DTS Project Management

Methodology

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Department of Technology Services
Project Management Office
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       Microsoft Project 2002 Template

Mini Project Process and Tollgate Deliverables

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1	**Project Acceptance Signoff**
2	**Stakeholder Identification**
3	**Cost-Benefit Analysis**
4	**Project Staffing Agreement**
5	**Summary Responsibility Assignment Matrix**
6	**Summary Communications Plan**
7	**Risk Management Plan**
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Appendices:
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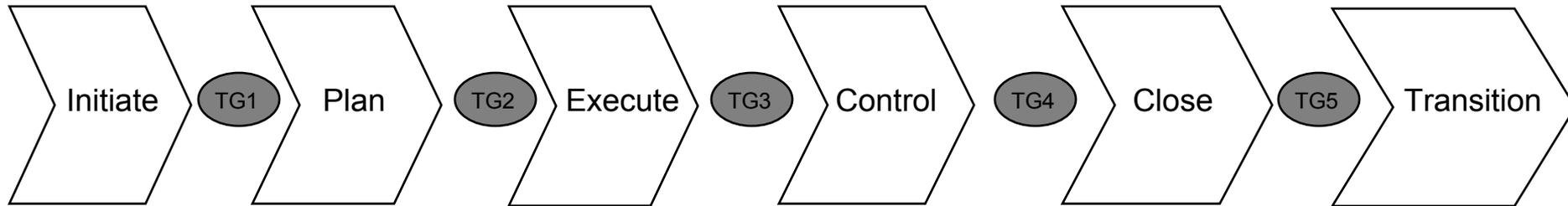   **Project Methodology Glossary**

LARGE PROJECTS

Department of Technology Services (DTS)

Project Management Process

Main Steps – Large Projects

Initiate → **TG1** → Plan → **TG2** → Execute → **TG3** → Control → **TG4** → Close → **TG5** → Transition

Deliverables

Initiate
- Requirements ID
- Stakeholder ID
- Kickoff Meeting
- Project Charter
- MOU
- Statement of Work
- Problem Definition
- Business Outcomes
- Performance Measures
- Assignment of PM
- Align w/Enterprise Strategy
- DTS Acceptance Signoff
- Sponsor Acceptance
- Assign Department Lead
- Assumptions & constraints
- Process mapping
- Funding Source Id
- Cost Benefit Analysis

Plan
- Project Plan
- Work breakdown Structure
- Budget
- Team ID
- Communications Plan
- Cost Estimates
- Risk Plan
- Quality Plan
- Procurement Plan
- Test Plan
- COTS Analysis
- Project Size Determination
- Design Plan
- Implementation Plan
- Training Plan

Execute
- Subteam formation
- Component Team
- Work Packet Deliverables
- Artifact Collection
- Test Plan Peer Review
- Subunit Testing
- Integration Testing
- System Testing
- Training
- Artifact Reuse
- Exception Reporting
- Status Reporting

Control
- Earned Value Analysis
- Responsibility Assignment Matrix
- Configuration Management
- Milestone Deliverables
- Risk Assessment
- User Acceptance Testing
- Project Audit (Triage)

Close
- Contractor Assessment
- Bill Payment
- Lessons Learned
- Best Practices
- Post Mortem Meeting
- PM & Team Evaluations
- Training Plan Updates
- Artifact Wrap-up
- Project Write-up
- PM Closing Survey
- Customer Interview
- Celebrations/awards

Transition
- Post Mortem Action Plan
- Operations Plan
- Monitoring Plan
- Transition Plan
- Audit
- Performance Measures Update
- Vendor Support Process

Underlined deliverables indicate responsibility of the Customer Requirements Team.

Tollgate Deliverables for Large Projects

Large Project Methodology
TG1 - Initiate to Plan

Documents Required

- DTS Acceptance Signoff (1)

including: Requirements Document (see Appendix for Requirements Flow Chart and Example)

- PM Assignment (1)

- Stakeholder ID (2)

- Sponsor Acceptance(1)

- Process Map

- Cost Benefit Analysis (3)

Process Steps

- PM request a TG1 meeting. Meeting includes the PM, CRT(*for Application Development Projects only*), PMO, CTO & Functional Team Leaders involved in this project. It is scheduled within a 1 hour timeslot via the PMO prior to Phase 1 completion.

- PM provides PMO with a copy of the Requirements Definition document and Stakeholder Identification form (2).

- PMO will notify PM of meeting date, time & location. And will schedule the CTO and Functional Team Leaders and distributes read ahead materials to meeting participants.

- PM will present the Process Map, Cost Benefit Analysis for the proposed solution (and other documents, if available) showing the activities needed to complete the requirements.

- Group will decide on the merits of pursuing the project, discuss assumptions, constraints and risks, workload implications and overall project readiness.

- CTO signs off on DTS Acceptance if project is to go forward.

Large Project Methodology
TG2 - Plan to Execute

Documents Required

- Project Plan (MS Project Schedule)

- Team ID (4 & 5)

- Project Size Determination

- Communications Plan (6)

- Risk Plan (7)

- Implementation Plan

Process Steps

- PM prepare Project Plan, Summary Responsibility Assignment Matrix (5), Communications Plan(6), and Risk Plan(7) and the Implementation Plan (a brief narrative – see Project Methodology Glossary).

- PM meet with Functional Team Manager of each DTS project team member and get signoff on Project Staffing Agreement (4).

- Provide PMO with copy of each completed form, narrative and agreement

- PMO will briefly present the documents at the next Chief's meeting (occurs weekly) and recommend the Project Size for this project (i.e., Large, Lite or Mini).

- Chiefs will make recommendations and/or concur that the project should continue as planned by the PM.

- PMO will contact PM to give feedback and suggest artifacts to collect during the project.

Large Project Methodology
TG4 – Control to Close

Required Documents

- Configuration Management Records
- Documents showing completion of the Milestones (8)
- User Signoff of User Acceptance Tests (8)

- Maybe required - Project Audit

Process Steps

- When 80% of the project is completed, according to the PM's estimates, the PMO should be contacted to review and discuss these documents which the PM has been maintaining:

Large Project Methodology
TG5 – Close to Transition

Deliverables Required

- Post Mortem Meeting

- PM & Team Evaluations

Process Steps

- PM contacts the PMO to execute The Project Closing Process.

- PMO will distribute the PM & Team Evaluations forms for completion and return them to the Functional Team Leader or manager for inclusion in the project team member's or PM's performance plan.

- PM & Functional Team Leaders will discuss and document Training Plan for the project team members for inclusion in the project team members performance plan.

- PM will collect all project artifacts and deliver to the designated repository.

- PM/CRT will arrange for project team celebration or make awards recommendations to Division Chiefs.

Large Project MS Project Template

S:/MSProject Templates and Training Guides/Large Project Template Import.mpt

ID		Task Name	Duration
	🛈		
0		**Large Project Template**	1 day?
1		Initiate	1 day?
2		**PM assigned to start process with CRT**	1 day?
3		Identify customer lead and sponsor	1 day?
4		Identify stakeholders	1 day?
5		Develop 'current' process map	1 day?
6		**Define SMART functional requirements - from sponsor, dept. lead and key stakeholders**	1 day?
7		Define the critical to quality factors - Draft the Quality Plan from these	1 day?
8		Kickoff Meeting - clarify stakeholders, identify assumptions, risks and constraints	1 day?
9		Identify funding (estimate)	1 day?
10		Perform cost/benefit analysis on suggested solution, if any, include analysis of COTS where available	1 day?
11		**TG1 meeting with PMO**	1 day?
12		Submit required documents from (tasks 4,5,6 and 9 above) for TG1 meeting	1 day?
13		DTS GO/STOP achieved (milestone)	0 days
14		Plan	1 day?
15	📋	**Develop 'new' process map & other Design Plan documents (network diagrams, etc.) in Visio & attached**	1 day?
16		**WBS**	1 day?
17		(Customize this area with your WBS - the lowest level of each task should be a deliverable, include testing prior to completion)	1 day?
18		**Assign Staff Resources**	1 day?
19		Meet with other Functional Team Managers and Dept Lead to obtain project staff	1 day?
20		Complete the Project Staffing Agreement (4)	1 day?
21	📋	**Complete the Summary Responsibility Assignment Matrix (5)**	1 day?
22		Update this MS Project template with resources	1 day?
23		Meet with project team to level set on controls to be used throughout the project, i.e., configuration management, milestones, risk	1 day?
24		**Communications Plan**	1 day?
25		Draft the plan	1 day?
26		Submit to stakeholders and project team for comment	1 day?
27	📋	Complete the Summary Communications Plan (6)	1 day?
28		**Risk Plan**	1 day?
29		Solicit information on project threats from stakeholders and project staff	1 day?
30		Do Risk Assessment	1 day?
31	📋	Complete Risk Plan (7)	1 day?
32		**Quality Plan - state all measurable outcomes**	1 day?
33	📋	**Procurement Plan (insert add'l steps for each Procurement component below as required)**	1 day?
34		**Consulting**	1 day?
35		Determine if skills needed are available in-house	1 day?

ID		Task Name	Duration
36		Develop costs for consultants if required	1 day?
37		Execute procurement steps needed	1 day?
38		Hardware	1 day?
39		Develop costs for purchase and maintenance	1 day?
40		Execute procurement steps needed	1 day?
41		Software	1 day?
42		Develop costs for the application, licenses and maintenance	1 day?
43		Execute procurement steps needed	1 day?
44		Licenses	1 day?
45		Develop costs to increase license count of existing products, as required	1 day?
46		Execute procurement steps needed	1 day?
47		Training	1 day?
48		Meet with project stakeholders to determine scope and process for training	1 day?
49		Document requirements and schedule	1 day?
50		Develop costs	1 day?
51		Execute procurement steps needed	1 day?
52		Facility	1 day?
53		Develop costs	1 day?
54		Execute procurement steps needed	1 day?
55		Maintenance	1 day?
56		Plan for future vendor support, as required, if funds are available at start	1 day?
57		Implementation Plan	1 day?
58		Draft Implementation Plan including scheduling, process steps, staffing and training requirements	1 day?
59		Develop a training plan	1 day?
60		Meet with stakeholders and project team to discuss plans and get agreement	1 day?
61		Test Plan	1 day?
62		PM meet with Dept. Lead to coordinate test plan development	1 day?
63		Develop Test Plan	1 day?
64		Test Plan Peer Review	1 day?
65		Collect sample data for testing and document expected results	1 day?
66		TG2 - Provide PMO with Planning phase documentation	0 days
67		Project Plan Approval Achieved	0 days
68		Execute	1 day?
69		Assign Subtask Ownership - assign team name and task leader/owner	1 day?
70		Subtask owners review and recommend updates to the WBS for their task(s) to PM	1 day?
71		PM define artifacts and configuration issues subtask owners should handle	1 day?

ID	ⓘ	Task Name	Duration
72		PM meet with project teams to review detailed WBS	1 day?
73		PM Provide JIT Training/Mentoring/Support to subtask owners as required	1 day?
74		(List tasks and their completion date milestones here, including testing)	1 day?
75		Integration Test	1 day?
76		Perform test	1 day?
77		Verify results	1 day?
78		Responsible Subtask team(s) or individual(s) correct errors	1 day?
79		Retest	1 day?
80	📋	Collect results and preserve in project documentation	1 day?
81		Integration Testing complete - obtain signoffs	1 day?
82		System Test	1 day?
83		Perform test	1 day?
84		Verify results	1 day?
85		Responsible Subtask team(s) or individual(s) correct errors	1 day?
86		Retest	1 day?
87	📋	Collect results and preserve in project documentation	1 day?
88		System Testing complete - obtain signoffs	1 day?
89		Training	1 day?
90		Develop training platform	1 day?
91		Develop training materials	1 day?
92		Set up training facility to be used	1 day?
93		Notify class participants of training dates, procedures to follow	1 day?
94		Execute training	1 day?
95		Control	1 day?
96		Obtain Configuration updates from subteam leads and others	1 day?
97		Collect results for Risk Plans for each WBS packet	1 day?
98		Perform User Acceptance Testing	1 day?
99		Verify results	1 day?
100		Responsible Subtask team(s) or individual(s) correct errors	1 day?
101		Retest	1 day?
102		Collect results and preserve in project documentation	1 day?
103		User Acceptance Testing complete - obtain user signoff	1 day?
104		Notify PMO for TG4 Meeting	1 day?
105		PMO Project Audit (as required)	1 day?
106		Close	1 day?
107		Notify the PMO that the project is ready for closeout	1 day?

ID	ⓘ	Task Name	Duration
108		Contact vendors to submit final billing	1 day?
109		Meet with stakeholders to discuss best practices and lessons learned	1 day?
110		Collect and update as required all documentation and artifacts	1 day?
111		Prepare a Contractor(s) Assessment(s) include with project documentation being collected	1 day?
112		**Do performance evaluations with DTS project team members**	1 day?
113		**Provide functional team managers with copy of evaluations of their team members**	1 day?
114		Work with functional team managers to update training plans for project team members	1 day?
115		Ask PMO for PM Closing Survey and complete it	1 day?
116		Plan and schedule celebration/awards	1 day?
117		Notify PMO for TG5 Meeting	1 day?
118		PMO will do customer interviews	1 day?
119		PMO will schedule and conduct Post Mortem Meeting	1 day?
120		PMO will do project write-up based on artifacts, best practices, surveys, interviews and post mortem	1 day?
121		PM will prepare a Post Mortem Action Plan	1 day?
122		Transition	1 day?
123		Audit System if not newly developed to assess configuration management, operational performance and maintenance issues to be addressed	1 day?
124		Execute the Post Mortem Action plan, i.e., remaining things to do as identified during the Post Mortem meeting	1 day?
125		Work with the project's subteam leaders/contractors to determine operational needs for the system	1 day?
126		**Meet with functional team leaders and stakeholders to develop Transition Plan (maintenance processes and assign responsibilities)**	1 day?
127		**Develop Monitoring Plan to identify thresholds and link to Quality Plan variables and Performance Measures**	1 day?
128		If old system benchmarks exist, update performance measures with sponsor to verify improvements	1 day?
129		Arrange for ongoing vendor support, as required	1 day?
130		Execute Transition to Operational Maintenance	1 day?
131		Release staff and resources for other projects	1 day?
132			
133			
134			
135			
136			
137			
138			
139			
140			1 day?

Lite Projects

Department of Technology Services (DTS)

Project Management Process

Main Steps – Lite Projects

Initiate → TG1 → Plan → TG2 → Execute → TG3 → Control → TG4 → Close → TG5 → Transition
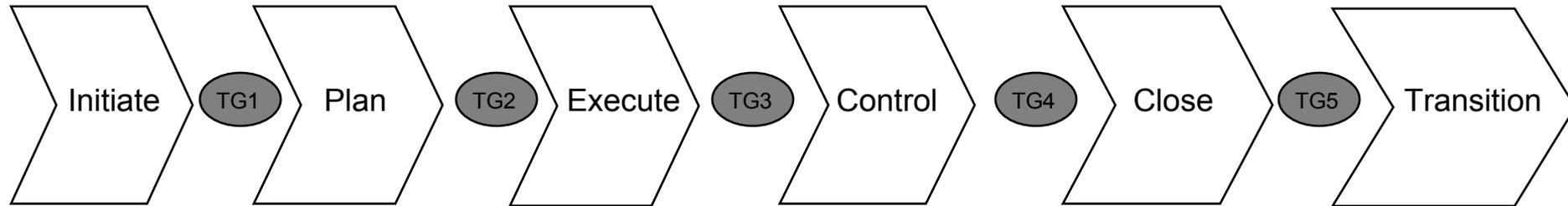
Deliverables

Initiate
- Requirements ID
- Stakeholder ID
- Kickoff Meeting
- Statement of Work
- Problem Definition
- Business Outcomes
- Assignment of PM
- DTS Acceptance Signoff
- Sponsor Acceptance
- Assumptions & constraints
- Funding Source Id

Plan
- Project Plan
- Budget
- Team ID
- Cost Estimates
- Implementation Plan
- Training Plan

Execute
- Artifact Collection
- Test Plan Peer Review
- Integration Testing
- System Testing
- Training
- Status Reporting

Control
- Configuration Management
- Milestone Deliverables
- User Acceptance Testing
- Project Audit (Triage)

Close
- Contractor Assessment
- Bill Payment
- Lessons Learned
- Best Practices
- Post Mortem Meeting
- Project Write-up
- Customer Interview
- Celebrations/awards

Transition
- Post Mortem Action Plan
- Operations Plan
- Transition Plan

Underlined deliverables indicate responsibility of the Customer Requirements Team.

Tollgate Deliverables for Lite Projects

Lite Project Methodology
TG1 - Initiate to Plan

Documents Required

- DTS Acceptance Signoff (1)

including: Requirements Document (see Appendix for Requirements Flow Chart and Example)

- PM Assignment (1)

- Stakeholder ID (2)

- Sponsor Acceptance(1)

Process Steps

- PM request a TG1 meeting. Meeting includes the PM, CRT(*for Application Development Projects only*), PMO, CTO & Functional Team Leaders involved in this project. It is scheduled within a 1 hour timeslot via the PMO prior to Phase 1 completion.

- PM provides PMO with a copy of the Requirements Definition document and Stakeholder Identification form (2).

- PMO will notify PM of meeting date, time & location. And will schedule the CTO and Functional Team Leaders and distributes read ahead materials to meeting participants.

- PM will present the documents (requirements, assumptions & constraints) for the proposed solution (and other documents, if available) showing the activities needed to complete the requirements.

- Group will decide on the merits of pursuing the project, discuss assumptions, constraints and risks, workload implications and overall project readiness.

- CTO signs off on DTS Acceptance if project is to go forward.

Lite Project Methodology
TG2 - Plan to Execute

Documents Required

- Project Plan (MS Project Schedule)

- Team ID (4 & 5)

- Implementation Plan

Process Steps

- PM prepare Project Plan, Summary Responsibility Assignment Matrix (5) and the Implementation Plan (a brief narrative – see Project Methodology Glossary).

- PM meet with Functional Team Manager of each DTS project team member and get signoff on Project Staffing Agreement (4).

- Provide PMO with copy of each completed form, narrative and agreement

- PMO will briefly present the documents at the next Chief's meeting (occurs weekly) and confirm that the project is in the Lite category.

- Chiefs will make recommendations and/or concur that the project should continue as planned by the PM.

- PMO will contact PM to give feedback and suggest artifacts to collect during the project.

Lite Project Methodology
TG4 – Control to Close
(Will Occur Only If Project Schedule Slips)

Required Documents

- Configuration Management Records
- Documents showing completion of the Milestones (8)
- User Signoff of User Acceptance Tests (8)

- Maybe required - Project Audit

Process Steps

- When 80% of the project is completed, according to the PM's estimates, the PMO should be contacted to review and discuss these documents which the PM has been maintaining:

Lite Project Methodology
TG5 – Close to Transition

Deliverables Required

- Post Mortem Meeting

Process Steps

- PM contacts the PMO to execute The Project Closing Process.

- PMO will distribute the PM & Team Evaluations forms for completion and return them to the Functional Team Leader or manager for inclusion in the project team member's or PM's performance plan.

- PM & Functional Team Leaders will discuss and document Training Plan for the project team members for inclusion in the project team members performance plan.

- PM will collect all project artifacts and deliver to the designated repository.

- PM/CRT will arrange for project team celebration or make awards recommendations to Division Chiefs.

Lite Project MS Project Template

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ID	🛈	Task Name
0		**Lite Project Template**
1		Initiate
2	📝	Identify stakeholders
3	📝	**Define SMART functional requirements - from sponsor, dept. lead and key stakeholders**
4	📝	Define the critical to quality factors - Draft the Quality Plan from these
5		Kickoff Meeting- clarify stakeholders, identify assumptions, risks and constraints
6		Identify funding (estimate)
7		**TG1 meeting with PMO**
8		Submit required documents from (tasks 4,6 and 9 above) for TG1 meeting
9		DTS GO/STOP achieved (milestone)
10		Plan
11		**Assign Staff Resources**
12		**Meet with other Functional Team Managers and Dept Lead to obtain project staff**
13		Complete the Project Staffing Agreement (4)
14	📝	**Complete the Summary Responsibility Assignment Matrix (5)**
15		Update this MS Project template with resources
16		Meet with project team to level set on controls to be used throughout the project, i.e., configuration management, milestones, risk assessments
17	📝	**Procurement Plan (insert add'l steps for each Procurement component below as required)**
18		**Consulting**
19		Determine if skills needed are available in-house
20		Develop costs for consultants if required
21		Execute procurement steps needed
22		**Hardware**
23		Develop costs for purchase and maintenance
24		Execute procurement steps needed
25		**Software**
26		Develop costs for the application, licenses and maintenance
27		Execute procurement steps needed
28		**Licenses**
29		Develop costs to increase license count of existing products, as required
30		Execute procurement steps needed
31		**Training**
32		Meet with project stakeholders to determine scope and process for training
33		Document requirements and schedule
34		Develop costs
35		Execute procurement steps needed

		Task Name
36		Facility
37		Develop costs
38		Execute procurement steps needed
39		Maintenance
40		Plan for future vendor support, as required, if funds are available at start
41		Implementation Plan
42		Draft Implementation Plan including scheduling, process steps, staffing and training requirements
43	📝	Develop a training plan
44		Meet with stakeholders and project team to discuss plans and get agreement
45		Test Plan
46		Develop Test Plan
47		Test Plan Peer Review
48		TG2 - Provide PMO with Planning phase documentation
49		Project Plan Approval Achieved
50		Execute
51		Assign Subtask Ownership - assign team name and task leader/owner
52		PM define artifacts and configuration issues subtask owners should handle
53		PM Provide JIT Training/Mentoring/Support to subtask owners as required
54		(List tasks and their completion date milestones here, including testing)
55		Integration Test
56		Perform test
57		Verify results
58		Responsible Subtask team(s) or individual(s) correct errors
59		Retest
60	📝	Collect results and preserve in project documentation
61		Integration Testing complete - obtain signoffs
62		System Test
63		Perform test
64		Verify results
65		Responsible Subtask team(s) or individual(s) correct errors
66		Retest
67	📝	Collect results and preserve in project documentation
68		System Testing complete - obtain signoffs
69		Training
70		Develop training platform
71		Develop training materials

ID	ⓘ	Task Name
72		Set up training facility to be used
73		Notify class participants of training dates, procedures to follow
74		Execute training
75		Control
76		Obtain Configuration updates from subteam leads and others
77		Collect Milestone Deliverable signoffs for each deliverable (form 8)
78		Perform User Acceptance Testing
79		Verify results
80		Responsible Subtask team(s) or individual(s) correct errors
81		Retest
82		Collect results and preserve in project documentation
83		User Acceptance Testing complete - obtain user signoff
84		Notify PMO for TG4 Meeting
85		PMO Project Audit (as required)
86		Close
87		Notify the PMO that the project is ready for closeout
88		Contact vendors to submit final billing
89		Meet with stakeholders to discuss best practices and lessons learned
90		Collect and update as required all documentation and artifacts
91		Prepare a Contractor(s) Assessment(s) include with project documentation being collected
92		Notify PMO for TG5 Meeting
93		PMO will do customer interviews
94		PMO will schedule and conduct Post Mortem Meeting
95		PMO will do project write-up based on artifacts, best practices, surveys, interviews and post mortem
96		PM will prepare a Post Mortem Action Plan
97		Transition
98		Audit System if not newly developed to assess configuration management, operational performance and maintenance issues to be addressed
99		Execute the Post Mortem Action plan, i.e., remaining things to do as identified during the Post Mortem meeting
100		Work with the project's subteam leaders/contractors to determine operational needs for the system
101		Meet with functional team leaders and stakeholders to develop Transition Plan (maintenance processes and assign responsibilities)
102		Execute Transition to Operational Maintenance
103		Release staff and resources for other projects
104		
105		
106		
107		

Project Management For
Mini Projects
10/8/03

Mini Projects
(match 3 out of 5 criteria to qualify)
Funding required < $250,000
No contractor involvement
Software cost < $500,000
Project <10 days duration
Routine with similar processes already existing

Process Steps
(Ready-Set-Go)

Enter Microsoft Project Web Access (PWA) and create a To Do List by entering the following tasks:

R
e
a
d
y

1. <u>Create a Requirements Document</u> (including a Problem Definition, Statement of Work and Identify the Customer's deliverables).

2. <u>Get Sponsor Signoff on Form 1</u>.

S
E
T

3. *<u>List all Work Breakdown Structure tasks separately</u>* *(customize here)*
   a. eg. Design new screen, Modify module, Test.

4. <u>Arrange for a TG1 Meeting</u>* with the PMO (to present and discuss the Requirements document. Attendees will confirm the project is suitable for this Mini Project Process).

G
O

(execute the tasks in the Work Breakdown Structure identified starting at task step 3 above)

5. <u>Train and turnover deliverables to customer.</u>

6. <u>Create or Update Documentation</u> of all changes.

7. <u>Arrange for a TG5 Meeting</u>* with the PMO (to go over documentation collected, obtain the User's Acceptance Signoff – Form 8 on all deliverables, discuss any follow-on activities or transitional issues). This meeting will also close the Mini Project and release the staff involved for the next project.

For each of the above tasks, enter information for the following 4 To Do List fields:
Assigned To (yourself if working alone), Priority, Start date, Finish date

Status Reporting: Each week update the *% Work Complete* field for each in progress task and enter any *Notes* pertaining to it. The Team Leader(s) involved will monitor the PWA To Do List for timely updates and completions.

*Note: TG1 and TG5 attendees include the CTO, PMO, Team Leader(s) of staff involved and the Project Sponsor. The Division Chief of the team(s) involved is an optional attendee. Most Mini Projects will not involve a CRT.

If the project slips its specified task completion dates, the Team Leader will contact the PMO to request a TG4 Meeting. At the meeting, the Project Manager will discuss issues regarding the slippage with the meeting attendees, e.g, lack of sufficient resources, lower project priority, scope creep, etc.

FORMS

DTS Project Acceptance Signoff – Form 1

Project Identification

Project Name:	_____	**Date:**	_____
Division:	_____	**Functional Team Ownership:**	_____
DTS Project Manager:		**Proposed Start Date:**	_____
		Proposed Completion Date:	_____

Project Sponsor Signoff

Project Sponsor Name/Title:	_____
Project Sponsor Comments:	_____
	_____
	_____
Project Sponsor Signature:	_____
Date:	_____

Project Manager Information

_____
Name (Print)

_____   _____
Signature   Date

DTS Management Approval (CTO)

_____
Name (Print)

_____   _____
Signature   Date

DTS Stakeholder Identification – Form 2

Stakeholder Directory – List names of the known proposed DTS project team members and their team leaders first.

	Name/Title	Department	Project Role	Phone	Email
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Chart Where Stakeholders Fall

High

Interest In the Outcome

Low

High

Influence on the Outcome

DTS Cost - Benefit Analysis – Form 3

Anticipated Benefits:

Budget / Resources:

Estimated Costs:			
Type of Outlay	Initial (Development)	Annual (Recurring)	Remarks
Hardware			
Software			
Supplies			
User Training			
Consultant Services			
Other:			
TOTAL			
Estimated Resources / Personnel:			
DTS Team(s)			
	Hours	Hours	
	Hours	Hours	
	Hours	Hours	
	Hours	Hours	
	Hours	Hours	
Program Area Involvement			
	Hours	Hours	
	Hours	Hours	
	Hours	Hours	
	Hours	Hours	
Consultant Services	Hours	Hours	
	Hours	Hours	

DTS Project Staffing Agreement – Form 4

The following staff have been allocated to the project cited belowed.

Project Name: _____

Name	Project Task(s)	Start Date	Percentage of Time to Be Spent	Expected Completion Date	Staff Signoff

By signing this document we agree that named staff will be allocated to this project for the period cited. Further, the staff person(s) has been briefed on the requirements for the assignment and its performance criteria.

We agree to file an update to this document if additional staff time is needed beyond the expected completion date.

Signed by: _____ Date: _____
            Team Leader

Signed by: _____ Date: _____
            Project Manager

DTS
Summary Responsibility Assignment Matrix – Form 5

Project Name: _____ Date: _____

Project Manager: _____

List staff names and insert percentage of involvement for each in the boxes indicating the phase of involvement.

	DTS Staff	Initiate	Plan	Execute	Control	Close	Transition
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

DTS Summary Communications Plan – Form 6

For each Activity/Event indicate how the project participant named in the column headings will be notified, i.e., meeting, email, phone call, project folder entry, etc.

You may add additional Activities or project participants to the list and exclude those that do not apply.

Activity/Event	Sponsor	Dept. Lead	DTS Task Teams	Stakeholders	Contractor	Functional Team Leaders	PMO	CTO
Budget review								
Change in project team membership								
Milestone completion								
Project kickoff								
Project schedule modification								
Project status								
Risk occurrence								
Schedule slippage								
Scope change request								
Task completion								
Test results review								

Risk Management Plan

See for template

**S:/DTS Project Management Methodology Handouts/Form7-
Risk Management Plan.xls**

DTS Deliverable Acceptance Signoff – Form 8

Project Identification

Project Name: _____ **Date:** _____

DTS Project Manager: _____

Our signature signifies acceptance of the following completed deliverables for this project:

Deliverable	Dept. Lead or Sponsor (sign/date)	DTS Project Manager (sign/date)

APPENDICES

PMO Process Map
Project Size Criteria
Project Closing Process
Requirements Definition Flowchart
Sample CRT Requirement Document
Sample Implementation Plan Template
Work Breakdown Structure Tutorial
Sample WBS Dictionary
Sample Risk Management/Contingency Plan Form
Project Methodology Glossary

Roadmap To A Standardized DIST Project Management Process

Collect 1.0

Analyze 2.0

Design 3.0

Apply 4.0

Acquire & Customize Tools 5.0

DIST Project Mgmt

1.1 Inventory all DIST efforts

2.1 Use inventory to assess current project issues

3.1 Define DIST's Project Life Cycle Methodology

4.1 Define a template for DIST projects

5.1 Define Project Management Reporting Process & Procedures

2.2 Determine resource interdependencies

3.2 Apply PM Processes based on proven methods (Six Sigma, CMMI, etc.)

4.2 Apply the template to all projects

Project Monitoring, Central Repository, Consultation, Standardization, Certification

0.0 Just-in-Time PM Training, Re-orientation, Information

Tollgate 1
1. to ensure all work efforts are accounted for.
2. to get an overview of project timelines, resource usage, & funding via reports and queries.
3. to inventory software products.
4. to get an idea of issues from the PM's perspective for targeting training and incorporation in the final process.

Tollgate 2
1. to refine our definition of types of work efforts.
2. to define a protocol for cross-functional team work.
3. to define the role of the PM, PMO, team leader and team member.

Tollgate 3
1. to have an agreed upon methodology for DIST projects.
2. to define the process steps that must occur in DIST project schedules.

Tollgate 4
1. to have complete templates to load into MS Project.

Tollgate 5
1. to have a working prototype of the PS2000 project in MS Project Central. The prototype will be expanded and made into the production system for other projects.
2. to have all PMs informed of new processes.
3. to have all PMs trained in working with MS Project Central.

DTS Project Methodology: Project Size Criteria

1.   Define a DTS "project":

       A DTS project is a strategic endeavor involving non-DTS stakeholders that consumes DTS resources.

2.   Project size criteria and thresholds are based on information gathered from the Projects Database:

Criteria (use figures for fiscal year of the project's execution)	Large Projects	Lite Projects	Mini Projects
1. **Funding (inc. operating budget, TIF, CIP, etc.)**	> = $250,000	< $250,000	< $250,000
2. **Contractor costs**	> = $500,000	< $500,000	none
3. **Software costs (COTS or development)**	> = $500,000	< $500,000	< $500,000
4. **Project Duration (estimate)**	> = 60 days	< 60 days	<10 days
5. **DTS' future management of product**	New effort involving multiple DTS teams	Routine with similar processes already existing	Routine with similar processes already existing

       A project's size is determined by meeting 3 or more of the criteria cited above in either the Large, Lite or Mini categories.

ASSIGNMENT MATRIX

PROJECT METHODOLOGY OVERSIGHT

	RESPONSIBILITY	CRT	PMO	ADT	TL	OTHER
	INITIATE:					
1	Intake	X			X	
2	Requirements ID	X			X	
3	Stakeholder ID	X				
4	Kickoff Meeting	X				
5	Project Charter	X				
6	MOU	X				
7	Statement of Work	X				
8	Problem Definition	X				
9	Business Outcomes	X				
10	Performance Measures	X				
11	Assign Start Up PM	X				
12	Align w/Enterprise Strategy					TG1
13	DTS Acceptance Signoff					TG1
14	Sponsor Acceptance	X				
15	Assign Department Lead	X				
16	Assumptions & constraints	X				
17	Process mapping	X				
18	Funding Source ID	X				
19	Cost Benefit Analysis	X		X		
	PLAN:					
20	Assign Tech PM			X	X	
21	Project Plan		X			
22	Work breakdown Structure			X	X	
23	Budget		X			
24	Work Group ID			X	X	
25	Communications Plan	X				
26	Cost Estimates		X			
27	Risk Plan	X				
28	Quality Plan	X	X	X	X	
29	Procurement Plan	X				
30	Test Plan			X	X	
31	COTS Analysis	X		X	X	
32	Project Size Determination					TG2
33	Design Plan Peer Review			X	X	Architect
34	Implementation Plan	X		X		
35	Training Plan	X		X		
	EXECUTE:					
36	Subteam formation			X	X	
37	Component Team			X	X	
38	Work Packet Deliverable		X			
39	Artifact Collection		X			
40	Training User	X				
41	SDLC			X		
42	Artifact Reuse		X			
43	Exception Reporting	X				
44	Status Reporting	X	X			

	RESPONSIBILITY	CRT	PMO	ADT	TL	OTHER
	CONTROL:					
44	Earned Value Analysis					Hold
45	Responsibility Assignment Matrix		X			
46	Configuration Management			X		
47	Milestone Deliverables		X			
48	Risk Assessment		X			
49	User Acceptance Testing	X				
50	Project Audit (Triage)		X			
	CLOSE:					
51	Contractor Assessment		X			
52	Bill Payment		X			
53	Lessons Learned		X			
54	Best Practices		X			
55	Post Mortem Meeting		X			
56	PM & Team Evaluations		X			
57	Training Plan Updates		X			
58	Artifact Wrap-up		X			
59	Project Write-up		X			
60	PM Closing Survey		X			
61	Customer Interview	X				
62	Celebration/awards		X			
	TRANSITION:					
63	Post Mortem Action Plan	X				
64	Operations Plan			X	X	
65	Monitoring Plan			X	X	
66	Transition Plan				X	
67	Audit				X	
68	Performance Measures Update	X				
69	Vendor Support Process					Contract Manager

Legend:

CRT – Customer Requirements Team
PMO – Project Management Office
ADT - Application Development Team
TL – Team Leader

Notes:
1) The Application Development Team is responsible for Web based applications. Other Team Leaders will be responsible for Mainframe or other non-Web based development.
2) This table does not apply to Lite or Mini Projects. In most instances, oversight for each applicable component of the methodology will be shared between the Project Manager and the Project Management Office for these types of projects.

Qualifications
For DTS Project Manager Status

Level 1: Items 1 – 7 below

	Requirements
1	Documented participation as the project lead in at least 3 projects within the last 5 years which had an initial expected duration of 2 months or more. Projects must be either Large or Lite.
2	Demonstrated ability in the above mentioned projects to develop a Project Schedule and Process Map.
3	Demonstrated ability in the above mentioned projects to do a Work Breakdown Structure.
4	Demonstrated ability in the above mentioned projects to do a Risk Plan.
5	Demonstrated use of a formal communications methodology while conducting the named projects.
6	For Applications Projects – demonstrated use of the SDLC in the projects named above.
7	Completion of MySkillSource courses MS Project 2002 Level 1 and Level 2

Level 2: Level 1 plus items 8 – 13 below

8	Performance as a contract administrator within the last 5 years.
9	Understanding of the requirements in each of the six project phases described in the DTS Project Methodology.
10	Use of MS Project (98, 2000 or 2002) to develop schedules, allocate resources and monitor project progress.
11	Completion of the Integrated Systems Project Management Course or satisfactory completion of a similar formal project management course of 3 days duration or more.
12	Experience leading a team gained through prior responsibilities or outside activities.
13	Certification as a Project Management Professional (PMP) via the Project Management Institute may be substituted for items 8, 9 and 10 above.

<u>Maintenance Requirement After Certification:</u>
Engage in at least 2 skills maintenance activities annually, i.e., read ten articles or a book on PM, attend PM seminars, classes or conferences.

The Project Closing Process
12/24/02

Participant	Role of Participant
PMO (Edith)	Assess training requirements & make recommendations Determine standardized tools to develop (templates) Use information to improve surveys and database collection Improve methodology - add additional tollgates to methodology Collect items for repository Collect best practices to be broadcast to other PMs Write a final project assessment (metrics from interviews + comments gathered during the meeting
PM	Get feedback from team members and customer Provide lessons learned and best practices Contribute to a standardized methodology Request tools and training Get credit for work done included in performance evaluation and work record
Team members	Provide views on project – contribute to lessons learned Get closure on project issues Contribute to PM standards Learn the role of the PM
PM's Manager	Appraise the project and PM's performance Get feedback from all parties to improve project structuring Improve methodology – add tollgates to methodology
Customers & Stakeholders (inc. contractors where applicable)	Provide feedback to DTS on project success, loose ends Contribute to lessons learned Learn how they can specifically contribute to more effective projects
CTO	Show DTS commitment to excellence and continuous improvement Assess organization's overall effectiveness, and adherence to the County's strategy and goals.
Other PMs	Up to 3 other Project Managers who may be able to provide constructive input (best practices) based on past projects.

Step 1: PMO ensures that the PM completes a Project Closing Survey form.

Step 2: PMO conducts interview with department lead contact.

Step 3: PMO combines results of both surveys and produces summaries for above project participants to receive as a read ahead.

Step 4: PMO conducts 1 hour Project Closing Meeting with the above participants. To discuss the following questions:

- Do you agree with the survey findings?
- To what degree did the project meet your expectations?
- What lessons did you learn from this project?
- How can our methodology be improved? (emphasis on adding tollgates to the methodology)
- What artifacts collected in this project could be used by other project managers?

Step 5: PMO will do a final assessment/write up summarizing the survey results and meeting discussion for distribution to all DTS project managers and interested parties.

Requirements

```
  ┌─────────────┐                      ┌───────────────────┐
  │ Legislation │──┐              ┌────→│   Traceability    │
  └─────────────┘  │              │     ├───────────────────┤
                   ↓    ┌──────────────┐│    Impact of      │
  ┌─────────────┐  →    │ Requirements ││  Requirements on  │
  │ New Mission │──────→│   Analysis   │←  Design or Service│
  │ or Service  │       └──────────────┘└───────────────────┘
  └─────────────┘              │
                               ↓
                        ┌──────────────┐
                        │   Clarify    │
                        │ Requirements │
                        └──────────────┘
                               │
                               ↓
                        ┌──────────────┐      ┌──────────────┐
                        │   Concept    │←────→│ Contractor or│
                        │   Reviews    │      │    Staff     │
                        └──────────────┘      └──────────────┘
                               │
                               ↓
                        ┌──────────────┐
                        │    Select    │
                        │ Concept(s) for│
                        │  Evaluation  │
                        └──────────────┘
```

- Legislation → Requirements Analysis
- New Mission or Service → Requirements Analysis
- Traceability: Impact of Requirements on Design or Service → Requirements Analysis
- Requirements Analysis → Clarify Requirements
- Clarify Requirements → Concept Reviews
- Concept Reviews ↔ Contractor or Staff
- Concept Reviews → Select Concept(s) for Evaluation
- Select Concept(s) for Evaluation → Evaluate Concept(s)
- Evaluate Concept(s) ↔ Trade-Off Analysis for Cost Schedule Performance
- Trade-Off Analysis for Cost Schedule Performance ↔ Risk Mitigation Analysis
- Evaluate Concept(s) → Select Concept(s) or System(s)
- Select Concept(s) or System(s) → Operational Requirements Document
- Operational Requirements Document → Baseline
- Purchasing Strategy → Trade-Off Analysis for Cost Schedule Performance
- Assumptions (make or buy) → Purchasing Strategy
- Select Concept(s) or System(s) → Modify as Needed
- Develop Implementing Budget, and Schedule → Modify as Needed
- Determine Organization Structure and Staffing ↔ Develop Implementing Budget, and Schedule
- Modify as Needed → (WBS) Work Breakdown Structure
- (WBS) Work Breakdown Structure → Develop Implementing Plans
- Develop Implementing Plans → Execute Project
- Baseline ┈┈→ Execute Project

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Council Agenda Scanning and Hyperlinks (CASH)

Requirement

Version 0.1

Date

02/10/2003

Version Number	Date	Comment/Description
0.0	2/10/2003	➢ Rough Draft – B. Biggins
1.0		➢ Draft
2.0		➢ Final/Baselined

TABLE OF CONTENTS

1.0 EXECUTIVE SUMMARY

1.1 Business Project Background

The County Council is looking to reduce its expenditures and current dependency on contractor service. Currently, a contractor scans and converts to digital PDF formats the Council's Agenda and Information packets and meeting minutes. The Council currently spends .10 cents per page to scan, convert to PDF file format and have hyperlinks added to the electronic document. This electronic document is then uploaded to the County's web-portal.

The MCG Print Shop proposes to take over the process currently outsourced into the Print Shop scope of responsibilities. This will decrease the cost to the County Council by approximately $13,000.

1.2 Description/Objective

To move the County Council meeting minutes scanning process from a vendor to in-house support, and thereby reduce costs by bringing current contractor provided scanning services in-house and keep the same level of service and efficiencies.

1.2.1 Overall Mission

In a timely and cost efficient manner, provide searchable and hyperlinked County Council agenda and information packets and meeting minutes on the County's web site.

1.3 Scope/Limitations/Assumptions

1.3.1 Scope
The Department of Public Works and Transportation's Print Shop will scan agenda and information packet documents and meeting minutes into a Xerox 6150 digital copier. The files are then converted to PDF file format. The print shop will add hyperlinks to the agenda page that will reference accompanying information packets and upload the completed electronic documents to the Council's website.

1.3.2 Limitations
Print shop staff may need to work late hours on Tuesdays and Fridays during normal business and almost nightly during the budget review cycle.

1.3.3 Issues/Considerations/Dependencies:
The print shop will need to purchase Adobe Acrobat to be able to add hyperlinks and text search capability to the web enabled document.
The overtime costs required in the Print Shop are offset by the County Council saving on in-house support.

1.4 Benefits

1.4.1 Financial Benefit

Currently, the County Council pays 10 cents per page (single sided) and spends approximately $13,000 per year on scanning and conversion services. This equates to 130,000 pieces of paper that need to be scanned. The Print Shop estimates that they can scan documents and add hypertext links for five cents per single page.

1.4.2 Intangible Benefit:

This task compliments the strategic direction of the DPWT's Print Shop and efficiently utilizes in-house resources.

1.5 Cost Estimates

- Purchase Adobe Acrobat at $200.00 a workstation for two workstations.
- Currently, Council spends $13,000 a year on scanning and editing services. Based on ten cents a page, single-sided it is estimated that 130,000 pages are scanned in a given year. The Print Shop estimates that two hours of overtime per week will be incurred. Periodic overtime as needed to accomplish late submissions will total no more than $3,500 per year.

1.6 Project Managers/Contacts

Name	Role	Department	Phone
Richard Taylor	**Project Manager**	**DPWT**	**240.777.6135**
Mary Ann McGuire	**Customer Project Manager**	**Council**	**240.777.7902**

1.6.1 Systems Project Manager:
- Brian Biggins, Customer Requirements Team

2.0 Business Operations Requirements

2.1 Process Definition

Currently, the Council staff prepares agendas, information packets and meetings minutes. These documents are then picked up by a vendor and taken back for scanning. The vendor scans the forms and converts them to PDF format. The Council staff prepares the website by adding the main hypertext link. This link is the date of the next Council or sub-committee meeting. After the documents are converted to PDF format the vendor's next step is to add hypertext links. The finished documents are then uploaded to the Councils web site completing the process. See Appendix A

2.1.1 Functionality Description

The proposed process is for Council staff to generate meeting agendas, minutes and information packets and deliver them to the offices of the Montgomery County Government Print Shop. MCG Print Shop will scan, digitally duplicate and add hypertext links to the digital document. The Council staff will create a main hyper-link on the Council's web page consistent with current process. The electronic documents will then be uploaded to the web link, by the print shop, using an existing application.

2.1.2 Process Flow

See Appendix B

2.2 Input Requirements

Council staff provides agendas, information packets, and meeting minutes in both hard and soft copy.

2.3 Processing Requirements

Agendas, information packets and related links are to be published two business days prior to the scheduled meeting.
There is a requirement to produce the scan able documents by 5:00 p.m. on Tuesdays and Fridays.

2.4 Output Requirements

Electronic output will be produced in PDF format using Adobe Acrobat. Using pre-existing tools, the electronic image is then transferred to the Council's web page.

2.5 Acceptance Criteria

The County Council staff will review the electronic document and hyperlinks to verify that the links work properly. Council staff will notify the Print Shop manager via voice mail of any problems and or confirm acceptance of the electronic document.

3.0 Business Impact

3.1 Processing Impact

The print shop will be required to manually scan and enter hyperlinks within PDF documents. This process adds a new task to the print shops job duties. However, according to the Print Shop manager this does fall in line with the strategic direction that the Print Shop should head.
Council staff will need to verify hyperlinks.

3.2 Human Impact

Print shop staff will need training in Adobe Acrobat and adding hypertext links to PDF files.
Print shop staff from time to time may experience the need to work overtime to meet required deadlines.

3.3 Facilities/Resources Impact

Current facilities would be used to meet requirements.

3.3.1 Hardware Impact

Current scanning hardware would be used to meet requirements.
Redundancy needs to be addressed to meet critical deadlines.

3.4 Training Impact

Print shop staff will need training on how to imbed and insert hyperlinks and to use the pre-existing upload application tool.

3.5 Risk Assessment

The biggest identifiable risk is not meeting the deadlines for public disclosure.
The next biggest risk is not getting the agenda and information packets in a timely manner.
There will need to be a backup plan or disaster recovery plan identified.

Glossary

PDF: Portable Document Format an industry standard that dictates the way a file is formatted and displayed.

Appendix A

Council Agenda Scanning
(Current Process)
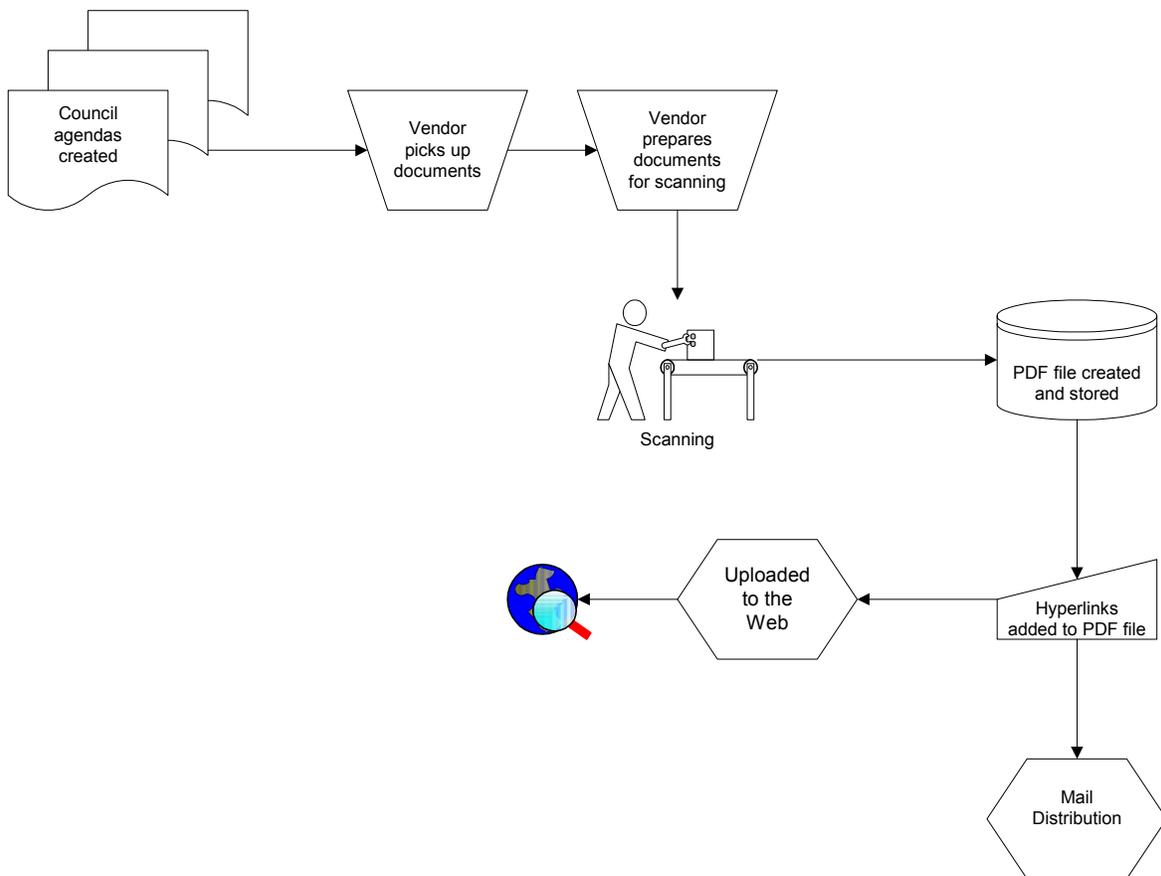
Appendix B

Council
Agendas

Scanning

PDF file created
and stored

Uploaded
to the
Web

Hyperlinks
added to PDF file

Mail
Distribution

PRODUCT IMPLEMENTATION PLAN

Implementation Activity	Owner	Who is Affected?	Who is Involved?	Timing/Dependency
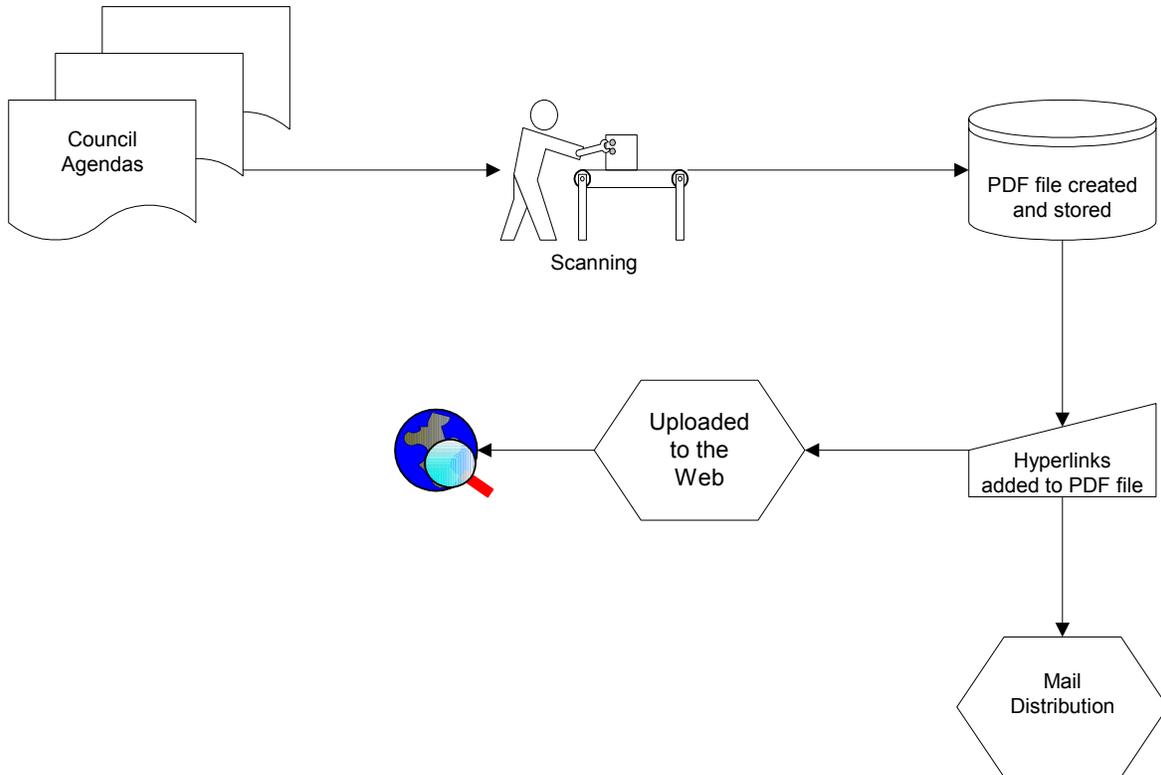
Work Breakdown Structure (WBS)

A deliverable-oriented grouping of project elements that organizes and defines the total scope of the project

- Drives all other planning efforts
- Uses divide and conquer approach
- Produces low-level work tasks
- Includes—
  - Development tasks
  - Management and administrative tasks
  - Support tasks

Source: PMBOK™ 1996, 171

Developing a WBS

- All activities to be performed during project development are defined
- All the work necessary to accomplish the objectives (and only that work) is identified
- Size and number of WBS levels vary with project
- Numbering scheme shows relationship of work elements
- Work package is lowest level at which resources are assigned
- Cost account is one level above the work package for management reporting
- Detail is included in the WBS dictionary
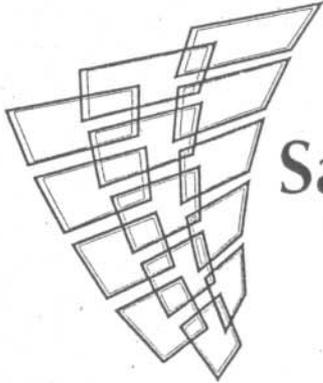
Sample WBS for a Conversion Project
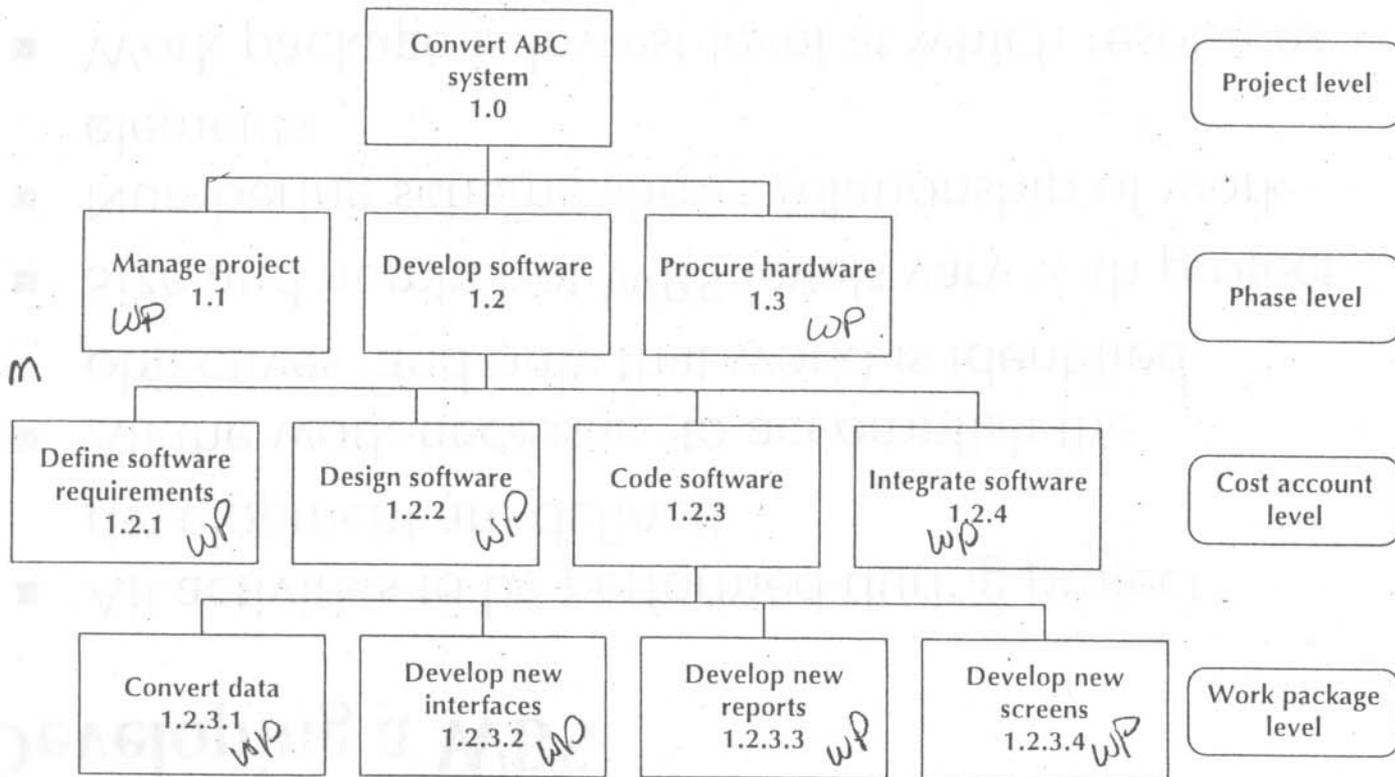
THERE ARE
9 WORK PACKAGES
IN THIS DIAGRAM

THE LOWEST
LEVEL IS THE
WORK PACKAGE

Project level

Convert ABC system
1.0

Phase level

Manage project
1.1 WP

Develop software
1.2

Procure hardware
1.3 WP

Cost account level

Define software requirements
1.2.1 WP

Design software
1.2.2 WP

Code software
1.2.3

Integrate software
1.2.4 WP

Work package level

Convert data
1.2.3.1 WP

Develop new interfaces
1.2.3.2 WP

Develop new reports
1.2.3.3 WP

Develop new screens
1.2.3.4 WP

Work Packages contain the following:

1. Dictionary
   a. Description of the work
   b. Acceptance criteria

2. Responsibility Assignment Matrix

3. Estimates (time and money)

4. Risk Assessment

5. Charts (critical path)

6. Earned Value
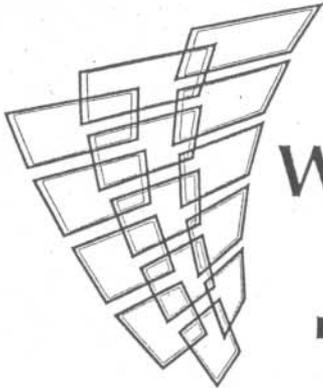
Where Do WBSs Come From?

- Templates
- Past projects
- System tutorials
- Creative energy

WBS	Task or Activity Name
1.3.1.1	Order/Develop Software
1.3.1.2	Customize Software
1.3.1.3	Accomplish File Conversion
1.3.1.4	Integrate Software Applications
1.3.2	Develop Hardware Solutions
1.3.2.1	Identify System Hardware Components
1.3.2.2	Order Hardware
1.3.2.3	Customize Hardware
1.3.3	Integrate Software and Hardware Components
1.4	Install and Test System
1.4.1	Develop Package/ Technology Installation Plan
1.4.2	Install/Test Hardware
1.4.2.1	Install Hardware
1.4.2.2	Develop Hardware Test Plan
1.4.2.3	Perform Component Test--Hardware
1.4.3	Install/Test Software
1.4.3.1	Install Software

Row #	Task Name	Start	End	Duration
1	Marketing Plan	Jan/04/99	Feb/04/99	21.00 d
2	+Market Analysis	Jan/04/99	Jan/08/99	40.00 h
3	Establish Objectives	Jan/11/99	Jan/12/99	16.00 h
4	Develop Tactics	Jan/13/99	Jan/22/99	5.00 d
5	Sales Forecasts	Jan/25/99	Jan/27/99	24.00 h
6	Staffing Requirements	Jan/28/99	Jan/28/99	8.00 h
7	Draft Complete	Jan/28/99	Jan/28/99	0.00 h
8	Review Plan	Jan/29/99	Feb/04/99	5.00 d
9	Advertising Plan	Feb/04/99	Mar/22/99	30.00 d
10	Meet with Ad Agency	Feb/04/99	Feb/04/99	0.00 h
11	Sample Ads from Age	Feb/05/99	Feb/22/99	10.00 d
12	Review	Feb/23/99	Mar/01/99	5.00 d
13	Approval	Mar/01/99	Mar/01/99	0.00 h
14	Final Layout	Mar/02/99	Mar/08/99	5.00 d
15	Develop Media Sched	Mar/09/99	Mar/22/99	10.00 d
16	Send to periodicals	Mar/22/99	Mar/22/99	0.00 h
17	Press Release Sent	Feb/22/99	Feb/22/99	0.00 h
18	Press Tour Travel	Mar/09/99	Mar/22/99	80.00 h
19	New York	Mar/09/99	Mar/11/99	24.00 h
20	Chicago	Mar/12/99	Mar/16/99	24.00 h
21	Dallas	Mar/17/99	Mar/18/99	16.00 h

Using a Top-Down Approach to Build a WBS

- Begin at the phase level
- Break down the large pieces into a logical series of components
- Break down each component into its logical subcomponents
- Continue the process down to the project manager's level of control

Using a Bottom-Up Approach to Build a WBS

- Ask team members to identify as many specific tasks as possible
- Aggregate and present tasks to the team
- For each task, ask—
  - What is the input?
  - Who provides the input?
  - What are the deliverables?
  - Who gets the deliverables?
- Identify tasks for all the input and deliverables
- Organize tasks according to their logical summary or parent tasks
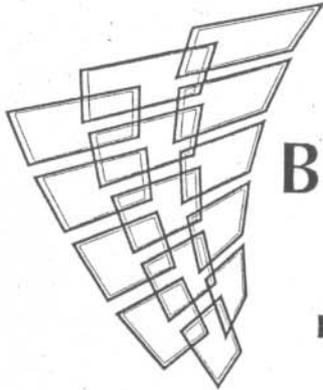
Benefits of a WBS

- Builds the project team
- Helps control scope creep
- Clarifies responsibilities
- Controls changes
- Facilitates work package monitoring
- Serves as a budgetary tool
- Provides greater accuracy in estimating
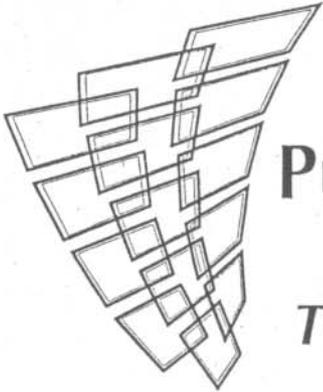
Purpose of a WBS Dictionary

Tool 4

- Records essential information for actual completion of the work package and includes—
  - Description of the work
  - Duration
  - Deliverables
  - Required skill set
  - Related tasks
  - Predecessors and successors
  - Completion and acceptance criteria

TOOL 4
WBS Dictionary

Project Name	Project Ref. No.	Prepared By (print)	Preparer's Initials
Customer	Contact	Contact's Phone	Date Prepared

General Information

WBS No.	Title	Revision No.	Revision Date
Responsible Organization		Risk Level (High, Medium, Low)	

Specification/Contract Reference

Spec. No.	Contract Line Item No.

Related Project Milestones

1.
2.
3.
4.

Description of Work

Comments

Resource Requirements

Labor (By Title)	Project Staff Hours	Other Staff Hours

Material	Amount	Reference

Subcontract		
Inventory Items		
Invoice (Purchased)		
Other Direct Charges	Amount	Reference

Activity Configuration and Status

Preceding Activity	WBS No.	Status	Date
Subsequent Activities	WBS No.	Status	Date

Acceptance and Coordination

Name	Title	Signature	Date

Risk Management/Contingency Plan

Project Name	Project Ref. No.	Prepared By (print)	Preparer's Initials
Customer	Contact	Contact's Phone	Date Prepared

Risk Event

Probable Causes

Risk Symptoms/Triggers

Preventive Plans

Contingency Plan

Outcome

Project Methodology Glossary

Initiate:

Requirements Definition – Statement describing the condition or capability needed by the customer to solve a problem(s) or achieve the objective(s) of the project. Use to gain consensus with the sponsor and other stakeholders on the project's purpose. Every requirement stated should pass the S.M.A.R.T. test, i.e., it is Specific (understandable and unambiguous), Measurable, Achievable, Realistic (feasible) and Testable, otherwise, the requirement is not ready for a project.

Stakeholder Identification – Recognize those who will be directly affected by the outcome of the project, with the goal of including them as active participants for project processes, i.e., requirements definition, process mapping, test plan development and deployment, etc. Stakeholders can also be ranked by power and influence to further determine how and when their involvement and feedback must be acknowledged throughout the project process.

Kickoff Meeting – The first project meeting initiated by the project manager and sponsor. It should include all stakeholders and project team members. Use the meeting to acknowledge the inclusion of relevant stakeholders, discuss their roles and level set all on the project's requirements. The sponsor should describe and emphasize the importance of the project's outcomes to all involved. Separate kickoff meetings can be held with project team members to clarify in greater detail their roles, procedures to be used and issues of a more technical nature.

Project Charter – A document issued by senior management that provides the project manager with the authority to apply organizational resources to project activities.

Memorandum of Understanding – An internal written agreement between DTS and the lead customer department to confirm a project's requirements, resources' availability or other important issues.

Statement of Work(1) – A formal project document that establishes the expectations and agreements about the project. See *The Complete Idiot's Guide to Project Management (pp.72-73)* for a detailed list of its components.

Statement of Work (2) – A narrative description of products or services to be supplied under contract.

Problem Definition – A description from the customer of the issue(s) to be resolved or opportunity to be gained from the project. Not as rigorous as the requirements definition.

Business Outcomes – A statement of the strategic business results to be achieved by the project.

Performance Measures – Quantified criteria used to determine whether a business unit is meeting its goals (i.e., reduction in the number of customer complaints, increased revenue, repeat customers).

Project Manager Assignment – The designation and granting of authority and responsibility to someone to manage the project and be responsible for its end results.

Enterprise Strategy Alignment – Determine whether the project's requirements are in line with Enterprise and team goals. Acceptance of a project should be based on this alignment.

DTS Acceptance Signoff - Signature from DTS management accepting the project as jointly defined with DTS.

Sponsor Acceptance Signoff – Signature from Sponsor accepting the project as it has been jointly defined with DTS.

Functional Manager Signoff - Signature of the Functional Team Manager to 'loan' staff for a stated period of time to a project outside of team's responsibilities.

Business Dept Lead Person Assignment – Assignment by the customer of a staff person to take a lead roll in facilitating project activities.

Assumptions & Constraints ID - Known issues that may affect the project's process or outcome.

Process Map Development – A diagram showing the steps, activities and entities involved in producing an output. Use to document a current process, communicate and confirm the process with the customer and to reengineer the process.

Funding Source Identification – Ensure that adequate funding will be available timely to execute the project and maintain the product via various department budgets, TIF, grants, master lease, revenue generation, etc.

Cost Benefit Analysis – A comparison (preferably weighted) of the advantages versus the disadvantages of pursuing a project to determine whether the gains outweigh the costs. If possible, comparison should be stated in dollar values.

Risk Assessment - Identifying threats to the project and evaluating the probably of their occurrence.

Plan:

Project Plan - A project schedule done with MS Project or similar software to show the project tasks, duration, start dates, etc.

Work Breakdown Structure - Chart breaking down milestones and tasks that must be accomplished in a project. It allows you to breakout subprojects and work packages (logical building blocks of activities).

Budget – Estimate of the sources and uses of funding for the project including when the funds will be needed.

Team Identification – List of the designated project team member and the tasks they have been assigned to and the expected duration of the assignment.

Communications Plan – A plan that describes how information will be gathered and stored (memo, phone call, periodic meeting, document updating, etc) and what information is to be communicated amongst the project team and stakeholders during the project . Also helps control project activities to make sure everyone stays on track, no one is left out and the team doesn't waste time in unnecessary communications activities, e.g., meetings.

Cost Estimates - Cost projections for the key expenditures in the project: labor, equipment, supplies, facilities, etc.

Risk Plan - A plan that provides a structured basis for assessing risk and reducing it. Allows for risks to be documented along with the contingency plans to be used if the threats occur.

Quality Plan – A plan to identify which quality standards are relevant to the project and how each will be satisfied.

Procurement Plan - A plan specifying which project requirements could best be met by procuring products or services and to determine which procurement vehicles to use and how the providers will be managed during the project.

COTS Analysis – To determine whether it would be more efficient and effective to use an off the shelf product versus doing a software development project.

Project Size Determination – A DTS activity to decide whether the effort qualifies as a large, lite or other-sized project and to select the components of the project methodology to use.

Design Plan – A plan of how the system should be built to fulfill all requirements including: technical, economic, political, environmental, sociological. Describes the functional components and how they will interact.

Implementation Plan – A plan of how the system will be deployed to customers, including user preparation and training, installation, testing, and user acceptance.

Training Plan – A plan describing the types of training required, training source, funding and timing.

Execute:

Sub-team Formation – Dividing the project team into logical work units and assigning a subteam manager to handle deliverables for that segment.

Component Team – A subgroup of the project's technical team with a specific expertise who are assigned to develop a specific component or subsystem of the end product according to the development approach chosen for the project. The team will have to coordinate testing and assembly of the main product with other component teams. Used in systems integration projects.

Work Packet Deliverables – The resulting product or service from the smallest subsystems of that project that can be produced independently.

Artifact Collection – The process of tracking (ensuring the last version is stored) and collecting project items to be saved for later reuse in the same or other projects.

Test Plan Peer Review – Functional or project team members review a test plan to ensure it covers all aspects of the products usage that the developer may have missed.

Subunit Testing – Testing individually the components of a larger system. Helps to reduce the time it will take to find errors when the large system is tested.

Integration Testing – A test of the integrated subunits of a system, usually done by a test team and usually does not include the developers of the subunits as the testers.

Systems Testing – A test of the full system, usually done in conjunction with the customers.

Training – To deliver the training needed as guided by the Training Plan document.

Artifact Reuse – Effort made to search a central project repository for prior project resources (documents, forms, code, techniques, schedules, contract language, etc.) that can be reused to help expedite completion of a project.

Exception Reporting – A document that includes only major variations from the plan.

Status Reporting – A report from team or sub-team members to the Project Manager on project activities completed during a period of time.

Control:

Earned Value Analysis – A method of comparing the amount of work planned against the amount of work done using scheduled days completed and cost accrued as variables.

Responsibility Assignment Matrix – A structure that relates the work from the work breakdown structure to a responsible individual.

Configuration Management - A plan to document and maintain an accurate list of the version levels of all components included in the development of a product.

Milestone Deliverables – Events on a project schedule that mark the completion of tasks by the delivery of something tangible, i.e., completion of a program, signed contract, functioning hardware component, etc.

Risk Assessment – A delineation of the threats that could occur and their associated impacts.

User Acceptance Testing – The final round of tests on an end product by the customer. An acceptance document is signed by the customer if the tests are successful.

Project Audit (Triage) – To perform a quick evaluation of a project and to prioritize actions or corrective recommendations based on current project status.

Close:

Contractor Assessment – Review of contractor's work quality and ability to deliver on its statement of work within budget and on time to determine if any contract actions are warranted and to assess whether to use the contractor again for similar types of work.

Bill Payment – To review charges and complete all payments to contractors for services rendered.

Lessons Learned – Collection of anecdotal Information from all team members and stakeholders regarding parts of the project process that went well or poorly with suggestions for repeat use in the future or recommended improvements to avoid similar deficiencies.

Best Practice – An approach to executing a project process that the project team found to be better than other approaches previously tried on other projects. The approach is recommended for use to others on different projects to avoid waste.

Post Mortem Meeting – A meeting of the project team and stakeholders (or a subset) after a project ends to discuss how the project process went, how it could have been improved and any loose ends that need to be taken care of. The meeting is preceded by a written survey completed by customers and stakeholders to gather statistics to be presented at the start of meeting.

PM and Team Evaluations – A formal evaluation of both the project manager and team members performance on the project, usually based on predefined criteria. This information will be rolled into the organization's personnel evaluation method.

Training Plan Updates – Team members including the Project Manager may need courses to support the project's products or may have taken courses to execute the project.

Artifact Wrap-up – Final collection of all documents, code and other reusable items from the project to be stored in a repository.

Project Write-up – A final analysis of the project based on surveys, interviews and a post mortem meeting held at the end of the project.

PM Closing Survey – The project manager's assessment of the project.

Customer Interview – The customer's assessment of the project as it pertains to his/her involvement.

Celebrations/awards – Recognition of the project's successful completion by the organization.

Transition:

Post Mortem Action Plan – List of items and activities that were discussed at the post mortem meeting to finally complete the project or move it into a support phase.

Operations Plan – A plan for continued use and upkeep of the project's end products.

Monitoring Plan – A plan to ensure that expected critical to quality factors and operating thresholds for the end products are continually reviewed and maintained.

Transition Plan – A plan to move operation of project's products from the project team (temporary) to a functional team (permanent part of the organization).

Audit – Third party review of the project results to ensure that end product is effective, efficient, secure, available, accurate, reliable and utilizing proper controls.

Performance Measures Update – On-going criteria used by the organization to ensure that the business outcomes of the project are being met by the products delivered.

Vendor Support Process - A plan to provide vendor support after the project closes.

Other Important Project Management Terms:

Corrective - bug fixing

Perfective - work that is adding functionality to the system in response from users

Adaptive - work which includes necessary alterations to the system because of changes oc