Project Management Methodology

INTRODUCTION

1. Overview

Texas A&M Division of Information Technology (Division of IT) established this methodology to meet the needs of the organization as they engage in information resource projects. It serves as a guide to the organization in project selection, to project teams in planning work, to management in providing oversight, and to sponsors and clients as they collaborate in the design and delivery of new business systems and services. This methodology is intended to facilitate compliance with state, system, and university regulations (e.g., TACs and SAPs). This methodology is consistent with the Project Management Institute's (PMI®) *A Guide to Project Management Body of Knowledge (PMBOK®),* as well as the *Agile Alliance's Agile Manifesto* (where appropriate), while meeting the unique needs of project management in the Division of IT. It should apply equally well and meet the requirements of large and small projects.

This document describes in detail the process that the Division of IT intends to use during the initiating, planning, managing (controlling and executing), and closing stages of information resource projects. Texas A&M Division of IT staff can find a Project Management Toolkit in the Division of IT – Projects SharePoint site and on ITnet.

PHASE 1 – PROJECT INITIATION

The project selection process, when the project idea is defined, evaluated, and authorized, is carried out during initiation. Each line of business within the Division of IT is responsible for submitting proposed projects to the Executive Review Board (ERB). During the ERB meetings, each submitted project is reviewed on financial, strategic, and technological imperatives to determine which resources are needed and if the project is feasible given available resources. This process gives management and other stakeholders an opportunity to validate the project's potential benefits realization.

The amount of effort during project initiation depends in part on the size, complexity, and resources required for the proposed project. Generally, more information is needed to evaluate proposals for big projects that represent substantial investments than for smaller ones.

Governance Model

Governance at the Division of IT is facilitated at both the portfolio and project levels. The ERB is chaired by the Vice President and Chief Information Officer (or designee). It authorizes new projects and manages project priorities that affect the division and its clients. For active projects, it also provides a forum for any project changes, risks, or issues that require discussion and/or resolution by the ERB. The group meets bi-monthly. For more information, see Project Portfolio Management.

Initiate Project Proposal

Project proposals are initiated using Laserfiche. The requestor submits a proposal using one of the following Laserfiche forms:

- Project Proposal – use when proposing most projects.
- Purchases not in Budget– use when a request for a purchase not included in the rate study involves a related project.

Only submit proposals that meet these criteria:

- The definition of an information resource project is met.
  - Do not initiate for operational work or task level work.
  - Do not initiate for non-information resource projects. See Exceptions and Exclusions.
- The project is for the Division of IT.
  - Do not initiate for work for external customers, e.g., non-Division of IT development work, or projects run by external entities, e.g., construction projects. See Exceptions and Exclusions.

The Laserfiche forms include project complexity assessment questions that determine:

- If the proposed work is a major information resource project (MIRP),
- If the proposed work is a project or a task, and
- The project level (1-4).

A project is a MIRP if it:

- Has development costs of $1 million or more; and
  - Requires one year or longer to reach operations status; or
  - Involves more than one State Agency; or
  - Significantly alters work methods of personnel or the delivery of services to clients.

Approve the Project Proposal

After submittal, the project proposal is sent to the portfolio manager or designee for review. At the ERB meeting, the portfolio manager presents new project proposals and records approvals by the members.

Add Project to the Division of IT – Projects SharePoint Site

Once a proposal is approved, the portfolio manager creates a project subsite in the Division of IT – Projects SharePoint site. The SharePoint site provides project management lists and documents that facilitate the Division of IT methodology.

Note: A project manager or project coordinator (PM/PC) must be assigned to the project. The portfolio manager assigns site ownership to the PM/PC, and a notification is sent that provides a link to the site.

Division of
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Project Management Workflow
Approval Process in Laserfiche
Client-facing projects in SharePoint

Work originates

Is it a project? → No → Follow procedures for non-project work

Division of IT Project Management Methodology

Yes

From an outside customer?

Yes → Department approval process for client-facing work

No

Laserfiche: project request w/ complexity assessment ← Project Request Form

Approval workflow (AD, Director, Committee) ← Purchases not in Budget Form

Is the project approved? → No → End work and notify

Yes

SharePoint project site (Portfolio Manager)

SDLC (ITSS)

Division of IT Project Management Methodology ← Construction-related projects (Networking)

Close project ← Manage project

EXCEPTIONS AND EXCLUSIONS

Construction Initiatives

Projects engaged in by the Division of IT, but managed via a third-party vendor (e.g., FP&C, SSC) for the purposes of campus cons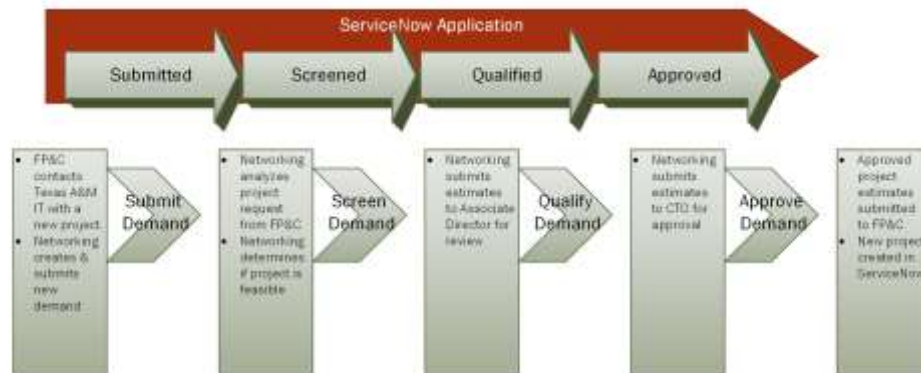truction are exempt from the methodology as written. In place of the full methodology, these initiatives are required to:

- Utilize a modified demand management process, visually depicted here, inclusive of formal approval of projects prior to the submission of bids and entering into of contracts.

- Utilize a custom charter template, specific to FP&C/SSC construction projects.
- Generate, at least monthly, a project status report as outlined within this methodology.
- Attach all project documentation into the ServiceNow PPM tool.

Specific Exclusions

- Business Case, Risk Register, and Project Schedule are not required.
- Construction projects are not required to be reported as Major Information Resource Projects (MIRPs).

Information Resource Development Projects for External (non-Division of IT) Units

Information resource projects engaged in by the Division of IT for external (non-Division of IT) customers are exempt from the methodology as written. In place of the methodology, these initiatives are required to utilize the Software Development Lifecyle (SDLC) methodology.

Non-Information Resource Projects

Projects that do not involve IT services and/or do not impact division business processes or functions are exempt from the methodology as written. While these projects are encouraged to use this methodology, they are not required. Also, these projects are not tracked within the Division of IT project portfolio.

If a non-information resource project includes a deliverable that involves IT development or other IT services, that project is no longer exempt. For example, a communication project that includes website development is considered an information resource project and is required to use this methodology.

If a non-information resource project may result in major impacts to the division's business processes or other functions, the project is no longer exempt.

PHASE 2 – PROJECT PLANNING

Project planning defines project activities and describes how the activities will be accomplished. Project planning helps ensure a project's success by making sure all players know the project purpose and the extent of the workload and time expectations. Required documentation is based on the size and complexity of the project.

Enter Project Information

Enter basic information for the project.

1. Select Project Information from the left-side Quick Links. Select EDIT THIS ITEM then click Edit.
2. Enter the Description. This serves as the project scope statement for Levels 1-3.
3. Select the Project Level (1-4). This controls what project checklist items are displayed.
4. Select a Project Phase. This should be updated as the project progresses.
   a. Planning, Executing, Closing, or Completed
5. Enter the Project Manager by entering a name or email address.
6. Select the Line of Business (LOB).
   a. CISO – Chief Information Security Officer
   b. Health IT
   c. EN – Enterprise Networks
   d. EP – Enterprise Platforms, Cloud, Shared Services and Enterprise Facilities Operations
   e. Finance
   f. PS&C – Product Strategy and Communication
   g. COS – Chief of Staff
   h. SCS – Statewide Client Services

Review the Project Checklist

The Project Checklist on the Home page shows required and encouraged documentation for the project level. The project manager/coordinator marks checklist item when they are completed.

1. To set a Document Type as completed, select it on the checklist.
2. Under Completed, toggle No to Yes.
3. Attach related documents, as needed.

Set the Overall Duration

The overall duration sets the start and end dates for the project. The end date is included in the Division of IT – Projects report.

1. Under Tasks, select Overall Duration.
2. Click Edit Item.
3. Select the Start Date and End Date. Click Save.

Add Milestones

Milestones track progress of important achievements or points of time in a project.

1. Select Tasks from the left-side Quick Links. Click new task.
   a. Note: Make sure to open the task list from the left-side menu. If you open the task list from the home page, the Add to Timeline option will not appear.
2. Enter the Task Name for the milestone.
3. Select the Start Date. For a milestone, set the Due Date the same as the Start Date.
4. Add a Description and select Save.
5. To add the milestone to the project timeline, click Open Menu (…) for the task to be added to the timeline. On the box that appears, click Add to Timeline.

Document Scope Approval

The project sponsor approves the scope, which is documented in the Project Information. The approval can be documented via email and stored as a pdf.

1. In the Project Checklist, select Scope Approval.
2. Under Completed, toggle No to Yes.
3. Attach the pdf.

Complete Additional Project Documents

Refer to the Project Checklist for additional required or encouraged project documents. Most document lists can be accessed on the Home page or from the left-side Quick Links. Other templates are available in the Project Documents library. See Additional Project Documents for more on each document type.

Schedule Recurring Project Team Meetings

(Encouraged for Level 1 and required for Levels 2-4)

Schedule the project team's status meeting on a regular frequency, such as weekly, bi-weekly, or monthly. Division of IT locations have conference rooms that can be scheduled through the email calendaring tool, and Zoom is available for remote meetings.

PHASE 3 – PROJECT MANAGING (EXECUTING AND CONTROLLING)

Once a project moves into the managing (executing and controlling) phase, the project manager's focus shifts to monitoring the work being performed. Managing the project plan ensures that planned project activities are carried out in an effective and efficient manner.

Update Project Phase

1. Select Project Information from the left-side Quick Links.
2. Select Quick edit.
3. Click Planning. From the dropdown menu, select Executing.
4. Select Exit quick edit.

Enter Status Report

Add project status reports at least monthly. They should be submitted on the Monday before the Operational Leadership Team (OLT) meeting, which meets on the first Thursday of each month. Status reports appear on the Home page of the main Division of IT – Projects site and are reviewed by the Executive Leadership Team.

1. In Status Reports on the Home page, click new item.
2. Enter a short summary of project accomplishments or events since the last update. Click Submit.

Manage Scope

The PM/PC should document any changes to the project scope. The project sponsor approves the scope change via email, which should be retained as a pdf. Optionally, the Project Changes list can be used.

Manage Schedule

A missed activity finish date may require adjustments to the entire project schedule, resource staffing, and other areas. The PM/PC communicates schedule changes to the sponsor and the portfolio manager:

1. At the monthly Operational Leadership Team (OLT) meeting, the Associate Directors are asked for status updates on projects that are due to be completed in the next 90 days.
2. After the monthly OLT meeting, the portfolio manager emails the Division of IT about the status of the project portfolio, including revisions to project completion dates.

Manage Communications

The PM/PC keeps the team and stakeholders informed of project status:

1. Enter status reports.
2. Hold regular team meetings.
    a. For Level 2-4 projects, the PM/PC documents meeting minutes. These minutes can be captured in Word, email, Google Docs, or other means. The meeting minutes template is available in Microsoft Word format.
3. Document issues and decisions (encouraged for all levels, required for level 4).

PHASE 4 – PROJECT CLOSING

The last major stage of a project's life cycle is project closure. Project closure occurs once all defined project tasks and milestones have been completed, and the sponsor accepts the project's deliverables.

Project closure may include the following:

- Verifying formal acceptance by the sponsor
- Documenting the project successes, problems, and issues
- Documenting lessons learned
- Archiving project records

Update Project Phase

1. Select Project Information from the left-side Quick Links.
2. Select Quick edit.
3. Click Executing. From the dropdown menu, select Closing.
4. Select Exit quick edit.

Document Lessons Learned

Documenting and disseminating lessons learned bolsters continuous improvement through better work processes, operations, and cost effectiveness. A lessons learned session should include the project team, key stakeholders, and any project support staff. The lessons learned document template is available in Microsoft Word format.

While formally conducted lessons learned sessions are part of project closure, some project teams choose to document lessons learned throughout the project's duration.

Examples of questions to cover during lessons learned sessions include:

- Did the project finish on time? If not, why?
- Was the customer satisfied with the end product?
- Were requirements and goals of the project met? If not, why?
- Did the project remain within budget? If not, why?
- Did the project management methodology work? If not, why?
- What could be done to improve the process?
- What roadblocks or challenges were experienced that impacted the project?

Archive Project Documentation

Closed project files are stored in Laserfiche in the PMO folder structure, which follows the standard university records retention guidelines. Please contact the portfolio manager for assistance with archiving project documentation. The portfolio manager sets the project phase to Completed.

ADDITIONAL PROJECT DOCUMENTS

Refer to the Project Checklist for additional required or encouraged project documents. Most documents can be accessed on the Home page or from the left-side Quick Links. Other templates are available in the Project Documents library.

Project Charter

Encouraged for Level 3, required for Level 4.

The project charter provides the basis for future project decisions. The PM/PC documents the project charter after meeting with the sponsor, associate director (AD), and/or technical lead. The project charter template is available in Microsoft Word format.

Kick-off Meeting

Encouraged for Level 2, required for Levels 3-4.

The kick-off meeting presentation template is available in Microsoft PowerPoint format. The PM/PC schedules the project kick-off meeting. Team members and other stakeholders should be invited. The scope should be discussed to ensure everyone understands the purpose and extent of the project. High-level milestones and time expectations should be set.

Requirements

Encouraged for Levels 1-2, required for Levels 3-4.

1. Select Requirements from the left-side Quick Links and click New.
2. Enter a short title and a description.
3. Select a Priority – Critical, High, Moderate, Low
4. Select a Requirement Type – Business, Policy, Quality, Technical (Functional), Technical (Non-functional), Stakeholder
5. Add an attachment, as needed.
6. Click Save.

Work Breakdown Structure

Encouraged for Levels 3-4.

A work breakdown structure (WBS) is a visual representation of the work required to produce the project deliverables. The creation of a WBS is an effort to breakdown the deliverables into smaller manageable work packages. The work referred to in a WBS is not an activity, but the work products or deliverables from an activity or group of activities. The WBS created in the planning phase may be essential in scope management during the managing phase. WBS templates are available in Microsoft Project, Excel, Word, and Visio formats.

The Division of IT has managed some projects utilizing Agile or SCRUM methodologies. These projects also have a project schedule, but due to their more cyclical nature, they follow a sprint timeline. See Scrum/Agile Project Management Methodology for more information.

Tasks

Encouraged for Level 2, required for Levels 3-4.

The task list (project schedule) provides the capability to track progress on the project and a mechanism to set expectations for what is expected, when, and by whom.

1. Select new task from the Home page or select Tasks from the left-side Quick Links and click new task.
2. Complete the form fields.
   a. Task Name, Start Date, Due Date, Assigned To, Description
3. Click Show More for additional fields.
   a. %Complete, Predecessors, Priority, Task Status
4. Click Save.

Team

Encouraged for Levels 1-2, required for Levels 3-4.

Document the project team members and their role. Note: Adding members to the Team list is separate from sharing the site or granting site privileges. The project manager/coordinator still needs to share the site or add the team member to a permissions group.

1. Click Team Member from the top right of the Home page.
2. Click Quick Edit.
3. Select a Role from the dropdown.
    a. Team Member, Project Manager, Sponsor
4. Enter Name (or enter an email address). Select the person.
5. Click Exit quick edit.

Share the project site with team members.

1. Select Share.
2. Enter the names or email addresses of the team members. Note: this is separate from adding people to the Team Members list.
3. Click Show Options. Select a permission level (the default is Contribute).
4. Click Share.

Risks

Required for Levels 3-4.

Document a list of risks that could occur, including a risk score based on probability and impact, consequences if the risk occurs, and a response. For Project Risk Examples, go to Project Documentation > 2_Planning.

1. Select Risks from the left-side Quick Links and click New.
2. Enter Title, Description, Consequences, and Risk Response.
3. Select Probability.
    a. Low, Medium, High
4. Select Impact.
    a. Low, Medium, High
5. Select State.
    a. Pending, Achieved, Not Achieved
6. Click Save.

RACI

Encouraged for Level 3, required for Level 4.

A RACI matrix is developed to assign roles and responsibilities for project milestones, decisions, and tasks. RACI stands for Responsible, Accountable, Consulted, and Informed, which defines the level of responsibility assigned to the project team members and stakeholders. The RACI template is available in Microsoft Excel format.

Stakeholder Analysis

Encouraged for Level 3, required for Level 4.

The stakeholder analysis involves identifying stakeholders and analyzing the stakeholders' impact or influence on the project throughout the project's lifecycle. A stakeholder analysis is instrumental in creating a communication plan and developing your requirements for the project.

1. Select Stakeholder Analysis from the left-side Quick Links and click New.

2. Enter Stakeholder Group. This is used in the Communication Plan.
3. Select Role
    a. Sponsor, Participant, Advocate, Vendor
4. Enter text for Interest in Project.
5. Select Interest Level and Degree of Interest.
    a. Low, Medium, High
6. Select Action by Group.
    a. Manage Closely, Keep satisfied, Keep Informed, Monitor
7. Click Save.

Communications Plan
Encouraged for Level 3, required for Level 4.

Project communications planning involves defining the information needs of stakeholders and team members, as well as identifying which people need what information, when it is needed, and how they get it. Communication is the cornerstone of how work is performed by different parties within a project and is a critical component in the process. For complex or cross-divisional projects, a formalized external communication plan may be needed, which should be coordinated with Product Strategy & Communications (PS&C).

1. Select Communications Plan from the left-side Quick Links and click New.
2. Select a Stakeholder Group created in Stakeholder Analysis.
3. Enter text for Role, Message, and Channel.
4. Add Responsible person.
5. Enter Frequency.
6. Click Save.

Meeting Agenda
Required for Level 4.

Every formal meeting should have an agenda prepared and distributed to participants prior to the meeting. Depending on the attendees and size, this can be done via email. The meeting agenda template is available in Microsoft Word format.

Meeting Minutes
Required for Levels 2-4.

Meeting minutes should be documented for all project meetings. They provide an effective way for participants and management to know the status from each meeting. These minutes can be captured in email, Word, Google Docs, or other means. The meeting minutes template is available in Microsoft Word format.

Decisions
Encouraged for Level 3, required for Level 4.

The Decisions list documents all major decisions that are made on a project. On a large project, management and the team make many decisions. It is very important to keep track of everything that has been agreed upon.

1. Select Decisions from the left-side Quick Links and click New.
2. Enter text for Title and Description.
3. Select Approved By.
    a. Team
    b. Sponsor
4. Add an attachment, as needed.
5. Click Save.

Issues

Encouraged for Level 3, required for Level 4.

The Issues list provides a mechanism for organizing, maintaining, and tracking the resolution of issues that cannot be resolved at the individual level.

1. Select Issues from the left-side Quick Links and click New.
2. Enter text for Title.
3. Add the Assigned To person's name or email address.
4. Select State.
    a. Pending, Open, Work in Progress, Closed Complete, Closed Incomplete, Closed Skipped
5. Select Priority.
    a. High, Normal, Low
6. Enter text for Description.
7. Enter Due Date.
8. Click Save.

Project Changes

Encouraged for Level 3, required for Level 4.

The Project Changes list documents major changes to the project, the consequences of the change, and the approval of the change.

1. Select Project Changes from the left-side Quick Links and click New.
2. Enter text for Title, Description, and Consequences.
3. Select an Approved Date.
4. Add the Approved By person's name or email address.
5. Add an attachment, as needed.
6. Click Save.

Project Closure Document

Encouraged for Level 3, required for Level 4.

The project closure document obtains verification and signoff from the sponsor that deliverables identified in the scope are completed. If for some reason a deliverable was not completed, this should be noted and the reason why this occurred. The project closure document is reviewed in the final project closure meeting. Also, during the meeting lessons learned are identified and documented. The project closure document template is available in Microsoft Word format.

be customized for the particular project to include pertinent deliverables, key features, and important information about final product delivery.

DEFINITIONS

Project

A project is a temporary endeavor undertaken to create a unique product, service, or result. An *information resource project* is an effort to acquire or produce information and telecommunications technology systems and services.

Examples include but are not limited to, developing a new product or service, developing or acquiring a new or modified information system, upgrade, or release. The project complexity questions in the Laserfiche project proposal forms provide guidance in determining if an endeavor is a project or a task.

Operational Activity

Operational activity refers to ongoing and repetitive tasks whose purpose is to maintain existing systems. Examples include but are not limited to incident tickets, requests for service, or routine maintenance requests.

Project Management Methodology (PMM)

The collection of processes, tools, templates and approaches intended to drive efficiency and consistent project delivery. It is designed to meet the needs of all segments of the organization as they engage in technical project work. It serves as a guide to the organization in project selection, to project teams in planning work, to management in providing oversight, and to sponsors and clients as they collaborate in the design and delivery of new business systems. It should apply equally well and meet the requirements of projects large and small.

Project Portfolio Management (PPM)

The coordinated management of the processes, methods, and technologies used by project managers and project management offices (PMOs) with the intent of enabling analysis and management of multiple concurrent proposals and initiatives. Objectives of PPM include realizing organizational strategic and operational goals through proposal approval, prioritization, standardization, efficiencies of scale and repetition, resource management, and financial management.

Enterprise IT Project Portfolio

The enterprise IT project portfolio is the combination of a unit's project portfolios to provide an enterprise-wide view of all IT projects. This term does not mean only a portfolio of projects that impact or serve the whole enterprise.

Portfolio Manager

The person responsible for the oversight of the project portfolio management process and methodology. Additionally, the portfolio manager analyzes the organization's projects to evaluate project status and execution to ensure each initiative is aligned with the expected benefits.

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PROJECT PORTFOLIO MANAGEMENT

Project Portfolio Maintenance and Reporting

1. Each Associate Director names a project coordinator, who works with the portfolio manager to provide updates to projects.
2. The portfolio manager emails the liaisons before the Executive Review Board (ERB) meeting to request the following:
   a. Submission of new projects (through Laserfiche)
   b. Revisions to dates of existing projects
3. At the ERB meeting, the portfolio manager presents new project requests submitted through Laserfiche and records approvals by the members.
4. Projects approved by the ERB are entered into SharePoint by the portfolio manager.
5. Project priorities are set in the ERB meeting to balance the portfolio.
6. The portfolio manager sends a reminder to the project coordinators to submit monthly updates by COB Monday before the Operational Leadership Team (OLT) meeting, which meets on the first Thursday of each month.
7. The portfolio manager runs the project status report on the Tuesday before the OLT meeting for all work-in-progress projects. The report contains project status, project end date, and the last monthly update.
8. At the monthly OLT meeting, the portfolio manager presents the project portfolio.
   a. The Associate Directors are asked for status updates on projects that are due to be completed in the next 90 days.
9. Annually, the Associate Directors provide a list of proposed projects in their tactical plans.
10. The portfolio manager conducts an annual review of the project portfolio to ensure completed projects are closed, new projects are approved, and resources are distributed to manage all approved projects.

Monthly Status Reporting

All projects registered in the project portfolio must have project status information updated at least monthly. The PMs/PCs is responsible for posting project status information and should review all project information to ensure accuracy. See Enter Status Report for more information.

PROJECT COORDINATOR PROGRAM

The project coordinator program (PC) supplements and enhances the Division of IT's ability to manage projects. It is dependent on functional, technical, and/or subject matter experts to engage in project management processes in addition to their normal work duties. This is compared to project managers (PM), whose primary role is to manage projects.

Definition

A PC is:

- Identified by an Associate Director,
- Reports into that AD's line of business (LOB),
- Familiar with project management practices,
- Responsible for reporting on project work.

The role and responsibilities of a PC are usually a subset of that of a PM. The primary responsibility of a PC is to maintain the project records and keep all related processes running smoothly.

Training

PCs have a variety of training tools to help facilitate and guide their project work.

- This guide – The purpose behind this methodology document is to provide high level support of the basic principles that should be applied at the Division of IT.
- Requests for edits, updates or additions should be forwarded to PMO@tamu.edu.
- In-person - The Division of IT will schedule training sessions to assist with project management practices, methodology questions, and tool (SharePoint) usage. These in-person sessions will be scheduled in advance.
- Online - Many courses are available at no cost through LinkedIn Learning, including the following:

Project Management Foundations	https://www.linkedin.com/learning/project-management-foundations-4/
Agile Foundations	https://www.linkedin.com/learning/agile-foundations/
Project Management: Technical Projects	http://linkedin.com/learning/project-management-technical-projects/

Communications

PCs should engage in regular and periodic communication. At a minimum, the expectations for communications from PCs include:

- Communicate at least weekly to the project sponsor (Associate Director or other executive).
- Communicate at least monthly on the status of your project to the portfolio manager.
  - This can be accomplished in SharePoint, or through ServiceNow's functionality, depending on where the project information is housed. Required update information is detailed in Enter Status Report.

Division of
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SCRUM/AGILE PROJECT MANAGEMENT METHODOLOGY

In addition to the PMBOK Project Management Methodology, the Division of IT has also adopted the practice of SCRUM on certain projects. SCRUM is a framework that employs various processes and techniques. It is an interactive, incremental approach to optimize predictability and control risk.

To determine if a project should use the SCRUM Methodology, the following questions should be considered:

1. Will resources (IT and client) be committed to the project more than 50% of their time?
2. Can requirements and tasks be clearly defined and measured in specific intervals of one to two weeks?
3. Will the resources be co-located?
4. Will resources be able to make daily progress on a task?

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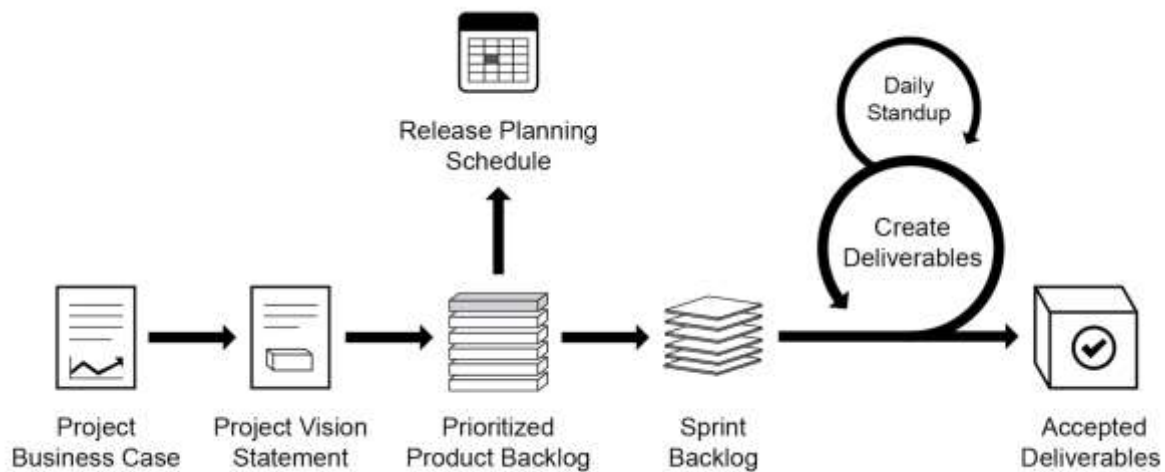
Scrum Cheat Sheet by agile42

Product Owner
Owns the Product Backlog

The Product Owner represents the interests of everyone with a stake in the project (Stakeholder) and he is responsible for the final product.

- elicit product requirements
- manage the Product Backlog
- manage the release plan
- manage the Return on Investment

Scrum Master
Owns the Scrum process

The Scrum Master is responsible for the Scrum process. He ensures everybody plays by the rules. He also removes impediments for the Team. The Scrum Master is not part of the Team.

- manage the Scrum process
- remove impediments
- facilitate communication

Development Team
Owns the software

The team figures out how to turn the Product Backlog into an increment of functionality within a Sprint. Each team member is jointly responsible for the success of each iteration and of the project as a whole.

- software quality
- technical implementation of User Stories
- delivery of a "potentially shippable" product increment at every Sprint

Sprint Planning
Commit the deliverable(s) to the PO

Two part meeting. First, the PO presents the User Stories. Second, when the Team thinks they have enough Stories to start the Sprint, they begin breaking it down in Tasks to fill the Sprint Backlog (normally 3 to 4 days of work, than inspect & adapt).

Timebox: 4 hours
Owner: Product Owner
Participants: Team, Scrum Master

Daily Scrum
Inspect and Adapt the progress

In this standup meeting the Team daily inspects their progress in relation to the Planning by using the Burndown Chart, and makes adaptation as necessary. Timebox: 15-20 minutes

Owner: Scrum Master
Participants: Team, all interested parties may silently attend.

Sprint Review
Demonstrate the achievements

The team demonstrate the PO the result - on the developed product - of the Sprint. The PO can accept or reject features depending on the agreed acceptance criteria.

Timebox: 4 hours
Owner: Team
Participants: Scrum Master, Product Owner, optionally the PO can invite other Stakeholders

Retrospective
Maintain the good, get rid of the bad

At the end of a Sprint, the Team evaluates the finished Sprint. They capture positive ways as a best practice, identify challenges and develop strategies for improvements.

Timebox: 3 hours
Owner: Scrum Master
Participants: Team, (Product Owner)

Product Backlog
Dynamic prioritized list of requirements

The requirements for the product are listed in the Product Backlog. It is an always changing, dynamically prioritized list of requirements ordered by Business Value. Requirements are broken down into User Stories by the PO.

Prioritize the requirements by playing the Business Value game. Buy these at www.agile42.com

Burndown Chart
Displays the remaining work

The Burndown chart shows the amount of work remaining per Sprint. It is a very useful way of visualizing the correlation between work remaining at any point in time and the progress of the Team(s).

Use a tool such as Agilo to automatically create the Burndown Chart. Learn more at www.agile42.com

Sprint Backlog
List of Tasks to fulfill the Sprint Goal

The Sprint Backlog contains all the committed User Stories for the current Sprint broken down into Tasks by the Team. All items on the Sprint Backlog should be developed, tested, documented and integrated in order to fulfill the Sprint Goal.

Estimate Story complexity by playing Planning Poker. Buy these at www.agile42.com

Potentially Shippable Product

Scrum requires at the end of each Sprint that the product is potential shippable to the customer. That means the increment is:

- thoroughly tested and stable
- well-structured
- well-written code
- user operation of the functionality is documented

Requirements
Make **SMART** Requirements: Simple, Measurable, Achievable, Realistic, Traceable.

User Stories
INVEST in User Stores: Independent, Negotiable, Valuable, Estimable, Small, Testable.

Tasks
Make sure a Task is **TECH**. Time boxed, Everybody (can pick it up), Complete and Human-readable.