Project Management Methodology

Information Technology

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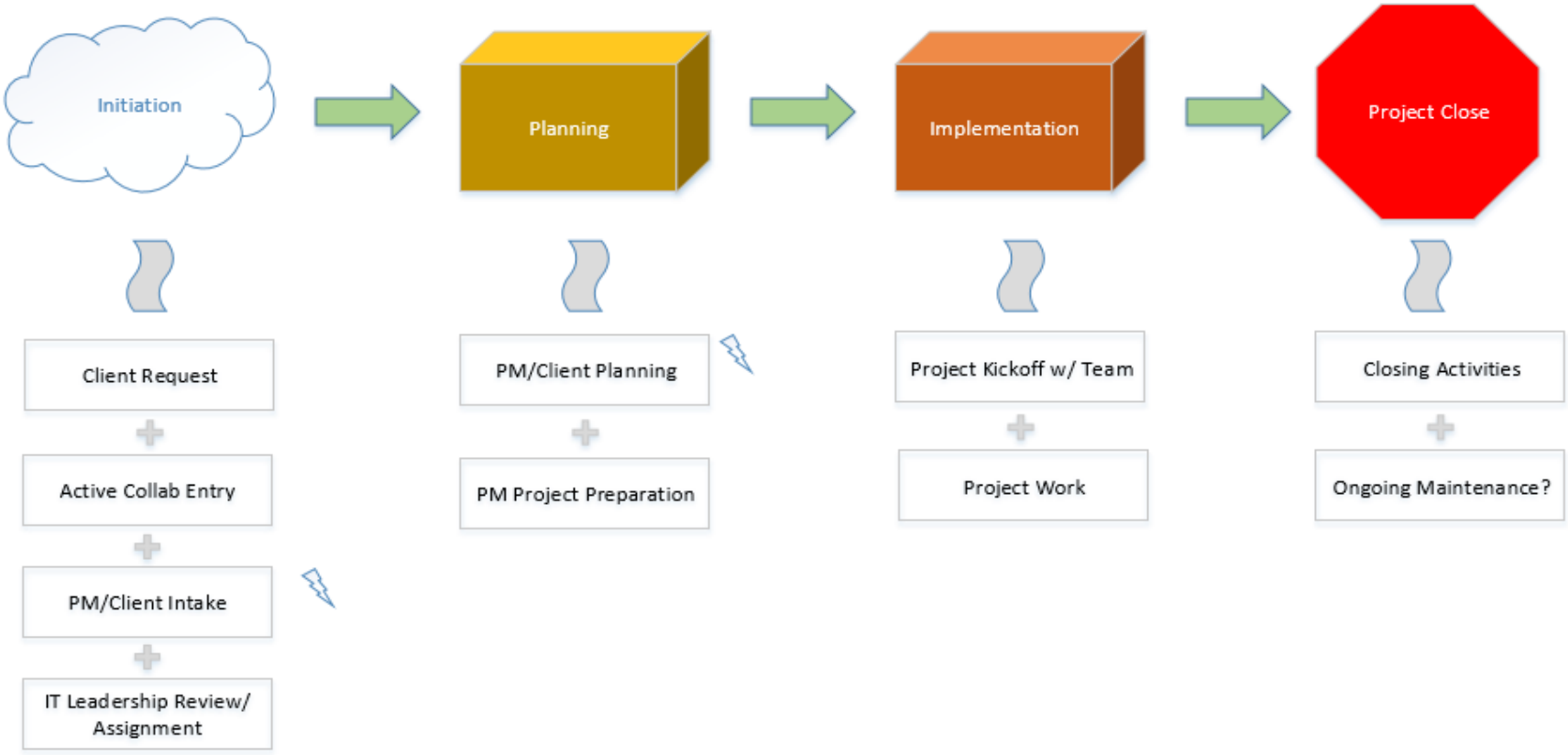
Table of Contents

Project Management Process Diagram



Project Lifecycle Overview

NMU's Information Technology (IT) department provides this Project Lifecycle Overview for reference purposes. The stages shown below serve as a general guide for a typical project. Though these stages are displayed sequentially, it is important to note that they regularly overlap and apply concurrently. Since every project is different, this approach allows necessary flexibility.

Project Stages:

- ***Initiation***
  - Project request submitted by client online
  - Client completes expanded project request form
  - Request received by IT
  - IT Project Manager meets with client (initial discovery and basic specification)
  - IT leadership review and prioritization

- ***Planning***
  - Formalizes the beginning of the project
  - Project team and roles – specify team members and roles
  - Scoping meeting with IT staff (Technical and Project Manager)
    - Ideation – summarize project, issues, constraints, and risks
    - Work process design – workgroups, meeting schedules, Active Collab
    - Document project objectives – what is requested and possible
    - Desired goals and specific outcomes – how will we know we are making progress?
    - Timing – when does the project begin and conclude?
    - Ownership – who owns "product"? How will ongoing work be managed?

- ***Implementation***
  - Formalizes the beginning of work directed at completing the project
  - Execute multiple tasks and produces deliverables related to project objectives
  - Addresses and solves issues and challenges that arise
  - Manages changes in scope
  - Delivers regular communication to stakeholders to detail progress and seek feedback
  - Relies on team members, work process design, and adherence to project objectives

- ***Closing***
  - Concludes all project activities
  - Provides "owner" the project "product"
  - Produces final draft of Project Master Document
  - Documents best practices and lessons learned
  - Assesses project outcomes and team performance

Project Management Methodology Overview

NMU's Information Technology (IT) department has developed a Project Management methodology to guide the facilitation and successful delivery of technology projects. This methodology will provide the framework and rationale for selection, prioritization, and scope of IT projects. It is aligned with the Project Management Institute's *Guide to Project Management Body of Knowledge (PMBOK).*

The intent of this methodology--its definitions, procedures, and structure--is to develop and maintain a standardized project management process. Our aim is to facilitate a collaborative working environment that effectively manages client expectations and institutional resources.

Project Management Methodology Goals:

Provide a common point of reference and common terminology for managing IT projects.

Increase the awareness and adoption of our Project Management Process.

Provide the criteria that will be used to classify a work request as a project.

Define the roles for individuals working on projects, and obtain consensus about each contributor's importance to the successful delivery of a project.

Create a collaborative environment that engages project team members, clarifies what is required of them, and helps them understand how those requirements influence project results.

Project Definition*

NMU's Information Technology department defines projects using the criteria listed below. This definition is provided to help clients understand the distinction between projects and operational support. Operational support is ongoing and repetitive, and may repeat daily, monthly, annually or on an as needed basis.

A PROJECT IS:

A ***unique*** endeavor undertaken to create a unique product, service or result

Temporary (having a specified beginning and end)

Defined by ***deliverables,*** scope, and resources

Completed by a ***temporary team*** that exists for the execution of the project

Facilitated by a ***Project Manager*** who is responsible for its success

Specified ***goals/***objectives, and an established process to meet them

Concluded when its objectives have been attained

**Adapted from the Project Management Institute*

Project Team Roles and Responsibilities

NMU's Information Technology (IT) department believes that a successful project requires the creation and active participation of a project team. Specifying the roles and responsibilities of project team members helps to ensure consistent levels of accountability for each project.

PROJECT SPONSOR: The Project Sponsor is the executive (AVP or above) with a demonstrable interest in the outcome of the project and who is ultimately responsible for securing funding and resources for the project. Does not need to be one person. In general, the Project Sponsor will:

- Oversee high-level project progress
- Provide vision for project (overall goal/objective)
- Resolve organizational policy issues as they arise (including budget)
- Considered the "champion" of the project; communicates with senior management
- Chooses project team members
- Ongoing support and consultation for project development
- Approve project completion

PROJECT MANAGER: The person assigned by Information Technology to ensure that the project is completed within scope, budget and timeframe. The Project Manager works directly and regularly with the client, as well as all other project team members to coordinate the goals, objectives, work process design, meetings, communication. In general, the Project Manager will:

- Develop project and implementation plans
- Initiate and coordinate meetings related to the project
- Monitor and review all project activities
- Regularly communicate project progress to all stakeholders, as well as request approval/feedback for project deliverables
- Assist with change management
- Maintain project records and create master document for project
- Resolve additional or unforeseen issues as needed

IT STAFF: Information Technology staff with expertise in myriad technology applications. IT staff serve a consulting function at all stages of the project, especially related to technical integration, implementation, and business processes.

INFORMATION TECHNOLOGY LEADERSHIP: The group responsible for reviewing and prioritizing all project requests. This group is primarily involved during the initiation phase of the project.

PROJECT TEAM: The group responsible for conducting project activities. Project team members are selected by the Project Sponsor. The Project Manager may add project team members. The project team can contain internal staff as well as outside vendors.

CLIENT: The person or group requesting the project. The person or group for whom the project is being completed. The client is responsible for articulating the details of their project request: goals, objectives, specifications and outcomes. After the project is completed, the client becomes the owner of the product produced by the project.

STAKEHOLDERS: Stakeholders are often members of the project team. However, stakeholders should also be understood as any other person/group whose interests may be impacted by a project or its deliverables. Stakeholders should be identified during the initial stages of a project, should be consulted at various stages a project.

OWNER: A client becomes an owner after the conclusion of the project. In general, this means that they are responsible for future oversight, ongoing maintenance, and communication regarding of the delivered product.

Project Terminology

TERM	DEFINITION
Assumption	Factors that, for planning purposes, are considered to be true or certain without proof or demonstration.
Change	A modification to the scope or deliverables of a project. Must be communicated through the Change Request Form.
Constraint	A restriction that will impact the facilitation or completion of the project. These include, but are not limited to: Scope, Time, Quality and Resources. For example, the allotted budget for a project was not sufficient to purchase the necessary software.
Customer	The person or group for whom the project is being undertaken. Used interchangeably with "client."
Deliverable	Any measurable, tangible, verifiable item that must be produced to complete the project. Generally, deliverables are broader categorical items. For instance, create a web page for Global Campus students. There are numerous tasks associated with that one deliverable.
Dependency	A requirement for the use of a tool or product. For example, access to myNMU is dependent upon entry of a valid user ID and password.
End User	An End User is a person who ultimately uses or is intended to use a product. The End User stands in contrast to users who support or maintain the product, such as sysops, system administrators, database administrators, or technicians.
Executive Sponsor	The person who can secure any necessary funds for the project and settle campus-wide policy issues as they arise.
Functional Requirements	Description of desired results. A negotiated set of measurable wants and needs. Related to Use Cases. What will end users be able to do when project is complete? How will the system need to function?
Issue	A question that is raised for inquiry or a problem to be solved.
Owner	The person or group who manages the project's end product after the conclusion of the project.
Progressive Elaboration	An iterative approach to planning. Comprehensive plans are created developmentally, as opposed to all at once.

Project	A temporary endeavor undertaken to create a unique product, service, or result.
Project Master Document	A document maintained by the Project Manager. It contains details for all components of the project, from beginning to end. Includes: changes, executive summary, specifications.
Project Lead	The person involved in the day to day aspects of the project. Not the project manager, but rather the person that works closely with the project manager to facilitate progress.
Project Life Cycle	The sequential phases through which a project passes. These phases contain all of the events necessary to complete the project. In general, the four phases of any IT project at NMU include: Initiation, Planning, Execution, Closeout.
Project Manager	The individual assigned and responsible for achieving the project objectives.
Project Management	The planning, monitoring and control of all aspects of a project in order to achieve the project objective with respect to specified cost, quality and performance.
Project Objective	A pre-determined result toward which the project is oriented. A concrete statement describing what the project is trying to achieve. Objectives should be Specific, Measurable, Attainable, Realistic, and Time bound (SMART).
Project Team	A selected group responsible for conducting project activities.
Risk	The likelihood of an undesirable outcome. What may hinder the successful delivery of a project or deliverable?
Scope	The deliverable that will be produced by the project. Scope describes the boundaries of the project in terms of what will, and will not, be produced.
Specifications	Specific details for project requests, tasks, or objectives. For example: an email will be generated; specifications include: From/To whom? Subject? When? Text body?
Stakeholder	Any person or group whose interests may be impacted by a project or its deliverables. Stakeholders are often project team members.
Task	A well-defined unit of work that has completion criteria. Tasks are generally smaller "to do" items. A project deliverable is often the result of the completion of numerous associated tasks.
Use Case	Guiding examples of desired functionality. Provides insight for how End Users will use the tool.

Forms and Additional Resources

Project Request Form

Summary Information	
Date submitted:	
Project requested by:	
Provide a summary statement for the problem (what is preventing you from having an optimal work environment?)	
Provide a list of desired outcomes and functionality for your request (What will the end product do?)	
What other people on campus would be affected by this project or are affected by the current process?	

Solution Information
What product/process currently exists to handle the issue the project would solve?
Please list the solutions/workarounds you have already tried in order to resolve the problem and their benefits/drawbacks
Please list and rank your potential solutions to this problem and list their benefits/drawbacks (ex: purchasing external software, building in house software, software modification, etc.)

Project Plan (to be completed after project request is submitted)

Success Factors:
What are the specific deliverables for this project?
What are the measurements of success for this project?
What are the project milestones and goal dates?
What are the project tasks and their priority?
Estimated Competition Date

Project Maintenance:
How will changes requested after initial submission be managed?
How will project check in be handled? (weekly calls? Monthly?)
Who will maintain this system after implementation?

Additional Information
Who specifically needs to be involved in the project?
What elements of NMU's Strategic Plan will the project support? (provide explanation for each)
What are potential problems with this project?
Are there dependencies for this project? (example: single sign on)
In the event that the project is not approved, how will you solve the problem?

IT Leadership Review Materials

Criteria:	Select:		Description (required for "Y")
Security requirement/concern	Y	N	
Legal or vendor requirement	Y	N	
Enrollment or retention initiative	Y	N	
AQIP	Y	N	
Cost savings	Y	N	
Significant benefit to University	Y	N	
Competitive advantage	Y	N	
Reduces labor	Y	N	
Supports NMU Strategic Plan	Y	N	
IT Staff assigned	Y	N	
Other (list):	Y	N	
Project Begin Date			
Project Completion Target			
Project Denial Explanation (if applicable):			

Project Management Time Estimation Tool

The unit of time used should be days.

E = Estimated time

O = The most optimistic time to finish the task

M = The most likely time to complete the task, based on repetitive experience

P = The most pessimistic time to finish the task

To estimate time:

$$E = \frac{O + 4M + P}{6}$$

Project Change Request

Project title:	
Date:	
Department/Person requesting change:	
Change request #:	

Type of change (circle/bold all that apply):				
Schedule	Cost	Resource	Scope	Technical

Questions:
Describe the change being requested:
Reason for the change request:
What alternatives have been considered?
Describe technical changes required to implement this change:
Describe risks associated with this change request:

****For Internal Use Only. Do not fill out information below this line.****

Disposition		
Approved	Deferred	Denied

Justification	**Additional Notes**

Project Change Request (cont.)

Guidelines for Project Change Requests:

1. Project change requests should be directed to the Project Manager.
2. The project manager will complete the **Project Change Request Form.**
3. Communication:
    a. Technical staff will be consulted to determine the feasibility of the request.
    b. Project stakeholders should be given the opportunity to review the change request and to provide feedback.
    c. Feedback, decisions, and outcomes should be documented by the Project Manager and shared with stakeholders.
4. The change will be completed in a test environment.
5. Stakeholders should be given the opportunity to test the changes.
6. Once testing is completed/approved, the change will be applied in the production environment.

Project Closure Form

Project title:	
Client:	
Executive Sponsor:	

Does the client agree that this project can be closed at this time?
Were all the objectives of the project met?
Were the project deliverables to your satisfaction?
Was the project planning and implementation process adequate? In what way(s)?
Overall, what went well?
What didn't go as well as you had hoped?
Additional Notes:

Communication Templates

(Project First Request)

Dear XXX,

Thank you for submitting a project request. The next step is to complete the attached full Project Request form with more detailed information. If you have any questions, please contact me at wirichar@nmu.edu.

After this form has been emailed back to me, we will set up a meeting to discuss the project in more detail and answer the questions found in the second page of the document labeled Project Plan. Please keep these questions in mind as you fill out the Project Request Form, but you do not need to provide answers until our meeting.

After our meeting to complete the Project Plan, your request will be brought to the IT leadership review committee. The project will be evaluated by the committee within 30 days of receiving this email. At that time, your project will either be accepted, returned with a request for additional information, or denied based on the current workload capacity of the IT department. Thank you for your understanding and cooperation.

Sincerely,

Bill Richards

(Project needs changes made)

Dear XXX,

Your project proposal has been reviewed by the committee. In order for your project to be considered for acceptance, we will need to schedule a meeting to revise a few details before resubmitting the form to the committee. If the form is not revised within 30 days of receiving this notification, it will be moved to the end of the project proposal consideration queue.

Areas needing revision are indicated in the attached proposal; please be prepared to talk about them at our meeting.

Possible meeting times according to both of our calendars are as follows, please let me know which time would work best for you.

- A
- B
- C

Sincerely,

Bill Richards

(Cannot accept project at this time)

Dear XXX,

Your project proposal has been reviewed by the committee. The IT department does not have the capacity to accept your project at this time. If you are still interesting in having your project completed, please resubmit your form through the website in 90 days for reconsideration.

Sincerely,

Bill Richards

(Project Accepted)

Dear XXX,

Congratulations, your project proposal has been reviewed and accepted by the IT Leadership Committee. Our next step is to set up a meeting with all of team members involved to begin discussing the process of project competition. Please be on the lookout for an email regarding potential meeting times.

Sincerely,

Bill Richards