

**Radford University Information Technology
Project Management Standard 5002s-01**

August 29, 2011

Preface

Date

August 29, 2011 - The initial version of the university's Information Technology Project Management Standard.

Policy Reference

5002 Project Management Policy

Notice

It is the reader's responsibility to ensure they have the latest version of this Standard. Revision questions should be directed to the Director of Project Management and Audit Compliance. The most recent, approved version of this Standard will always be available upon request and on the university's Division of Information Technology (DoIT) website.

History

August 29, 2011 – Original Version 1 (5002s-01)

Review Process

The Director of Project Management and Audit Compliance will ensure that reviews of this Standard and subsequent revisions are done when necessary, and will request reviews by the Information Technology Advisory Committee (ITAC) and the Office of Audit and Advisory Services (OAAS), as appropriate.

Scheduled Review

One (1) year from effective date

Approval Authority

The University President, or designee, has approval authority over this Standard.

Publication Designation

Information Technology Project Management Standard

Publication Number

5002s-01

Purpose of this Standard

The Vice President for Information Technology & Chief Information Officer (CIO) has designated the Director of Project Management and Audit Compliance to develop project management policies, procedures and standards to ensure the timely and effective completion of the university's information technology projects. Therefore, the Director of Project Management and Audit Compliance is the author and maintainer of this Standard.

Subject Area

Information Technology Project Management

Effective Date

September 1, 2011

Compliance Date

September 1, 2011

Supersedes

None

IT PROJECT MANAGEMENT STANDARD

Section 1 Introduction

1.1 Purpose

The IT Project Management Standard (Standard IT-5002s) (PM Standard) establishes the required agency processes and documentation for information technology projects (IT Projects). The expected outcomes or results of implementing this standard are increased IT project success through sound investment decisions, management commitment and oversight, implementation of a best practice based project management methodology, and the establishment of defined processes that measure and evaluate project progress throughout the project lifecycle.

Implementation of this standard will ultimately achieve a higher return on the university's IT investments by promoting the use of sound management practices appropriately scaled to fit each project. This standard uses complexity of each project to determine the degree of management and documentation required in detailed planning, execution, and closeout. The goal is to apply the right amount of management control and documentation needed for a specific project to succeed.

1.2 Authority

The Commonwealth of Virginia Restructured Higher Education Financial and Administrative Operations Act of 2005 and Chapter 824, Virginia 2008 Acts of Assembly grant institutions additional authority over financial and administrative operations, on condition that certain commitments to the Commonwealth are met. Radford University's Memorandum of Understanding with the Commonwealth provides delegated responsibility for management of the institution's information technology project management and project auditing activities. This delegation includes the authority to conduct these activities in accordance with industry best practices appropriately tailored for the specific circumstances of the university, in lieu of following Commonwealth determined specifications. Responsibility for IT projects costing under \$2 million is delegated to the university to approve and manage such projects in accordance with industry, Commonwealth, and/or Project Management Institute (PMI) best practices.

IT projects costing \$2 million and over remains under the purview of the Commonwealth's Chief Information Officer (CIO), and the Project Management Division (PMD) of the Virginia Information Technologies Agency (VITA).

The President of the university has final project management oversight authority and may review, suspend or terminate any project.

1.3 Scope

The PM Standard is applicable to all university departments that may undertake the management, development, purchase, and use of information technology investments; however, this standard does not apply to research projects, research initiatives, or instructional programs.

This standard addresses requirements for university managed IT projects only.

1.4 What is an IT Project?

An information technology project is a temporary effort undertaken by the university with the primary purpose of creating a unique information technology product or service. **Temporary** means that the project has a definite beginning and a definite end. **Unique** means that the technology product or service is different in some distinguishing way from all other products or services provided.

Operations and maintenance activities, supporting an existing technology product or service within the organization, are not projects so long as the focus of the activity is the continued use of the current product or service. Significant cost for a procurement or operational activity does not make the procurement or activity a project. For example, routine upgrades and network component replacements, conducted as a matter of course in the maintenance and operation of IT assets, are not necessarily projects. However, an activity is a project if that activity leads to modification of an existing product or service, resulting in a new unique capability within the operational or organizational environment. Utilization of project management principles and techniques in the management of operations and maintenance activities is encouraged but not required.

Section 2 IT Project Classifications and Oversight

When a project proposal is received by DoIT, it is evaluated by the Project Director and assigned a classification. Once assigned, the classification drives the level of required documentation and institutional oversight.

2.1 Project Complexity Classification

Project complexity drives classification, amount of oversight required and the extent of project documentation necessary to adequately manage a given project. The IT Project Complexity Model provides a scoring mechanism to determine the level of complexity associated with a project. IT projects under \$100,000 are classified as “Basic” unless project characteristics rate a higher complexity score. Projects \$100,000 and over are classified as projects with “High”, “Medium”, or “Low” complexity.

Classification Characteristics

High	Medium	Low
<ul style="list-style-type: none"> ▪ Complex schedule with many dependencies 	<ul style="list-style-type: none"> ▪ Schedule has some dependencies 	<ul style="list-style-type: none"> ▪ Simple schedule with few to no dependencies
<ul style="list-style-type: none"> ▪ High total cost 	<ul style="list-style-type: none"> ▪ Intermediate total cost 	<ul style="list-style-type: none"> ▪ Low total cost
<ul style="list-style-type: none"> ▪ Untested technology, techniques or processes 	<ul style="list-style-type: none"> ▪ Evolving technology, techniques or processes 	<ul style="list-style-type: none"> ▪ Tested technology, techniques or processes
<ul style="list-style-type: none"> ▪ Extensive impact across departments or university-wide 	<ul style="list-style-type: none"> ▪ Impacts multiple departments or units 	<ul style="list-style-type: none"> ▪ Impacts a single department or unit
<ul style="list-style-type: none"> ▪ Involves staff from many departments 	<ul style="list-style-type: none"> ▪ Involves staff from more than one department 	<ul style="list-style-type: none"> ▪ Staffing involves single department
<ul style="list-style-type: none"> ▪ Extensive vendor or consulting activity 	<ul style="list-style-type: none"> ▪ Some vendor or consulting activity 	<ul style="list-style-type: none"> ▪ None to minimal vendor or consulting activity
<ul style="list-style-type: none"> ▪ Affects strategic direction of department(s) or university 	<ul style="list-style-type: none"> ▪ Clear effect on one or more business goals of a department 	<ul style="list-style-type: none"> ▪ Incremental effect on business goals of department

Certain other characteristics may elevate complexity for technology projects. These projects involve systems that:

1. interface to the university's Banner Administrative Systems (for data related to Student Administration, Finance, Human Resources, Advancement, Financial Aid, Student Accounts Receivable, etc.);
2. authenticate using the university's directory services (i.e. Active Directory); or,
3. access, transmit, process or store highly sensitive data such as Social Security Number (SSN).

2.2 Project Documentation

Refer to the Project Documentation Requirements matrix for detailed documentation requirements.

Section 3 Project Management Lifecycle

The project management methodology is closely aligned with the lifecycle of a project. The lifecycle is comprised of five phases which are sequential and often overlap. The five phases are Initiation, Planning, Executing, Monitoring and Controlling, and Closeout. The table below presents each phase along with key activities and deliverables required.

Important: Activities and deliverables for Initiation phase MUST be completed and approved before Planning and Executing may begin.

	Project Phase	Key Activities	Deliverables
1.	Initiation	<ul style="list-style-type: none"> • Project Sponsor develops project proposal to document the vision and business case for the project • Project Sponsor secures funding via new budget initiative or internal resources • Project Sponsor submits project proposal for approval by department head, division VP, and CIO • Project Sponsor submits approved project proposal to DoIT Project Director for classification • Project Sponsor assigns project manager • Project Sponsor and Project Manager identifies key stakeholders, project team • Project team defines project scope and develops project charter • Charter submitted for approval to Project Sponsor • Approved charter submitted to CIO • CIO approves charter, project now approved for planning 	Project Charter
2.	Planning	Project Team will:	Project Plan

		<ul style="list-style-type: none"> • Refine scope • Finalize requirements for deliverables • Develop work plan and schedule • Develop budget plan • Assign resources • Develop communications strategy • Assess risks and risk strategy • Develop procurement plan • Develop security plan • Develop testing plan • Develop quality management plan • Submit project plan to Project Sponsor for approval • File project plan with DoIT Project Director 	
3.	Executing	<ul style="list-style-type: none"> • Assemble the project team • Procure resources • Execute project tasks • Distribute information • Manage stakeholder expectations 	Identified in the Project Plan
4.	Monitoring/Controlling	<ul style="list-style-type: none"> • Provide status reports • Monitor performance • Monitor progress according to the schedule • Monitor and log issues and risks • Manage procurement • Monitor and log change requests • Implement testing and training plans 	Identified in the Project Plan
5.	Closeout	<ul style="list-style-type: none"> • Formal acceptance of final deliverable(s) by the Project Sponsor • Close out contracts or procurements • Transition project deliverable to operations and support • Final status report submitted to Project Sponsor and DoIT Project Director • Document lessons learned and file with DoIT Project Director • Archive project documents in file share • Project Sponsor releases the project team 	Final status/closeout report Lessons learned

3.1 Initiation

The initiation process defines a new project and obtains authorization for that project to start. A project proposal, outlining the business justification for the project, is prepared by the Project Sponsor. The sponsor holds a position with authority and responsibility to define project goals, secure resources, establish project priorities, and serves as a “champion” for the project.

Project proposals may be submitted via two avenues, depending on funding requirements:

1. Submission of a project proposal where additional funding is required: New projects requiring funding beyond the departmental budget allocations will be submitted as new budget initiative requests during the annual budget evaluation cycle. A signed project proposal, approved by the department head, the division Vice President, and the CIO, will be submitted along with the new budget request. If funding is secured, the proposal is submitted to the DoIT Project Director for classification.
2. Submission of a project proposal where additional funding is not required: New projects that can be funded via a departmental budget may be submitted at any time via the project proposal. A signed project proposal, approved by the department head, the division Vice President, and the CIO, will be submitted to the DoIT Project Director for classification.

After the project proposal is approved as noted above, and the project appropriately classified, the Project Sponsor will appoint a Project Manager. The Project Sponsor and Project Manager will identify the appropriate team members, and the Project Manager and project team will complete the project charter document. If the project is classified as High complexity, a Steering Committee will be appointed to provide recommendations and feedback to the Project Sponsor and university leadership.

Approval of the project charter by the CIO authorizes the Project Manager to staff the project team, procure resources, and oversee the people and resources necessary to complete the project. The project charter must be approved by the Project Sponsor and the CIO before the project is considered approved for planning.

3.2 Planning

During the planning phase, information used in the Initiation phase is used to further refine the scope and define the objectives to be met by the project. The DoIT Project Director will work with the Project Manager and team to identify documentation and project management activities that will be required (see the Project Documentation Requirements for details). A project plan is developed, which includes the schedule, milestones, and plans for testing and training, security, procurement, resources, change control, communication, risk, and quality. The planning phase is complete when the Project Sponsor approves the project plan.

3.3 Executing

Executing begins when team members begin the actual work, as defined in the project plan, to complete the defined tasks and develop the deliverables. This includes building, developing and managing the project team; distributing relevant project information to stakeholders as planned; managing stakeholders' expectations to ensure their needs are met; obtaining seller proposals, seller selection, and awarding contracts.

3.4 Monitoring and Controlling

Monitoring and Controlling processes track, review and regulate the project's progress toward meeting the performance objectives as defined in the project plan. These include, but are not limited to, ensuring changes to the plan are tracked and approved; that decisions, issues and risks are documented and appropriately addressed; that timely and accurate project status reports and other relevant information are communicated to stakeholders; and that testing and training activities proceed according to plan.

3.5 Project Closeout

When the Project Sponsor has accepted the project's deliverables as complete and signed off on the project, the project manager initiates action to finalize the project's expense accounting and submits a final status report to the sponsor and the DoIT Project Director. An archive of the project's documents must be stored on

a network share with a list of lessons learned compiled for future reference. The final deliverable is transferred to operations and support staff where it becomes part of the operational activities of the university. The last activity performed in Closeout is to officially release the project team.

Section 4 Project Manager Selection and Training

Project Managers are selected and assigned to projects by the Project Sponsor, in consultation with the DoIT Project Director. The training and certification required depend on the project classification and level of experience required to manage the project.

For projects with High classification, a Project Management Institute (PMI) or Virginia Information Technologies Agency (VITA) certified project manager is required. For all other projects, a non-certified project manager may be assigned. However, it is recommended that a certified project manager serve as a consultant on these projects.

Section 5 Definitions

Information Technology Project - a temporary effort undertaken by the university with the primary purpose of creating a unique information technology product or service. **Temporary** means that the project has a definite beginning and a definite end. **Unique** means that the technology product or service is different in some distinguishing way from all other products or services provided.

Project Director - provides project methodology guidance and support for the university's IT projects. The Project Director maintains Project Management Institute (PMI) or Virginia Information Technologies Agency (VITA) certification.

Project Manager - assigned by the Project Sponsor, and responsible for managing the project on behalf of the sponsor. Approval of the project charter authorizes the Project Manager to staff the project team, procure resources, and oversee the people and resources necessary to meet the project objectives. Project managers are responsible for reporting project status, budget, schedule and issues to the sponsor, the project stakeholders, and the DoIT Project Director. Every IT project must have a designated Project Manager.

Project Sponsor - the individual, usually part of the senior management team, who makes the business case for the project. This individual has the authority and responsibility to define project goals, secure resources, establish project priorities, and resolve organizational issues and conflicts. The sponsor approves the project proposal and charter, and provides formal sign-off to accept the final deliverables. Project sponsors should be prepared to dedicate a portion of their time to attend to projects in detail.

Project Steering Committee - provides guidance and feedback to the project sponsor and university leadership regarding the overall performance, management and status of the project. The need to establish a steering committee is based on a project's classification. Only projects with a High classification require a steering committee.

Project Team - comprised of the individuals responsible for completing the project tasks and objectives. The team members may be assigned to the project in a full or part-time capacity, and may report directly or indirectly to the Project Manager.

Stakeholders - persons or organizations that may be impacted, positively or negatively, by the execution or completion of a project. Stakeholders may be actively involved in project activities and may influence the project outcome and deliverables. The Project Sponsor and Project Manager are responsible for identifying all stakeholders at the start of a project.

Section 6 References

Project Management Institute. 2008. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*, 4th ed. Newtown Square, PA: Project Management Institute.

Virginia Information Technologies Agency. 2006. *Project Management Standard (CPM112-02)*. Chester, VA: Commonwealth of Virginia.