The University of the District of Columbia Information Technology



Project Request and Approval Process

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Project Management Methodology Overview

The University of the District of Columbia (UDC) Office of Information Services and Management (ISM) has developed a Project Management Methodology as a means of achieving a greater degree of success in its technology projects. The Project Management Methodology serves as a guide to the institution as it selects its projects, to project teams as they plan the work, to management as they supply the required oversight, and to sponsors and customers as they collaborate in both design and delivery. This methodology is design to be consistent with the Project Management Institute's Guide to Project Management Body of Knowledge (PMBOK) as well as the nature of the institution.

The Information Technology Project Management Methodology is design to provide an institution wide project management capability based on a common language, a practical set of skills, and a robust methodology, with appropriate support tools for maximizing productivity and effectiveness in completing projects successfully, on time, and within budget. The larger intention of this effort is to develop a standard for project management practices and procedures across all aspects of the institutional technology landscape. The Project Management Methodology includes documentation, templates, and other tools to assist the project managers, project teams, faculty, and staff in scoping, planning, and executing projects.

GOALS

This document describes in detail the process that UDC ISM will use during the requesting phase of a project. In defining this methodology, we hope to reach the following goals:

- Provide a common point of reference and a common vocabulary of talking and writing about the practice of project management for projects within the ISM Division.
- 2. Increase the awareness and professionalism of good Project Management Practice by those charged with the responsibilities defined in the methodology.
- 3. Define the roles of the sponsor, IT liaison, IT project manager, subject matter expert (SME), project team, stakeholders and other team members and obtain consensus within the institution about their importance as critical success factors.
- 4. Establish the basis for a collaborative environment where everyone engaged in project work understands what is required of them and why those requirements are key factors for improving project results.

DEFINITION OF A PROJECT

A project is a temporary endeavor with a start and end date, that is carefully planned and designed to achieve a particular aim, to create a unique product, service or result within defined constraints. A project concludes when its objectives have been attain and its resources have been release to do other work.

UDC Information Services and Management defines a project as:

- 1. A unique endeavor
- 2. Temporary, with a distinct beginning and end
- 3. Defined by specific deliverables
- 4. Conducted by a temporary team that exists for its execution
- 5. Having a project manager who is responsible for its success
- 6. Defined by identifying its starting point, the goal/objectives sought, and the route between them.

Day to day operations are ongoing and repetitive. Operational activities may repeat daily, monthly, annually, or on an as needed basis, e.g., financial review, system upgrades, hiring for a new position. When operations require a major change in process, input/output, or purpose, they may become projects until the change is complete.

PROJECT TYPES

All Information Technology (IT) projects that take place within the University of the District of Columbia are categorized into two categories: a Campus Strategic Project or an Operational Project; these categorizations are based on the criteria described below.

Strategic Project:

Any work requested that meets <u>any</u> of the criteria below will be consider a Strategic Project:

- 1. The propose project requires a minimum of 10 hours of dedicated IT support which may include planning and design considerations
- 2. The work requested impacts more than one department
- 3. The work requires institutional funds to be expended, excluding staff salaries
- 4. The project implements new technologies and processes that promote transformative change resulting in an institutional competitive differentiation
- 5. The project has a large institutional impact

Operational Project:

Any work requested that meet <u>all</u> the criteria below will be consider an Operational Project:

- 1. The proposed project requires a minimum of 10 hours of dedicated IT support which may include planning and design considerations
- 2. The work is in support of one department
- 3. The work does not require that institutional funds be expended, excluding staff salaries
- 4. The project does not have a large institutional impact
- 5. The project will optimize performance and accommodate incremental growth and improvements

PROJECT MANAGEMENT OVERVIEW: TOLLGATES METHODOLOGY

UDC will utilize the methodology known as *tollgates methodology*. The tollgates methodology is a process of project progressive definition based on a planned and standardized evaluation at the end of each phase. Thus a tollgate is used as a standardized control point where the projects phase is reviewed and/or audited and approved (or not) to continue into the next phase. The gates allow the project manager, project team, and stakeholders to verify if the project reaches the expected performance; in other words, the information necessary to proceed with the project is reviewed and checked as to whether it is complete and updated. From the project management point of view, the gate control allows the institution (and extensively the project managers) to validate whether the planning is good enough to face the next phase.

The technique is based on a structured review of project scope and plans, consequently limiting the uncertainty at the moment of decision-making. As funds and resources are increased step by step, it permits the institution to limit the business's and project's risk.

The systemic approach means that no project will be approved to move on without the minimum information and the minimum confidence required, making the management of future phases easier. This approach helps avoid breaks in transitions, smooth the closure, and forces the documentation to be made that will allow the use of lessons learned.

Similar to a road map, the methodology shows the path that must be taken and the deliverables that must be developed during each stage of the project. It also provides templates and a structure that helps to guide and standardize the process.

When a stage begins, the project team starts to develop and consolidate the deliverables needed for passing to the next gate. To do so, the initiation, planning, execution, and finalization cycle is performed in each phase. The tollgates methodology has five phases: Request, Discovery, Realization, Implementation, and Closure. Once everything is completed, a review can be done to ensure there are no missing points, and minor problems can be solved before the formal audit. Afterward an audit can be conducted to determine if the project can step forward to the next phase, giving a recommendation to the decision maker.

Assuming that a project passes all of the necessary tollgates successfully, the project is elevated to the sponsor for approval. The sponsor can either ask for a more detailed work before making a decision, approve funds to begin the next stage, delay the investment, or cancel the project. The phased nature of the method forces the explicit endorsement or cancellation of the project. This final decision depends on the project's attractiveness for the business and is based on information that fulfils the institution standards.

Each project phase addresses a specific aspect of the process flow referenced in the UDC IT Governance Framework of managing a project from initiation through close. Although these phases are described sequentially, in practice many of these phases may overlap or be applied concurrently during the lifetime of a project. Listed below is an overview of the five phases. The Requesting Phase is describe in detail in subsequent sections of this document while the remaining four phases are documented in detail in the Project Management Methodology.

Requesting

Requests from the University community for technology-related improvements are injected into the IT governance process by submitting a brief project overview or project request form to the Office of Information Services and Management. Below are steps in sequence of the Requesting phase:

- Stakeholders deliver a project request consisting of the following information:
 - 1. Project Name
 - 2. Stakeholder Name and Department
 - 3. Estimated Project Cost
 - 4. Estimated Level of Effort
 - 5. Requested Delivery Timeline
 - 6. Brief description of the Project and its benefits to the University
- ISM will review and ensure that the request meets the criteria delineated in the UDC IT Governance Framework and same request is not being submitted by multiple parties
- ISM submits the completed proposal to the members of the governance board.
- The governance board distributes copies of the proposal to technical, security, risk, liability, legal, ethical, regulatory, policy, procedural, and other accountability reviewers.
- Each of the reviewers submits a form to the governance board indicating whether there are any issues or concerns with the proposal. These reviewers are asked only to consider potential risks and issues with the proposal. Their comments will become part of the project proposal as it moves forward through the project life cycle.

- The IT governance board considers proposals and decides which ones to recommend for action. Each recommended project proposal is submitted to the appropriate sub-committee for follow up action.
- Sub-committees work with project stakeholders to develop a detailed blueprint which includes a thorough estimate of cost, level of effort, functional requirements, risk analysis, cost benefit analysis and delivery recommendation date.
- Project blueprints are submitted to ISM where functional analysis will be performed against the business defined requirements. This requirement analysis will be used to evaluate the market and determine the best product to meet the business needs. Project blueprints will be updated with technical recommendations and submitted back to the appropriate sub-committee.
- Sub-committees will distribute the project blueprint to all committee members for review and analysis.
- The IT governance board considers proposed project blueprints and decides which ones to recommend for action. The board ranks those projects based on specified criteria, including impact, importance, risk, and funding models.
- The governance board formally submits the rank ordered list of proposals to the Executive Director of ISM for implementation planning.
- The Executive Director of ISM becomes responsible for the implementation of the submitted projects and communicates scheduling and timelines to the submitter. Once agreed upon, the Executive Director communicates these decisions to the governance board and the decisions are published in the minutes for transparency.
- Technical project teams are formed according to the proposed schedule and monthly reporting of budgets and milestone are presented to the governance board by the Executive Director.
- The Project manager coordinates with the funding source to submit a requisition/ purchase order to purchase the necessary products or services

Discovery

- The IT project manager coordinates a project kick-off meeting with the project sponsor, project team, and the customer(s).
- The IT project manager formalizes the existence of the project
- The IT project manager defines the preliminary project scope, roles, and timeline

- The IT project manager delivers a project charter
- The IT project manager creates a resource plan
- The IT project manager creates a project requirements document

Realization

- The project team creates a test environment / prototype
- The project team delivers a detailed project plan
- The project team defines the detailed project schedule, budget, resources, and timeline
- The project team provides the baseline to control and manage the project
- The project team creates and approves the acceptance document for the test environment prior to beginning project work
- Customer approves the test environment
- The project team executes the tasks in the project plan against the test environment (schedule)
- The project team conduct required training for new product, service, or software

Implementation

- The project team executes the tasks in the project plan against the prod environment (schedule)
- The IT project manager delivers regular updates to stakeholders detailing progress
- The IT project manager relies on the plans from the Discovery phase to control the project
- The project team creates and delivers the project requirements in the test environment to production environment (prod environment)
- Customer approves the prod environment
- The project team deploy the required capabilities, product, or service to the production environment

Closing

- The IT project manager provides confirmation that the project business case has met desired objectives and outcomes
- The IT project manager concludes all project activities
- The IT project manager administratively closes the project
- The IT project manager turns the delivered product or service over to customer or a support group
- The IT project manager assesses project outcomes and team performance
- The IT project manager documents best practices and lessons learned
- The project team celebrates project success

PROJECT ROLES & RESPONSIBILITIES

A successful project requires the project team to participate (at some level) in the planning process, buy-in to the project plan, and be responsible for the completion of necessary assignments. It is important to have a defined formal structure for the project and for the project team. This provides each individual with a clear understanding of the authority given and responsibility necessary for the successful accomplishment of project activities. This section describes the typical roles and responsibilities for projects. Roles may be assign to one or more individuals. Conversely, individuals may have one or more roles on a project.

Project Sponsor - The Project Sponsor is the executive (Dean, AVP or above) with a demonstrable interest in the outcome of the project and who is ultimately responsible for securing spending authority and resources for the project.

The Project Sponsor will:

- Oversee high-level project progress
- Provide input to the development of a project charter
- Provide and approve project budget and resources
- Champion the project to provide exposure and buy-in from senior management And University administration
- Approve the project completion

IT Governance Committee – The IT Governance Committee consists of unit leaders who are authorize to represent their unit on all Information Technology related matters

including the submission of project requests. The IT Governance Committee works with the ISM Division to define the project's goals and objectives, to keep abreast of major project activities, and to ensure there are sufficient human capital resources needed to complete an approved project.

IT Project Manager- The IT project manager is the person assigned by the ISM division to ensure that the project team achieves the project objectives and completes the project in accordance with the defined project deliverables. The IT project manager develops the project charter and plan with the team and manages the team's performance of project related tasks. The IT project manager also secures the acceptance and approval of deliverables from the project sponsor and stakeholders.

The IT project manager will:

- > Develop, monitor, and review project management deliverables & activities within the project plan
- Communicate to and receive feedback from the project team
- > Escalate and resolve issues as needed
- ➤ Initiate project meetings in consultation with project team and sponsor
- Develop project and implementation plans
- Prepare deliverables for approval by stakeholders
- > Schedule and track resources
- Communicate project status to Project Sponsor and stakeholders

Subject Matter Expert (SME) - The subject matter expert is an individual who has a high level of expertise in performing a specialized job, task, or skill within the institution. Project managers need to work with SMEs in the Discovery and Execution phases of a project and should involve them in the technical validation of project charters and plans.

Project Team - The Project Team has responsibility for conducting project activities. Project team members, as necessary, assist the Project Manager in planning the development effort and will help construct commitments to complete the project within the established schedule and budget constraints. The project team may include the subject matter experts responsible for implementing the project solution. Customers and/or stakeholders should interact with the project team to ensure they understand the requirements and to ensure the project team properly implements the requirements. The project team may include both UDC staff members and external consultants brought on for the project engagement.

PROJECT REQUEST AND APPROVAL PROCESS

Any work requested of the ISM Division that is not a core service (e.g. creating accounts, adding phones and computers, etc.) or for the repair (break/fix) of a core service item, requires the submission of a project request to the IT project manager. Once submitted, all project requests will follow the workflow described below. In this way, the requestor

will be certain that the project concept is aligned with the department and institutional strategies.

Creating a Project Request

- 1. The project requestor initiates an IT project request online by completing the project request form posted on the IT UDC Homepage.
- 2. The online project request form submission shall be considered an informal project request.
- 3. The Informal Project Request submission must contain:
 - ➤ A brief overview of the project work
 - ➤ A justification statement for the project request
 - ➤ Goals and objectives (what is the purpose of doing the work)
 - Name of the project sponsor
 - Scope (overview of what is in, out, and uncertain)
 - > Stakeholder roles, responsibilities and involvement
 - ➤ Initial estimated cost (hardware, software, professional fees, licenses, and effort if applicable)
 - ➤ Identified funding source
- 4. Upon receipt of the informal project request submission, the ISM Division along with the IT project manager will work with the requestor to develop the proposal into a formal project request, which will be fully evaluated by the IT governance committee during the project planning process.

Developing the Project Request

- 1. The informal Project Request submission is sent to the ISM Division for an initial evaluation.
- 2. The ISM Division will contact the project requestor to arrange a meeting(s) to review, refine and develop the project proposal. This meeting will develop the project proposal into a formal IT project request.
- 3. The formal IT project request form will be posted on the IT UDC Portal page. The project request form will contain all the information necessary to allow formal project task and portfolio planning to occur as part of the monthly request review process.

The Request Review Process

The ISM Division will initiate the review of all IT Project Requests when a project(s) meet the magnitude of zones listed in the IT Governance document. The Information Technology Leadership, the Information Technology Project Manager, and the IT Governance Committee will then review all requested technology projects for identifying which projects will be approve to go forward into the project-initiating phase for further planning.

During the monthly request review process, all project requests will be initially classify as "approved", "declined" or "deferred" based upon their project score, the institution's ability to successfully execute the projects, and how the projects align with the goals of each division and the University's strategic plan. Approved projects will be those projects that are consider the highest priorities of the University. The ISM Division will make a firm commitment to complete all of the approved projects within the specified timeframe. The Executive Director of ISM will share the results of the annual request review process with the Chief Operating Officer to ensure the approved projects reflect the needs and priorities of the University.

There may, occasionally, be a need to review a project request outside of the monthly request review process. These instances will be handled as exceptions and addressed on a case by case basis. These one off projects will be evaluated against the impact they cause to previously approved budgets, projects and timelines and institutional priorities. If changes are necessary, they will be communicated to the impacted parties and the IT Governance Committee.

The Project Planning Process

The Project Planning Process is designed to produce the IT projects portfolio for all approved information technology related projects. The project manager will create a draft IT projects portfolio with recommendations for the following for each approved project:

- Project Manager
- Project Scoping/Planning Team
- Project Chartering Timeline
- Project Charter Due Date
- Project Planning Timeline
- Project Plan Due Date
- Estimated Project Start Date
- Estimated Project End Date

The draft IT project portfolio will be review by ISM management and approved monthly. The Executive Director of ISM will appoint project managers to approved projects and share the approved project portfolio with the IT Governance Committee, the Information Services and Management Division and the Chief Operating Officer.

APPENDIX A: GLOSSARY

Activity	A task or set of tasks that are carried out in order to create a deliverable.
Assumption	Factors that, for planning purposes, are considered to be true or certain without proof or demonstration.
Business Case	The reason or reasons to do a project
Change	A systematic way of reaching an intended outcome. Philosophically, change is what project management is all about.
Charter (Project Charter)	Formally authorizes the project to exist, establishes the Project Managers Authority, document high-level requirements, and success criteria.
Constraint	A restriction that will affect the performance of the project. The four primary and universal project constraints are scope, quality, time and resources. A factor that will limit the project team's options. For example, a predefined budget is a constraint that may limit the team's scope, staffing and schedule options.
Customer	The person or group for whom the project is for or whom will benefit from the project.
Deliverable	Any measurable, tangible, verifiable item that must be produce to complete the project. There are two kinds of deliverables associated with a project. The term is most often use in reference to those deliverables that are subject to approval by the project customer, e.g., system reports, screens, etc. There are also process deliverables which are produced as a result of the project management process, e.g., Statement of Work, Project Plan, etc.
Issue	A question that is raise for inquiry or a problem to be solve.
IT Governance Committee	The IT Liaison is a designee of an Area Vice-President who is authorize by that Vice-President to represent the division in all Information Technology related matters including the submission of project requests on behalf of a division.
Lessons Learned	What went well during the project as well as what did not go well? Lessons learned are used to improve current or future project performance.
Phase	A group of related project activities that allows for more control and often completes a major deliverable.
Progressive Elaboration	An iterative approach to planning, plans are created in multiple passes rather than all at once.
Project	A temporary endeavor undertaken to create a unique product, service, or result.

Project Life Cycle	The sequential phases through which a project passes. These phases contained all of the events, from beginning to end, necessary to complete the project. The generic project phases are • Requesting - • Initiation – Here the need is examined, high level requirements are developed, solution alternatives are assessed, the project scope is stated and feasibility is examined. • Planning – Here the concept is verified and developed into a workable plan for implementation of the solution. • Execution/Realization – Here the project work is undertaken to produce the project's deliverables and deliver them to the customer.		
	 Closeout – Here is where all remaining project activity required to close the project is completed, e.g., final review, lessons 		
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 Management Office (PMO)	The organizational entity charged with providing a focal point for the discipline of project management.		
Project Manager	The individual assigned by the institution who will be responsible for achieving the project objectives.		
Project Objective	A predetermined result toward which effort is directed. A concrete statement describing what the project is trying to achieve. An objective should be written at a low level so that it can be evaluated at the conclusion of a project to see whether it was achieved or not. A well-worded objective will be Specific, Measurable, Attainable/Achievable, Realistic and Time bound (SMART).		
Project Plan	An approved document used to manage and control the project work that includes a detailed schedule.		
Project Review	An evaluation of project results.		
Project Sponsor	The person who can secure any necessary funds for the project and settle policy issues as they arise.		
Requirements	Description of desired results. A negotiated set of measurable customer wants and needs. Requirements should be distinguished as "must haves" and "nice to haves".		
Risk	The likelihood of an undesirable outcome.		

Scope	The deliverables that will be produced by the project. Scope describes the boundaries of the project in terms of what will, and will not, be produced.	
Stakeholder	A person or department that is actively involved in the project, or whose interests may be positively or negatively impacted by the project, or who might exert influence over the project.	
Statement of Work (SOW)	A detailed narrative description of the work to be performed. The SOW includes: Project Overview Scope (Deliverables) Estimates (Effort/Cost/Timeline) Assumptions Risks Approvals	
Task	A well-defined unit of work that has entrance criteria (pre-conditions) and completion criteria (post-conditions).	
Timeline	A schedule showing key dates and planned events. A high level schedule.	
Work Breakdown Structure (WBS)	A deliverable-orientated hierarchical decomposition of the work to be completed on a project.	
Schedule	Planned dates for starting and completing activities and milestones. A detailed schedule shows the timing and sequence of tasks within a project, as well as the project duration.	

APPENDIX B: PROJECT REQUEST FORM



REFERENCES

Muino, A., & Akselrad, F. (2009). *Gates to success, ensuring the quality of the planning*. Retrieved from Project Management Institute: https://www.pmi.org/learning/library/gates-success-tollgate-methodology-6842