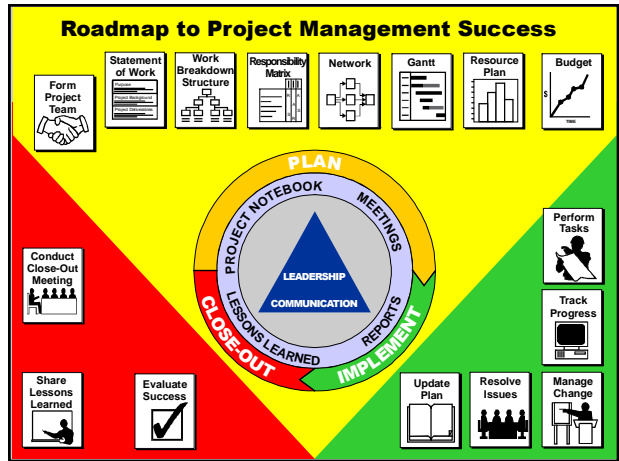
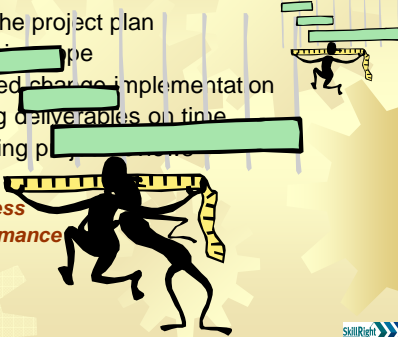




Section 4.0

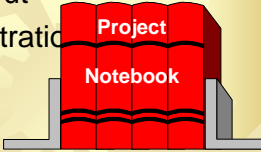

Project Implementation

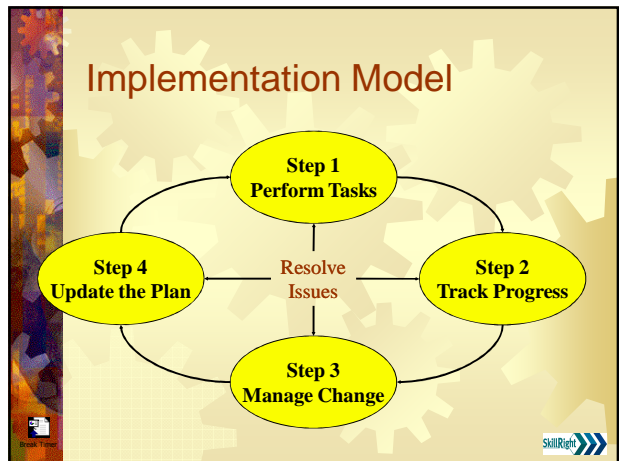


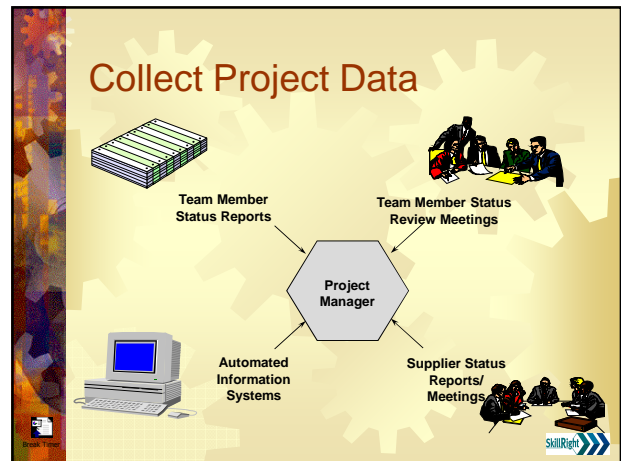
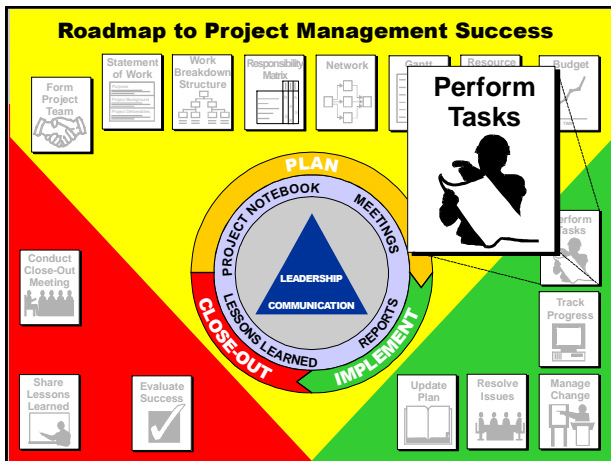


- ### Factors that Ensure Success
- Update the project plan
 - Stay with the type
 - Authorized change implementation
 - Providing deliverables on time
 - Conducting project meetings
 - MBWA
 - Progress
 - Performance
 - Moral
- 
- 

- ### Project Manager's Role
- Managing customer expectations
 - Carrying out project start-up activities
 - Directing and supporting the project team by using leadership skills
 - Tracking activities
 - Communicating project status
 - Managing change to control deviations from the established plan
 - Resolving issues in a timely manner
 - Maintaining the project notebook
- 

- ### Project Notebook
- Project History
 - Project Plan
 - Project Implementation
 - Project Close-Out
 - Project Administration
- 
- 





Reporting Activity Progress

- Estimate to complete (ETC)
- 80 hour rule

Percent Completion Reporting

Period	1	2	3	4	5	6	7	8
Planned	20	40	60	90	100			
Actual	20	40	60	90	94	96	97	97.5

Everything looks fine until you reach 90%!

Reporting Project Progress

- Progress review meeting
- Project reports

Project Progress Data

Audience	Level of Detail Presented
Senior management Project sponsor Customer Program manager	Summary data: <ul style="list-style-type: none"> - Summary activities - Decision matrix - Major risks - Serious issues
Project manager Team members Cross-functional groups	Detail data: <ul style="list-style-type: none"> - All activities - Detail Gantt charts - All milestones - All risks and issues

Project Progress Review Meetings

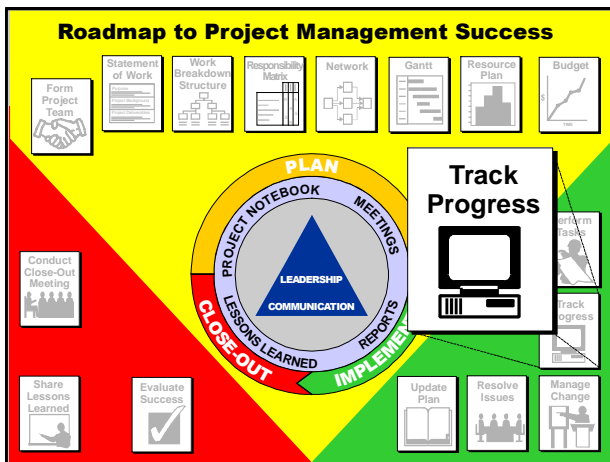
- Review of action items from last meeting
- Update on activities and schedule
- Problem identification and corrective action planned
- Review of issues (closed, open, new)
- Change request status
- Risk status
- Plan for next period



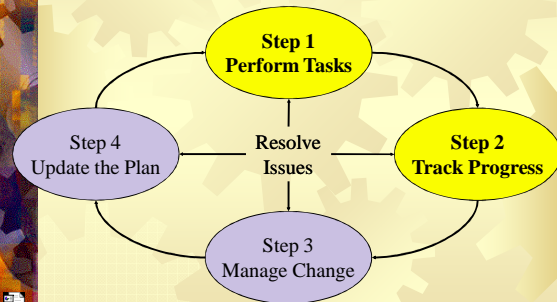
PROJECT PROGRESS REPORT				
Project Title	Date Submitted			
Project Manager	Report Period			
Authorization Reference (Purchase Order, ...)	Contract Change Number			
Summary of Progress During Period				
Open Issues	Responsibility	Completion Date		
Reports/Correspondence Issued During Period				
Meetings Attended During Period				
Work Planned for Next Period				
Budget Status	Approved Budget	Expended During Period	Expended to Date	Remaining at End of Period
Project Manager	Project Director			



Roadmap to Project Management Success



Project Tracking and Control



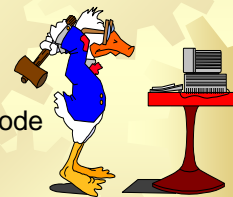
Compare Progress to Plan

- Quality reviews
- Gantt schedule performance charts
- Cost performance charts
- Earned value techniques



Quality Reviews

- Product design
- Specifications
- Manuals
- Parts
- Computer program code

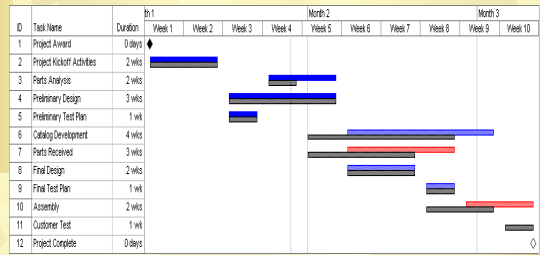


Schedule Performance Charts

- Gantt charts
- Cost Performance



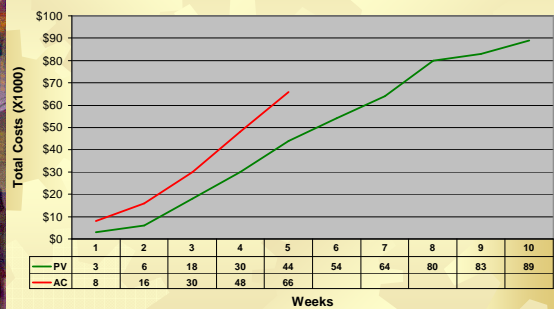
Gantt Chart



Cost Performance

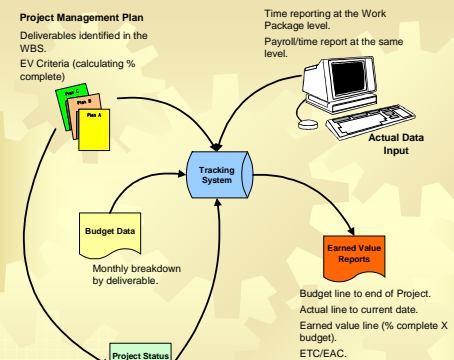
Week	Planned Value	Actual Costs
1	\$3,000	\$8,000
2	\$6,000	\$16,000
3	\$18,000	\$30,000
4	\$30,000	\$48,000
5	\$44,000	\$66,000
6	\$54,000	
7	\$64,000	
8	\$80,000	
9	\$83,000	
10	\$89,000	

Cost Performance Chart



Earned Value Analysis (EVA)

- Performance status based on costs
- Project projection tool
- Originated by government



Earned Value Analysis System

Earned Value Analysis (EVA) Terminology

- **Planned Value (PV)**
 - This is the budget for what was scheduled to have been performed within the reporting period. This may also be called the budget plan, performance measurement baseline or planned earned value for this period.
- **Actual Cost (AC)**
 - The actual cost of work completed within a given reporting period. This includes only those costs related to work performed to date.
- **Estimate to Complete (ETC)**
 - What it will cost to finish the rest of the project or an individual work task.

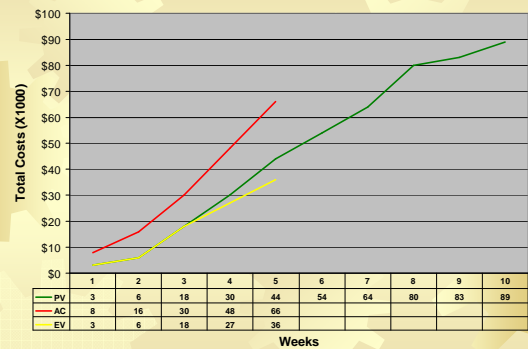
EVA Terminology

- **Budget at Completion (BAC)**
 - The budget approved for the project. This is also called the performance measurement baseline for the project.
- **Estimate at Completion (EAC)**
 - Forecasted project cost determined at the end of each reporting period.
- **Earned Value (EV)**
 - This is the budgeted cost for the work that has actually been performed within the given reporting period. Actual earned value is the sum of the budgets for all work that has been completed for the reporting period. At the activity level, it is equal to the percent complete of an activity times its original budget.

Earned Value Costs

Weeks	Planned Value	Actual Costs	Earned Value
1	\$3,000	\$8,000	\$3,000
2	\$6,000	\$16,000	\$6,000
3	\$18,000	\$30,000	\$18,000
4	\$30,000	\$44,000	\$27,000
5	\$44,000	\$66,000	\$36,000
6	\$54,000		
7	\$64,000		
8	\$80,000		
9	\$83,000		
10	\$89,000		

Earned Value Analysis



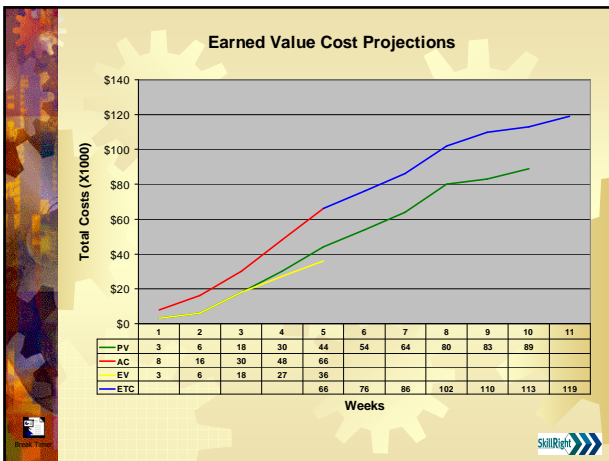
Earned Value Exercise

- Calculate the Earned Value Data for the project:
 - CV and CPI
 - SV and SVI
 - % Complete
 - % Spent
- Is the project in trouble?



Exercise Answers

EVA Parameter	Indicator Value
CV	-\$30,000
CPI	0.545
SV	-\$8,000
SPI	0.818
% Complete	40.4%
% Spent	74.2%



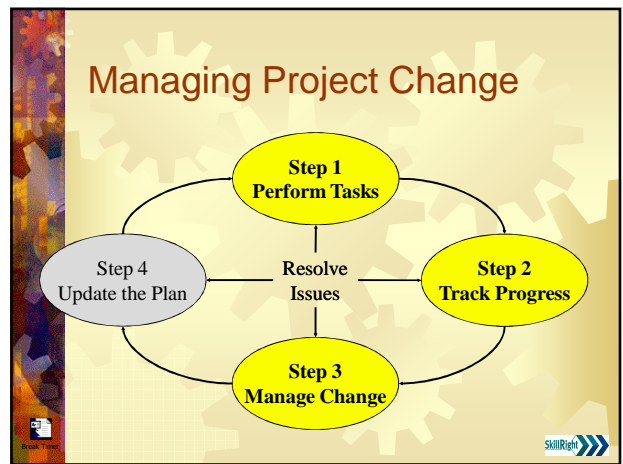
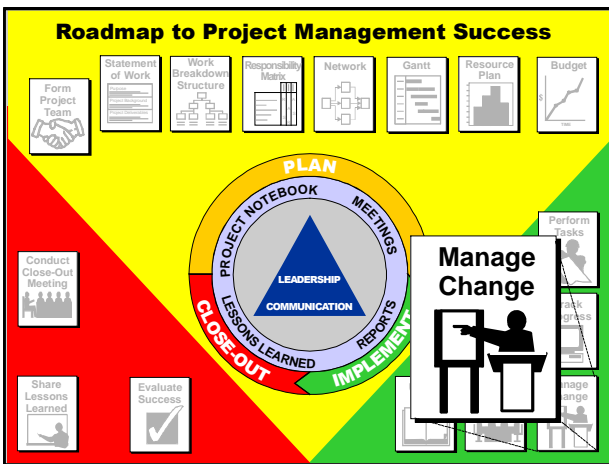
EVA Projections

Estimate At Completion (EAC) = BAC/CPI
 $= 89/0.545 = 163.3$

Estimate to Complete (ETC) = $EAC - AC$
 $= 163.3 - 66 = 97.3$

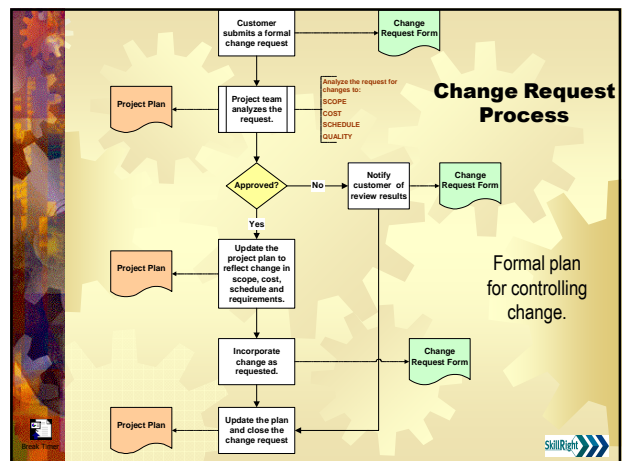
Estimated Additional Time = 2.2 Weeks

To complete this project it is estimated to take an additional \$97,300 and it will be approximately two weeks late.



Categories of Change

- Customer requested
 - Typically the largest source of change
- All others
 - Internal company requests
 - Government regulation
 - Team members



Addressing Project Changes

- Call a team meeting.
- Explain what the change is.
- Obtain feedback from team members.
- Identify alternative corrective options.
- Prepare a decision matrix.
- Select a recommended option(s).
- Present information to upper management/customer.
- Implement the approved course of action.

Decision Matrix

OPTION	IMPACT ON			RISK
	QUALITY	COST	SCHEDULE	
Describe course of action for this option	Quantify impact on quality	Quantify impact on cost	Quantify impact on schedule	Indicate level of risk as: H - high M - medium L - low
Use overtime to complete work that's behind schedule	No impact on quality	Will increase cost by 5%	Will get project back on schedule	L
Overlap work on later critical path activities by adding staff	No impact on quality	Will increase cost by 10%	Will get project back on schedule	H

Roadmap to Project Management Success

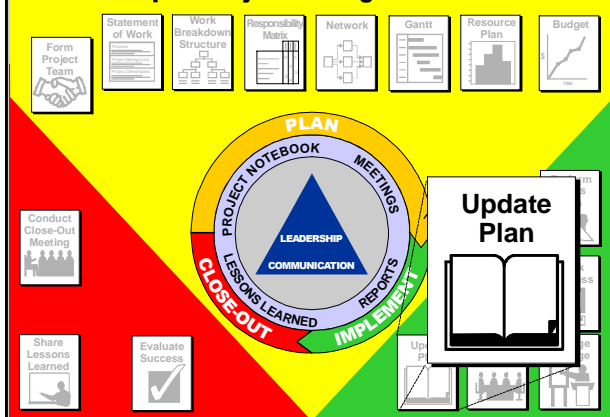


Issue Resolution

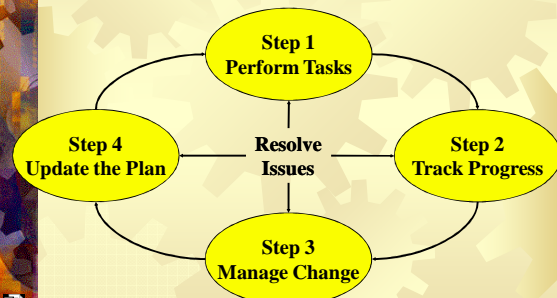
- Disagreements that should be ...
 - Documented
 - Assigned
 - Scheduled
 - Tracked
 - Escalated
 - Resolved



Roadmap to Project Management Success



Plan Updates



Section 4.0

End of Implementation Phase

