

Digitization Project Management

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Why focus on project management?

- Some key challenges with scientific, research, and digitization projects...
 - Scientists want to do less administration and more research
 - Project administration can be time consuming
 - Distracts the scientist from his/her main interest
 - Funding agencies desire accurate cost estimates and predictable outcomes



Why focus on project management?

- Scientific, research, and digitization projects can get into trouble...
 - Objectives are not well defined
 - Communication is inadequate
 - Trouble is diagnosed at vulnerable times
 - Cost overruns
 - The "near death" syndrome





There has to be a better way!

- Impart experience of scientists/managers to those in emerging projects
- Educate emerging scientists/managers in the basics of project management
- Emphasize value of leadership and teamwork



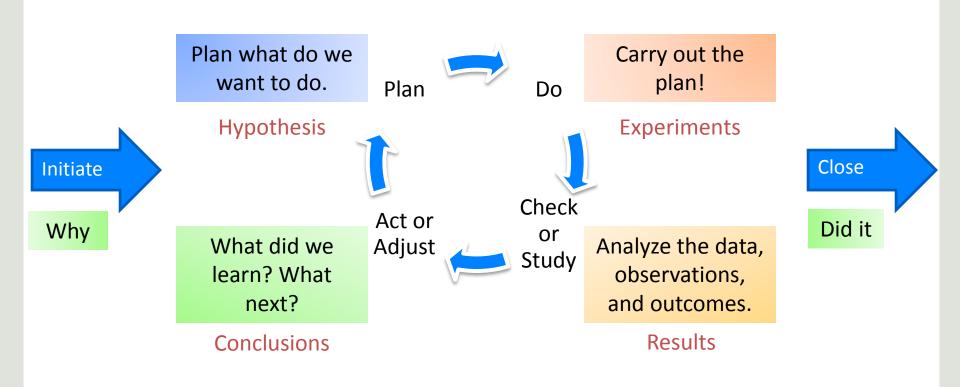


What is project management, anyway?

- The essence of project management:
 - Predictably meeting project requirements within established constraints
- It is a set of skills, methods, and processes to plan, organize, and manage a project from inception to successful completion
 - Provides structure that promotes success
 - Focuses on goals and outcomes
 - Promotes effective communication



The project management cycle has its roots in the scientific method...

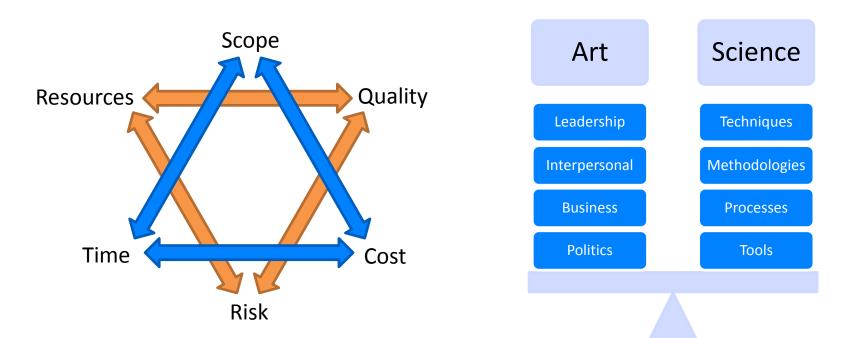


Walter Shewhart / W. Edwards Deming / PMI



Project managers strive for balance...

- We live in a world of limited resources and never enough time...
- Humans are always part of the equation...





Successful project managers must be...

• **Visionary**See the big picture

See both the forest and the trees

But, don't attempt to be omniscient

• **Reliable** Get things done
Say what you mean; mean what you say

• Organized

Be pragmatic – what is essential vs. not?

Seek alternatives

Keep the ball rolling

• Flexible Adapt, overcome, improvise
Wear the right hat at the right time



What are the secrets to success?

• **Initiation** is where you establish your scope of work. Lack of agreement or understanding will cause scope creep.

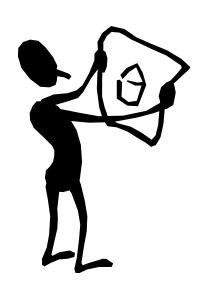


- Planning is where you gain a better understanding of <u>what needs to get done</u> and then communicate it to the team and stakeholders.
- **Closing** is when you have agreement from all stakeholders that the project is finished.



Planning is vital!

- Create a workplan as guide and map for your team:
 - What needs to be done?
 - Who is doing the work?
 - How much will the work cost (**budget**)?
 - When will the work be done (schedule/milestones)?
 - **How** the work will be done?
 - How will you manage communications?
 - How will you manage risk?
 - How will you manage change?
 - What metrics will you use to track progress, quality, and scope? How will you measure them?
 - What are the internal and external dependencies?





In summary...

• **Project management** focuses the team on goals and outcomes and provides a structure for success

• Leadership is always important

- The key is **flexibility**
- Plan, plan, plan
- Seek balance





Resources

- iDigBio's Project Management Resources: https://www.idigbio.org/wiki/index.php/Project_Management_Resources
- Project Management Institute: <u>www.pmi.org</u>
- DoIT Project Management Advisor: <u>www.pma.doit.wisc.edu</u>
- Improving the User Experience: <u>www.usability.gov</u>
- Project Science: <u>www.projectscience.org</u>



Thank you!

Questions?





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