors, with different languages, organisational cultures, funding, and planning processes. In very successful projects you may well get more outcomes than your bargained for, particularly on 'soft' measures e.g. raised awareness of your work, offers of future support or collaboration.

On time

Even if you deliver the most wonderful outcomes they may be of no use if they are late. For example, if you fail to get a funding bid together before the deadline for the bid you may have missed your chance. Timing is vital throughout the whole project as much of project management is about co-ordination. Remember that museums and academic institutions are likely to run on different planning timetables, make sure both of you are aware of major events that could have an impact on your project, for instance new student intakes for academics, or a major exhibition opening for museums.

Within budget

We all know that finances are tight everywhere. A good project is one that comes in on budget. Overspend indicates a lack of control or the appearance of risks that were not foreseen at the start of the project. However, do not think that massive

underspend is a virtue. Why did you underspend? Was your budgeting significantly inaccurate or did your project lack some important elements.

Relationships intact

Because projects have defined outcomes, timetables and resources they can be stressful experiences. Everyone's performance is on show and can be clearly measured. It can be possible to drive the project at the expense of relationships between those involved. Ensure that your project is sensitively managed so that it does not affect the long-term health of participants such as partners, staff, students or volunteers. Remember that many of these people you will want to or need to have to work with in the future

Project is closed

A successful project finishes on time with clear results that can be celebrated and advertised. A project should have a clear finish in which the work and outcomes are recognised and evaluated.

To achieve project success you need to have several factors in place. There must be clearly identifiable goals. There needs to be support for the project from key stakeholders for which your project sponsor will be vital. The sponsors will be the individuals within your organisations (one for each organisation involved) who advocates for the project during its lifetime. They need to have sufficient authority and networks to be effective. Next, you will fail without proper planning. You must develop a clear plan at the outset (see this guidance later on for how) and then monitor and amend that plan as you go along. The better the planning the more likely you are to achieve you goals. Alongside planning is effective communication. Stakeholders need to receive the right level of communication at the right time. Finally, you cannot tell the future so stay flexible. You may well have to amend your approach to reach your goals.

Successful project management requires good management of people, processes (the work that takes place) and systems (procedures and information). To achieve this you must develop a clear plan at the outset (see this guidance later on for how) and then monitor and amend that plan as you go along. The better the planning the more likely you are to achieve you goals. This process of planning, monitoring and reacting requires information that is accurate, timely, complete and relevant, effective communications with stakeholders.

Successful project delivery matters for many reasons. Firstly it means that you achieve what you were aiming for. This will impact on the rest of your work. Secondly, it is important for how people view you and the project. For project participants will be a great morale boost and payback. For funders and decision-makers it will engender confidence in you for the next time you want their support. Finally, success breeds success. Often people have developed their project management skills on small-scale activity and built on this to larger and larger projects, learning as they go and pulling in the support of others.

Identifying the stages in a project

It is very useful to think of a project as a series of stages. In that way you will be able to identify at what point you are ain a project and what work needs to be done as a consequence. There are two sets of stages.

Planning stages

- Initiation
- Specification
- Design
- Approval

'Doing' stages

- Execution
- Monitoring/review
- Completion and closure

Bear in mind that during the planning stages you may work through some or all of the stages several times e.g. at the approval stage you may be asked to reduce costs which would prompt you to revisit the initiation stage (is it still feasible with fewer resources?) and consequently revise the specification and design.

Planning a project

Initiation

This is the start of your project where you scope out in general terms the desired outcomes and feasibility of your project. You can assess the broad feasibility of the idea with tools such as force field analysis ¹. This is the point at which you can decide whether to pursue developing a project or not.

For museum and academic partnerships it is important that both parties have a clear understanding of the project drivers right at the start. It is vital for both to recognise that there are likely to different organisational drivers to engage in collaborations but these can ultimately be addressed by the project.

Specification

Having decided at the Initiation Stage to undertake the project you next need to define the project in detail. This will include the following areas in varying levels of details depending on the scale and complexity of your project.

Sponsors – the individuals within each of your organisations who will
advocate for your project with decision-makers. They need to have
appropriate authority and contacts.

¹ For advice on how to do forcefield analysis go to MIndtools at http://www.mindtools.com/pages/article/newTED_o6.htm

- Project customer the individuals or groups who are the focus for the outputs of the project e.g. fellow researchers, local residents, students.
- Objectives make sure your objectives are very clearing (i.e. SMART -. Specific Measurable Attainable Relevant Time bounded)²
- Scope who/what will be affected
- Constraints such as a deadline e.g. end of term or availability of key personnel e.g. a staff member going on sabbatical, exhibition openings, etc
- Budgets and resources
- Deliverables what will be the tangible outputs from the project. These
 may be different for academic and museum partners within the project.
 For instance, academics may deliver papers in academic journals or at
 conferences, whereas museums will focus on public engagement and will
 want to see sympathetic deliverables, eg exhibitions or outreach.
- Project phases and timescales
- Strategy any underlying approaches e.g. professional cataloguing standards, ethical research requirements, copyright and IPR demands.
- Risk analysis³
- Roles and responsibilities it is vital that named individuals are responsible for delivering elements or the project as well as assigned overall responsibility to one person.

Design

Designing in detail how your project will be implemented is all about careful planning. Get the planning right and you're more likely to succeed. The design stage involves several planning elements:

Work breakdown structure⁴ - this Identifies all units of work but does not describe them in detail. It is hierarchical showing what needs to be done to deliver an element of the project. Obviously The bigger the project the more levels. Each unit of work must be measurable in terms of resources required to complete it and have a single end product. Finally, it must be the responsibility of one person. The final structure will identify all the units of work required to complete the project along with resources and responsible individuals. This will provide the basis for your budgeting and personnel management.

² For more expanations about SMART objectives look on Wikipedia at http://en.wikipedia.org/wiki/SMART_objective

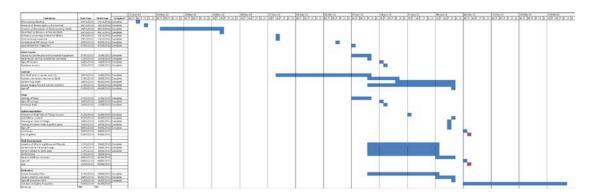
³ To learn more about risk analysis go to Mindtools at http://www.mindtools.com/pages/article/newTMC_07.htm

⁴ To learn more about workbreakdown structures go to the Dummies website at http://www.dummies.com/how-to/content/how-to-create-a-work-breakdown-structure.html. For an example of how to create a work breakdown structure go to Project Management Docs at http://www.projectmanagementdocs.com/project-planning-templates/work-breakdown-structure-wbs.html

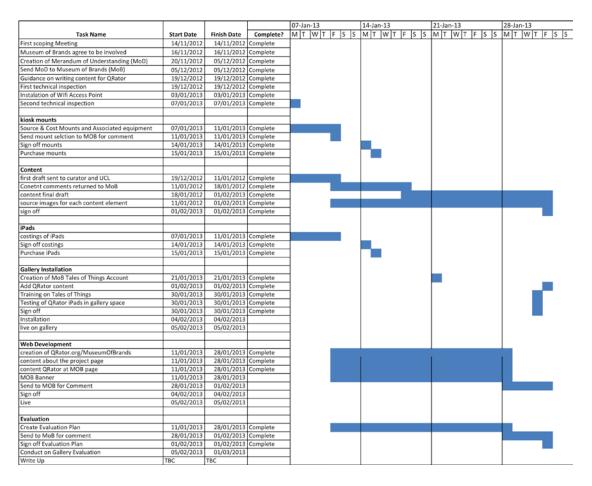
- Critical path the critical path describes the 'dependencies' in the project i.e. in what order things have to happen. For example, it would not be possible to put pictures up for an exhibition without first booking the exhibition space.
- Gantt chart this is arguably the most useful document to the project manager because it lays out what will happen when. It combines the work breakdown structure with the critical path analysis to provide a layout of work over time. It is an explanation of how you get from here to your goals and on time. You should remember that all the planning is a statement of intent not the final reality. In all your planning focus attention on results not processes so that the project team are constantly focused on what they are trying to achieve. The Gantt chart is also used to measure and communicate performance.
 - To create the Gantt chart order activities you identified in the work breakdown structure, showing interdependency.
 - o Identify where work units can overlap to save time.
 - Estimate the duration of individual work units, based on sound calculations (if you don't know find out!)
 - Don't forget holidays and unavoidable commitments e.g. Open days
 - Then challenge the content of your chart. Have you taken into the account the risks identified in your risk assessment? Have you built in contingency plans or timings? Are your dependencies accurately estimated?
 - Resource requirements

The following page contains an example of Gantt chart that was used by the team who managed the successful Share Academy supported project between the UCL QRator team and the Museum of Brands. This was a short project that placed new social media technology that had been developed by at UCL by the QRator team within a real world setting, the Museum of Brands. Example of a Gantt Chart

Example of Gantt chart used on the QRator Project:



Detail of the QRator Gantt Chart covering January 2013



Note: QRator is a collaborative project between the UCL Centre for Digital Humanities (UCLDH), UCL Centre for Advanced Spatial Analysis (CASA), and UCL Museums and Collections, to develop new kinds of content, co-curated by the public, museum curators, and academic researchers, to enhance museum interpretation, community engagement and establish new connections to museum exhibit content. Share Academy helped fund collaboration between the QRator project and the Museum of Brands to see how the technology would work in 'real world' environment outside of UCL and UCL Museums.

- Building your team to create your team define the skills, manpower and
 points in time at which you need people according to your project plan. Then
 assess potential members for their skills, availability, enthusiasm and ability
 to fit into your team. Decide what roles each member will have. It's useful to
 remember that as well as formal roles within an effective team there are
 roles that accord with people's personality:
 - Co-ordinator pulls together the work of the team as a whole
 - Critic analyses the team's effectiveness
 - Ideas persons encourages team's innovative approach
 - Implementer ensures actions are taken and things actually happen
 - External contact looks after the team's external communication and contacts
 - Inspector ensures high standards are met
 - Team builder implements team working spirit

Try to bring your team together as early as possible in the life of the project and if possible during the initiation and design stages so they have a sense of involvement and ownership. Ensure your team understands the vision, targets, milestones, threats, opportunities and stakeholders. Be very positive about the project and their involvement. Throughout the project listen to what your team are telling you as they will know what is happening 'on the ground' and make sure they have easy access to relevant data and information to do their work.

Approval

Get your plans approved by the appropriate stakeholders. Without this you will not have the authority to act.

Implementing and monitoring a project

Execution

Time to do the work! At the start of the execution period you need to bring together the project team and clearly brief them on the relevant aspects of the project. Make sure that all those involved understand the project plan and their role.

Monitoring and review

Once you have carefully planned out your project it is the monitoring and review process that will keep you on track. Is the project going to fulfil the specification? You will be keeping an eye on key factors such as whether deadlines are met, whether income and costs are as expected, whether individual team embers are meeting their responsibilities. In doing so you require the baseline of the original plan and proper monitoring and reporting procedures to keep track of what is going on. You need to manage change as things will change – assumptions, resources, timescales priorities, errors. Remember – your original plan is not the future just your best guess and needs to be amended as reality hits! Change is going to be inevitable as the reality of the situation unfolds. Do not feel that change is a sign of

failure but rather a pragmatic virtue to adapt to circumstance As long as you understand and control the change (including managing stakeholders' expectations) your project can still deliver but maybe just not as you originally envisaged.

There will be lots of methods by which you can monitor your project but here are a few common ones.

Monitoring time usage

- Status of elements of the work programme (not started yet, in progress, completed)
- Elapsed time of project spent since it began to the current time
- Number of days work on this particular project i.e. days actually worked rather than duration since the project began.
- Estimate of number of days' work to complete the task
- Estimate of finish date within overall project timetable

Basic financial monitoring

- Estimated at completion (EAC) = costs incurred to date + scheduled costs
- Budgeted at completion (BAC) = total costs as per original plan before work started
- Actual cost of work performed to date
- Budget costs to date vs. actual to give variance to date. You can then look into what caused the variance and whether it requires you to amend your project plan e.g. costs from a particular supplier are put up so perhaps change to a different cheaper supplier, which may affect the timetable.

Quality assessment (QA)

Quality assessment is an on-going process throughout your project to ensure that a certain level of quality is present throughout the project, ensuring a high quality deliverables from the project. You need to apply the standards you identified in your specification. Have you set up mechanisms and timetables for checking quality? Do you need to involve the project customer in the quality assessment e.g. piloting activities with audiences?

Risk register

You will have started this when you were designing the project and did your risk assessment. From then on you will regularly review and update the risk register, which will inform decision-making and be a useful communication tool with key stakeholders such as project staff, managers and funders.

Completion and closure

This is the moment you have been dreaming of! This is the point at which you deliverables are achieved (hopefully) and the project draws to a close. When the project ends don't just walk away. Do a full project review. How does the project customer rate what the project delivered to them? Check out whether key stakeholders are happy with the final result (e.g. funders and sponsors). Try to evaluate what went well during the project and what could have been improved.

Thank everyone who got involved and celebrate the success with a party or a launch for example. Finally, write up and disseminate your experiences – this will promote your work and provide useful advice for others.

What can commonly go wrong with project management?

Common errors with the stages are:

- Going directly from initiation to execution without properly specifying the project or designing its implementation.
- Omitting the Start phase in which the team will define its procedures and relationships
- Only partially completing the closure phase so never fully evaluating whether the project achieved its purpose and learning from the experience.
- Project creep the project grows beyond its original specification. It this starts to happen you need to revisit the planning stages.
- Project team fails to come together and ends up working as a group of individuals rather than a full team.

Communication

- Not involving all key project stakeholders. Take time to do an analysis of who
 will be interested in your project and how influential they are on the success
 of the project. The higher the level of influence and/or interest the more
 active the level of communication required.
- Inconsistent, incomplete and inappropriate communication. For each type of stakeholder think carefully about the message, level of detail, communication method and frequency of communication.

Planning

- Not clearly defining your vision and objectives.
- Not clearly defining roles and responsibilities leading to gaps and overlaps of effort.
- Uncontrolled changes in what the project is intending to achieve.
- Having work plans, timetables and resource requirements that are wrong or incomplete. This can come from being over optimistic about the speed of work, skill base of team members, or level or resources required, maybe to appease managers.
- Leaving out necessary activities during the planning, often because they are not foreseen. Can avoid this by rolling planning during the project to accommodate growing awareness of what needs to be done as the project develop.
- Starting activities out of turn with the project plan.
- Too much focus on the final deadline, which can make the team feel, wrongly, they have lots of time.
- Making assumptions without clearly defining them or communicating them to those who need to know about them.

- Risks and uncertainties not properly identified and planned for.
- Too much planning or too centralized planning, which actually stifles creativity and responsiveness to events that can challenge the plan.

Information gathering

- Failing to monitor progress in a timely and accurate fashion. Things change so you need to be aware of changes as soon as happen.
- Failure to recognise the difference between monitoring and control.
 Monitoring is much easier but if you need to act on the information you gather.
- Generating too much project information creating unnecessary data for people to absorb and wasting effort that could be directed towards the project.

Managing the project team

- Team members are not familiar to each other and therefore need time to understand how they each approach work.
- Team members working by different rules and procedures that result in uncoordinated working and variable quality.
- Team members not being held accountable for their performance. This removes the sense of responsibility of individual team members
- Leadership that lacks authority but still has the responsibility for seeing the project through.
- Leadership that is technocratic rather than managerial. Good management seeks to delegate to and motivate team members rather than control them.
- Alternative ways of organizing the project are not considered. E.g. hierarchical vs. matrix approach.
- Senior management do not fully support the project. Check that your project fulfils the objectives of your institution and you have tan effective sponsor.
- Team members not buying in to the project goals and failing to commit to the project. By involving key team members in the design of the project you will help to avoid this problem.
- Poor quality control. Make sure you monitor regularly and against appropriate measures.

Working on museum and Higher Education Institutions (HEIs) partnership projects

Working with partners can be a fantastic experience and enable your institution to achieve things it could never have imagined on your own. If you are a museum planning to work with an HEI or vice versa you need to incorporate the partner(s) into the project. There are a range of issues you need to consider.

 Ensure that there is a real need for the project rather than trying to force ideas simply to create the relationship. The project should meet the organisational goals of both the museum and the HEI, facility/department, academic, or students involved. Be aware that each of the partners may have different goals but that they can all be all achieved by the project, for instance a researcher may be using a museum collection to add value to their doctrinal research and the museum is willing to expend resources in return for gaining a deeper understanding of areas of its collection.

- Draw up a Memorandum of Understanding (see the Share Academy guidance on this area), which will lay out the purpose and structure of a partnership.
- You might consider a Service Level Agreement, which lays out how the partnership will work and can be a legally binding document.
- Have a frank discussion about what each partner wants and needs from the
 project and what contribution each will make. If these are unacceptable to
 the other partner then it may be that the project in its current form is either
 unworkable or needs revision. Do not enter a partnership simply to access
 funding if other differences are irreconcilable.
- Neither side should agree to a project on which they are unable to deliver their side.
- Clearly define the contribution that each partner will make to the project.
- Involve both partners at all stages of the project, particularly at the initiation and design stages as this will help both sides to feel ownership from the start.
- Be aware that museums and HEIs are likely to work on different planning horizons, with museums being able to plan larger projects in shorter timeframes than academic partners are used to. Conversely, HEIs wanting to deliver student/museum projects will need to involve the museums at an early stage so they can be prepared, it is unlikely any museum will be willing to take on a number of student placements if only asked a term or less in advance.
- Make sure that commitment for the project is taken on board by individuals from both institutions at suitable levels of authority.
- Ensure that responsibilities are clearly assigned to named individuals so the no key areas of the project lack an 'owner'.
- All key decisions should be taken jointly and all partners must know of and be able to comment on changes to the project.
- For larger projects consider recruiting an external project manager who does not have specific allegiances to either partner.
- Ensure all reporting mechanisms treat the partners equitably.
- In larger projects you might consider having a mechanism for resolving disputes.
- Respect differences of style and approach you will both have opportunities
 to learn from each other. Take time to get to know and understand your
 partner and their priorities, environment and working practices.
- Recognise that constraints that your partner has to operate within.
- Ensure you have single identity for external audiences. Consider giving the project a name or logo to define it apart from the everyday work of the partners.
- Have an 'exit strategy' laying out how the partnership will be disbanded once the project has been completed or is stopped before completion.
- Once the project is over consider whether this is a relationship that you
 would like to continue. This might be through another project or it could be

through a more permanent arrangement e.g. a student internship programme between your museum and an academic department; access to conservation research for museum partners

Project management can seem a daunting task. However, if you carefully define your goal, plan and keep reviewing your plans and stay flexible you will be successful. Do not expect your plan to take place without any changes. As Winston Churchill said 'Those who plan do better than those who do not plan even though they rarely stick to their plan'. The effort that you put in at the beginning will be paid back saving time, keeping control of expenditure, delivering a successful project and building long-term relationships. Plan and then take action. As another great leader, General S Patton, noted 'A good plan violently executed now is better than a perfect plan next week.'

Some useful books on project management

- Making Ideas Happen: Overcoming the Obstacles Between Vision and Reality, Scott Belsky
- Making Things Happen, Scott Berkun
- Project management in a week, Mark Brown
- The One-Page Project Manager: Communicate and Manage Any Project With a Single Sheet of Paper, Clark A. Campbell
- Agile Project Management: How to Succeed in the Face of Changing Project Requirements, Gary Chin
- Project management for Dummies, Nick Graham
- Fundamentals of Project Management, James P. Lewis
- A Guide to the Project Management: Body of Knowledge (PMBOK Guide) –
 2000 Edition, Project Management Institute
- Strategic Project Management Made Simple: Practical Tools for Leaders and Teams, Terry Schmidt
- Effective Project Management: Traditional, Adaptive, Extreme Robert K. Wysocki