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| Document ID  **ITSW102** | Title  **IT PROJECT MANAGEMENT** | Print Date  **mm/dd/yyyy** |
| Revision  **0.0** | Prepared By  **Preparer’s Name / Title** | Date Prepared  **mm/dd/yyyy** |
| Effective Date  **mm/dd/yyyy** | Reviewed By  **Reviewer’s Name / Title** | Date Reviewed  **mm/dd/yyyy** |
|  | Approved By  **Final Approver’s Name / Title** | Date Approved  **mm/dd/yyyy** |

**Policy:** All in-house software development shall follow a defined project management procedure.

**Purpose:** To ensure that Information Technology projects are clearly defined, well structured, efficiently and effectively managed, and produce the desired results on time and within budget.

**Scope:** This procedure applies to all in-house software development projects.

**Responsibilities:**

The Information Technology Project Manager is responsible for ensuring that projects run smoothly, remain on schedule, and are completed on time.

**Definitions:** Quality Management System (QMS) – A formalized system that documents the structure, responsibilities, and procedures required to achieve effective quality management.

**Procedure:**

### 1.0 IT PROJECT SETUP

1.1 The Information Technology Project Manager should use the following tools:

* Company-wide standards that outline the look and feel of all software products;
* Industry standards and best-practices;
* A standard development method;
* Project scheduling software (for estimating timelines);
* A development database for storing all information about the project.

1.2 The Information Technology Project Manager shall select the members of the project development team, which should include one or more of the following people:

* Subject matter expert;
* Systems analyst;
* Software designer;
* Programmer;
* Technical writer; and
* Quality assurance analyst.

1.3 The Information Technology Project Manager shall set up e-mail and voice mail groups for the development team, which development team shall use to:

* Schedule meetings;
* Send updates and bulletins; and
* Pose suggestions, questions, and development issues to the rest of the group.

### 2.0 IT PROJECT SCHEDULE

2.1 The Information Technology Project Manager, with the assistance of the development team, shall create a preliminary development schedule from ITSW101-1 IT PROJECT PLAN, which shall indicate estimated duration and expected begin and end dates for each of the following tasks:

* Systems Analysis
  1. Create the system requirements specification.
  2. Create the acceptance test plan.
  3. Create the beta test plan.
* Software Design

1. Create the software design specification.
2. Create flow charts and process maps that define inputs, outputs, and process interactions.

* Programming

1. Program the system.
2. Unit test the system.

* Documentation
* Quality assurance

1. Perform the acceptance test.
2. Conduct the beta test.

* Production

1. Configure the system for maintenance and support.
2. Create release materials (such as disks and CDs) for shipping.

2.2 The Information Technology Project Manager shall review the proposed schedule with Information Technology Management. They shall discuss possible changes to the proposed project with respect to ITSW102-1 PROJECT DEVELOPMENT DATABASE and resolve possible scheduling conflicts with existing projects.

2.3 The Information Technology Project Manager shall discuss scheduling changes with the development team and revise the project schedule accordingly.

2.4 The Information Technology Project Manager shall enter the original project schedule into ITSW102-1 PROJECT DEVELOPMENT DATABASE so that at the end of the project, it can be evaluated in relation to the actual times spent on the project.

### 3.0 IT PROJECT CYCLE MANAGEMENT

3.1 Throughout the course of the project, the Information Technology Project Manager:

* Continually monitors progress on each major task;
* Resolves internal staff and scheduling conflicts;
* Keeps team members current on all changes;
* Updates and communicates the project schedule;
* Leads project meetings;
* Helps team members handle project-related requests from other departments and from management; and
* Periodically informs management of the progress on the project.
  1. Throughout the course of the project, the Information Technology Project Manager should document the project status, as obtained above, at regular periodic intervals using ITSW102-2 IT PROJECT STATUS REPORT. The reporting cycle should be a function of the level of project activity but should not occur less often than once a month.

### 4.0 IT PROJECT REVIEW

4.1 After a project task is completed, the Information Technology Project Manager prints the outlines or charts that reflect actual time lines. The development team reviews the differences between the original estimates and the actual time required to complete each task.

4.2 ITSW102-3 IT PROJECT TEAM REVIEW CHECKLIST is reviewed before each meeting to determine of all pre-meeting steps have been accomplished. Important steps include:

* Determining the purpose of the review and communicating it to all required parties;
* Developing and distributing the agenda for the review;
* Determining the status of the review items including current action items, issues, risks; status of technical activities; and plans for next activities;
* Reviewing purpose and goals to determine achievement to date;
* Conducting a process review to identify improvements;
* Determining new items to be added to the agenda; and
* Preparing all handouts, charts, or presentation materials for each participant in the meeting.

4.3 A progress review is performed at important milestones indicated in the project plan. ITSW102-4 IT PROJECT PROGRESS REVIEW CHECKLIST is reviewed before each meeting to determine if all pre-meeting steps have been accomplished. Important steps include:

* Determining the purpose of the review and communicating it to all required parties;
* Developing and distributing the agenda for the review;
* Determining the status of the review items including current action items, issues, and risks, status of technical activities, and plans for next activities;
* Reviewing purpose and goals to determine achievement to date;
* Conducting a process review to identify improvements;
* Determining new items to be added to the agenda; and
* Preparing all handouts, charts, or presentation materials for each participant in the meeting.

4.4 The Information Technology Project Manager leads the progress review, documents each action item for resolution with the responsible party and a due date for completion, and schedules the next review.

4.5 The Information Technology Project Manager records the team’s findings in the development database. These findings aid in estimating and scheduling future projects.

**Forms:**

* ITSW102-1 IT PROJECT DEVELOPMENT DATABASE
* ITSW102-2 IT PROJECT STATUS REPORT
* ITSW102-3 IT PROJECT TEAM REVIEW CHECKLIST
* ITSW102-4 IT PROJECT PROGRESS REVIEW CHECKLIST

**References:**

1. **ISO 9001:2008, “QUALITY MANAGEMENT SYSTEMS - REQUIREMENTS”**

ISO 9001 describes what a company needs to establish and operate its own quality management system, or QMS. A company’s QMS should:  
(a) demonstrate its ability to consistently provide products or services that meet customer and regulatory requirements; and (b) enable the company to enhance customer satisfaction by effectively applying the QMS, continually improving it, and assuring the company’s continued conformity to customer, legal/regulatory, and other requirements.

1. **ISO/IEC 12207:2008 – INFORMATION TECHNOLOGY-SOFTWARE LIFE-CYCLE PROCESSES**
2. **IEEE 12207-2008 – SYSTEMS AND SOFTWARE ENGINEERING – SOFTWARE LIFE CYCLE PROCESSES**

This ISO standard describes the major component processes of a complete software life cycle and the high-level relations that govern their interaction. It establishes a software life cycle architecture based on two principles, modularity of processes and responsibility for processes. There are three process classes in the ISO software life cycle: primary, supporting, and organizational. Each life cycle process is made up of activities and each activity is subdivided into tasks. The standard is based on ISO quality management principles.

The IEEE version of 12207 is closely aligned with, though not a duplicate of, its ISO counterpart. For more information, visit <http://www.iso.org> and/or <http://www.ieee.org/>.

**Additional Resources:**

1. Software Project Survival Guide – <http://www.construx.com/survivalguide/>
2. Project Management Productivity Checklist – <http://www.commercial-solutions.com/pages/checklists.html>
3. Project Management Institute – <http://www.pmi.org>

**Revision History:**

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| --- | --- | --- | --- |
| **Revision** | **Date** | **Description of Changes** | **Requested By** |
| 0 | mm/dd/yyyy | Initial Release |  |
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**ITSW102-1 IT PROJECT DEVELOPMENT DATABASE[[1]](#footnote-1)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project ID** | **Proposed Start Date** | **Proposed End Date** | **Proposed Length (months)** | **Actual Start Date** | **Actual End Date** | **Actual Project Length** | **User Mgr (emp ID)** | **User Dept** |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
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**ITSW102-2 IT PROJECT STATUS REPORT**

|  |  |
| --- | --- |
| General Information: | |
| Agency name: | Date: |
| Contact Name: | Phone: |
| Project ID: | For the period beginning:  and ending: |
| Name of the project: | |
| Project Start Date: | Current Phase: |

### Key Questions

1) Has the project scope of work changed? Yes No

2) Will upcoming target dates be missed? Yes No

3) Does the team have resource constraints? Yes No

4) Are there issues that require management attention? Yes No

If any of the above questions is answered “yes,” please provide an explanation of the “yes” answer.

### ****Key Milestones for the Overall Project revised on <date>:****

|  |  |  |  |
| --- | --- | --- | --- |
| **Milestone** | **Original Date** | **Revised Date** | **Actual Date** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Milestones planned for this month and accomplished this month:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Milestone** | **Original Date** | **Revised Date** | **Actual Date** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Accomplishments planned for this month but not completed:**

|  |  |  |
| --- | --- | --- |
| **Milestone/Item/Accomplishment** | **Original Date** | **Revised Date** |
| 1) |  |  |
| 2) |  |  |
| 3) |  |  |
| 4) |  |  |

For each item listed above, provide a corresponding explanation of the effect of this missed item on other target dates and provide the plan to recover from this missed item.

**Items Planned for Next Month:**

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Original Date** | **Revised Date** |
|  |  |  |
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|  |  |  |
|  |  |  |

(Use a chart like the following to show actual expenditures compared to planned levels. Break the costs into other categories as appropriate.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year-to-Date Costs** (000) | | | | |
| **Fiscal Year**  **20\_\_** | **Actual Costs to Date** | **Estimate**  **to Complete** | **Total Estimated Costs** | **Total Planned Budget** |
| Personnel Services |  |  |  |  |
| Prof. & Outside Service |  |  |  |  |
| Other Expenditures \* |  |  |  |  |
|  |  |  |  |  |
| Total Costs |  |  |  |  |

(Use a chart like the following if the project spans more than one fiscal year.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year-to-Date Costs** (000) | | | | |
| **Grand Total For Project** | **Actual Costs  to Date** | **Estimate to  Complete** | **Total Estimated Costs** | **Total Planned Budget** |
| Personnel Services |  |  |  |  |
| Prof. & Outside Service |  |  |  |  |
| Other Expenditures \* |  |  |  |  |
|  |  |  |  |  |
| Total Costs |  |  |  |  |

**\* Other Expenditures include hardware, software, travel, training, support, etc.**

### Comments:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Project Leader Date**

**Attach the current risk list.**

**For significant items that require management attention, attach a current issues / action item list.**

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**ITSW102-3 IT PROJECT TEAM REVIEW CHECKLIST**

|  |  |  |
| --- | --- | --- |
| **ID** | **ITEMS TO BE CONSIDERED** | **RESPONSE** |
|  | **TEAM REVIEWS** |  |
| 1 | Has the purpose of the review been determined and communicated? |  |
| 2 | Has the agenda for the review been developed? |  |
| 3 | Have the review items been prepared? Including:   * Current action items, issues, risks * Status of technical activities * Plans for next activities |  |
| 4 | Have action items been followed up as appropriate? Items such as the following should be included:   * Due date assigned * Responsible party |  |
| 5 | Have next tasks been assigned? |  |
| 6 | Have purpose and goals been reviewed to determine success? |  |
| 7 | Has process been reviewed to identify improvements? |  |
| 8 | Other? |  |

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**ITSW102-4 IT PROJECT PROGRESS REVIEW CHECKLIST**

| **ID** | **ITEMS TO BE CONSIDERED** | | **RESPONSE** |
| --- | --- | --- | --- |
|  | | **PROGRESS REVIEWS** |  |
|  | | Has the purpose of the review been determined and communicated? |  |
|  | | Has the information to be prepared and/or presented been identified? |  |
|  | | Have assignments been made to gather, prepare and present the information for the review? |  |
|  | | Have the participants for the review been identified and notified? |  |
|  | | Have the logistics of the review been established? |  |
|  | | Has the agenda for the review been prepared and distributed for comments? Have comments been resolved? |  |
|  | | Has a review package been developed and distributed to the participants, with ample review time? The review package should include at least the following:   * + Agenda identifying time allotted and responsible party   + Current action item list, issues, and risks   + Status of technical activities   + Information on critical decisions to be made and possible alternatives   + Plans for next activities |  |
|  | | Has the information for the review been prepared? Items such as the following should be included:   * List of accomplishments in the last period * List of plans for the next period * Milestone progress reports (planned to actual) * Staffing profile (planned to actual) * Cost profile (planned to actual) * Size and Critical Computer Resources (if appropriate) * Risk Management Status * Action Item Status * Quality Assurance Status * Configuration Management Status * Requirements Management Status * Updated Cost-Benefit Analysis |  |
|  | | Has the review been conducted? |  |
|  | | Has agreement been obtained on next course of action? |  |
|  | | Have assignments been given commensurate with next course of action? |  |
|  | | Have action items been assigned? |  |
|  | | Have minutes from the meeting been distributed? |  |
|  | | Have purpose and goals been reviewed to determine success? |  |
|  | | Has the process been reviewed to identify improvements? |  |
|  | | Other? |  |

1. This is only a suggested layout for a project development database; it is expected your company’s will vary from this. [↑](#footnote-ref-1)