

Section 4.0

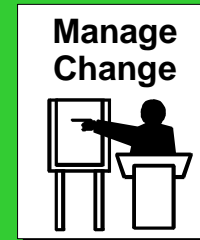
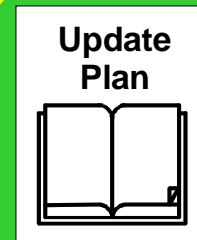
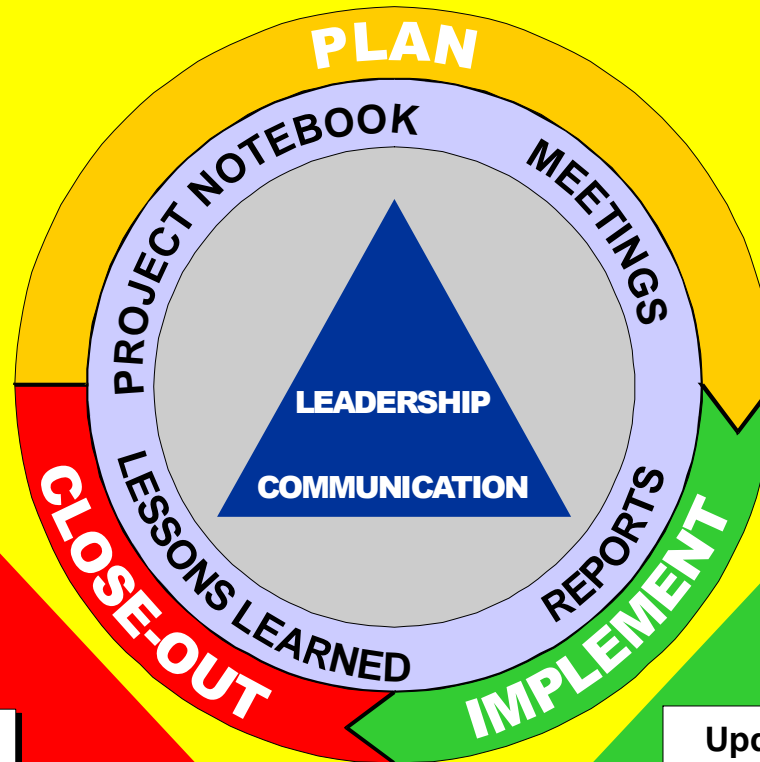
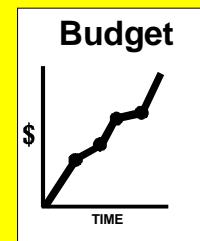
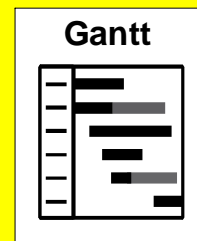
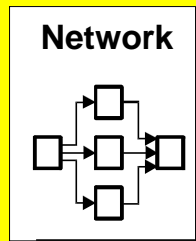
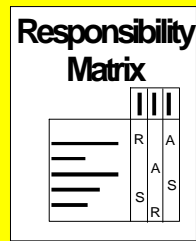
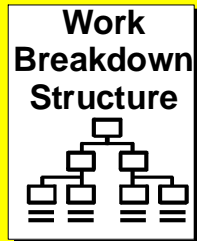
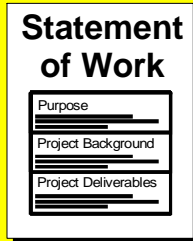
Project Implementation



Break Timer

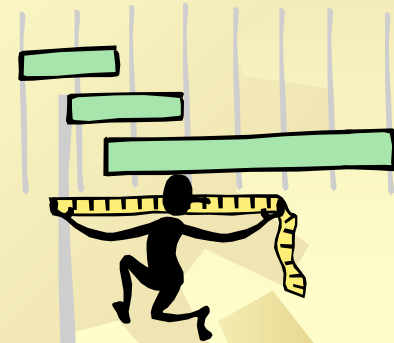


Roadmap to Project Management Success



Factors that Ensure Success

- Update the project plan
- Stay within scope
- Authorized change implementation
- Providing deliverables on time
- Conducting project reviews
- MBWA
 - *Progress*
 - *Performance*
 - *Moral*



Project Manager's Role

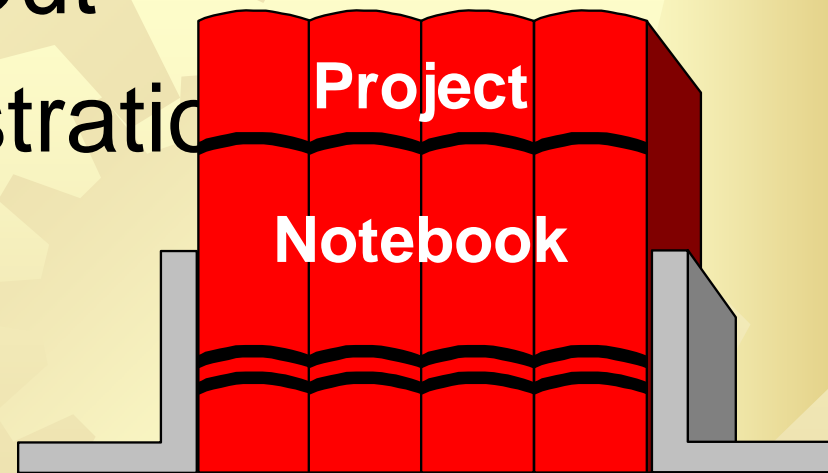
- ✿ Managing customer expectations
- ✿ Carrying out project start-up activities
- ✿ Directing and supporting the project team by using leadership skills
- ✿ Tracking activities
- ✿ Communicating project status
- ✿ Managing change to control deviations from the established plan
- ✿ Resolving issues in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



Break Timer

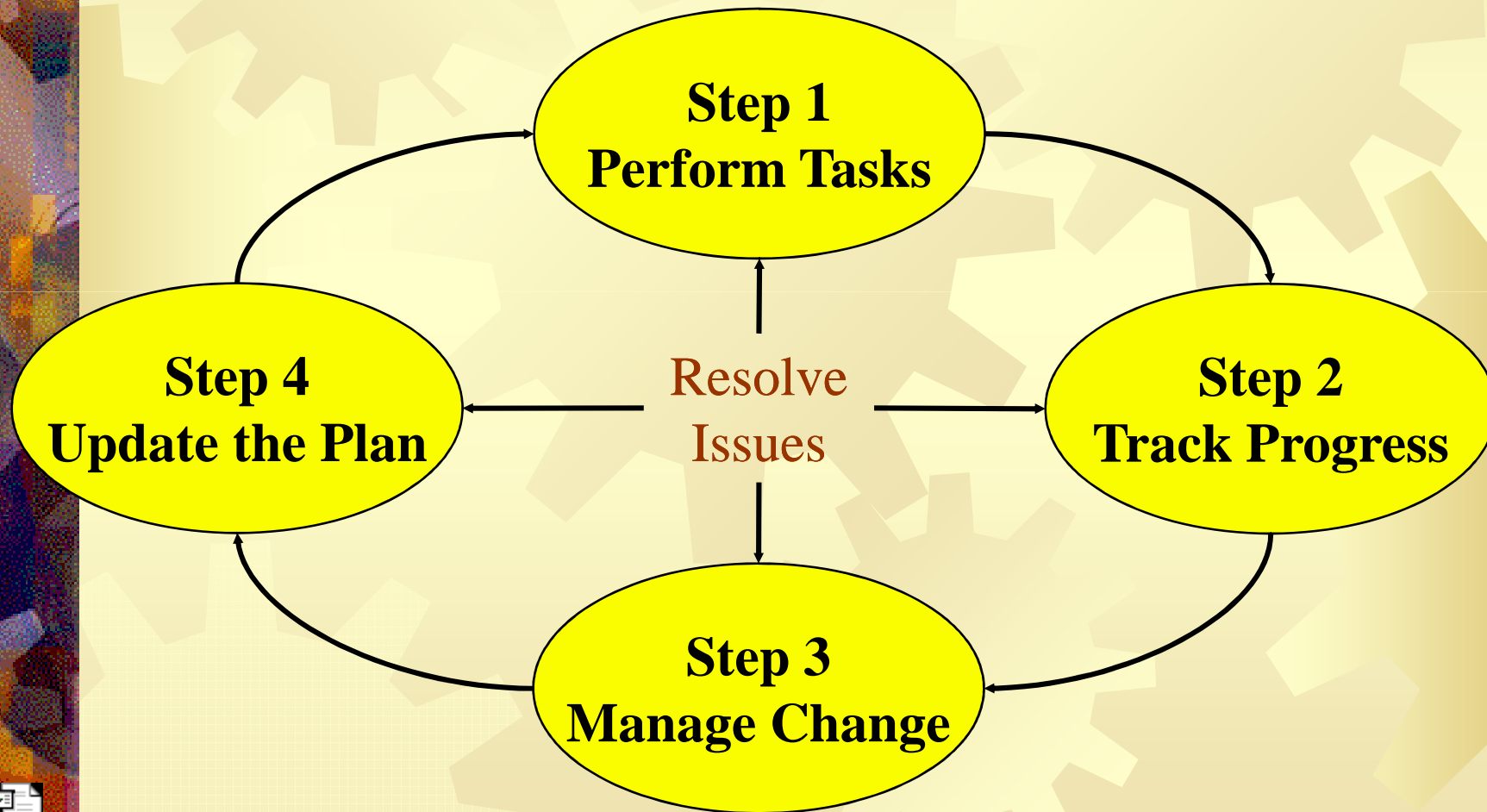
Project Notebook

- ✿ Project History
- ✿ Project Plan
- ✿ Project Implementation
- ✿ Project Close-Out
- ✿ Project Administration

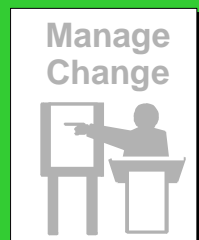
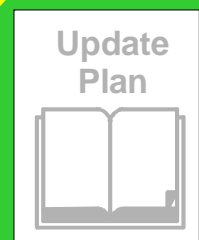
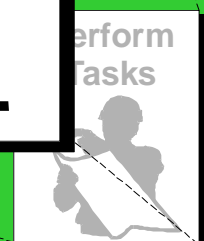
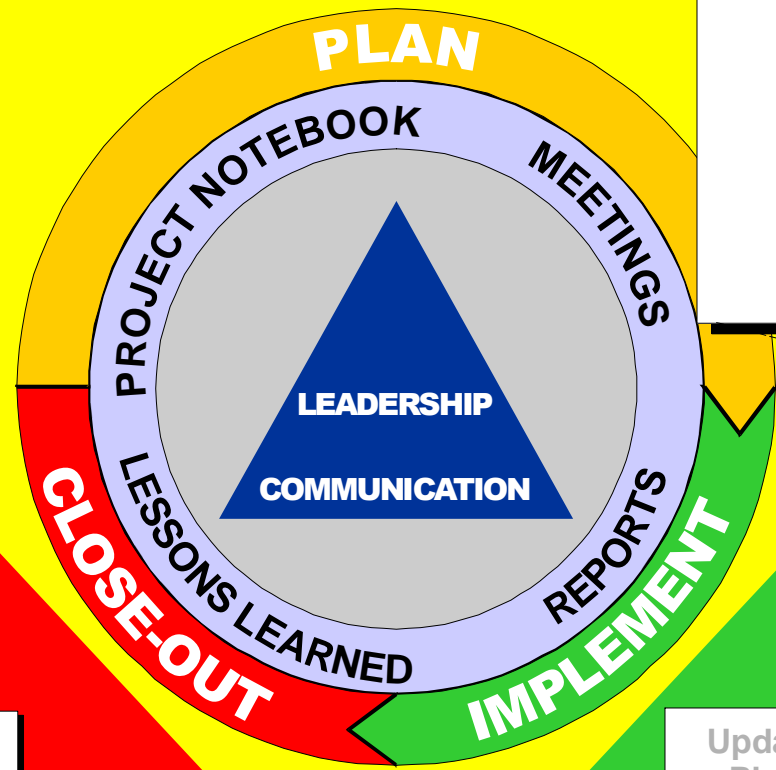
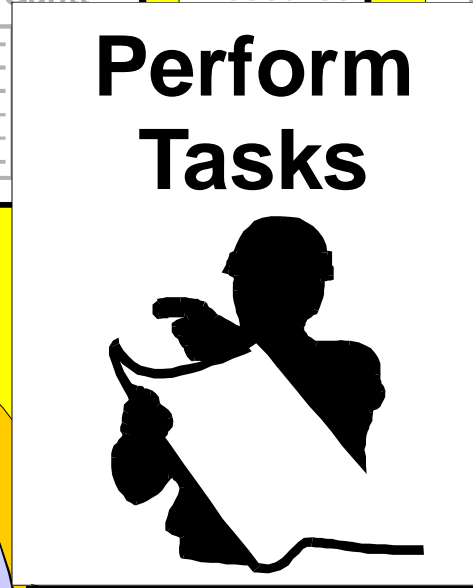
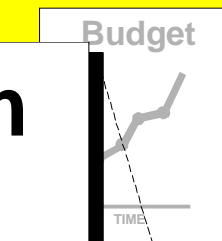
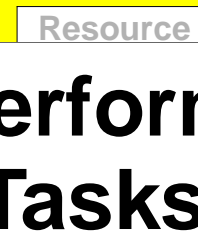
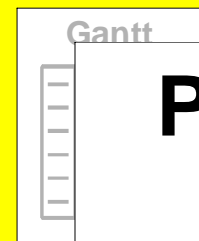
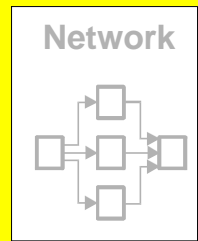
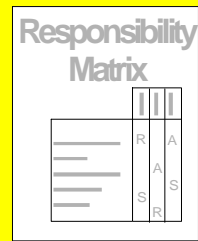
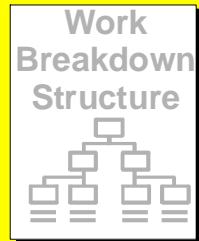
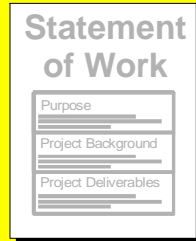
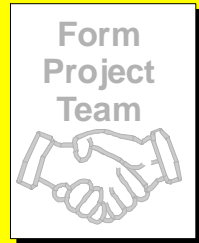


Break Timer

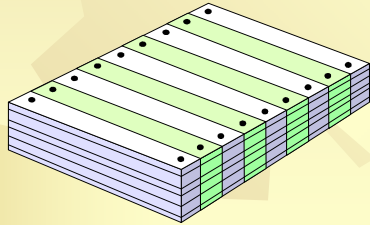
Implementation Model



Roadmap to Project Management Success



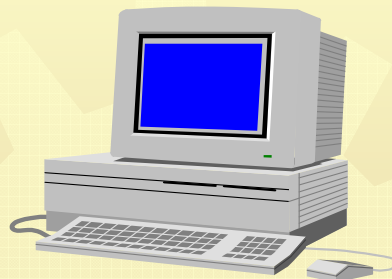
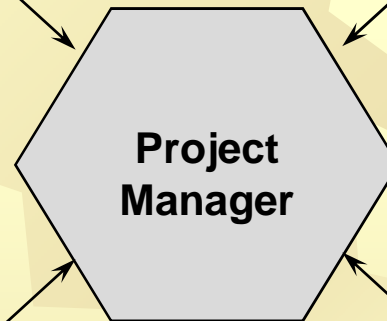
Collect Project Data



**Team Member
Status Reports**



**Team Member Status
Review Meetings**



**Automated
Information
Systems**

**Supplier Status
Reports/
Meetings**



Break Timer

Reporting Activity Progress

- Estimate to complete (ETC)
- 80 hour rule



Break Timer

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%!



Break Timer



Reporting Project Progress

- ✿ Progress review meeting
- ✿ Project reports



Break Timer

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



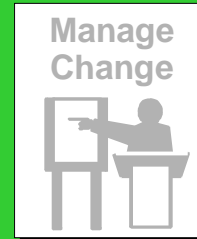
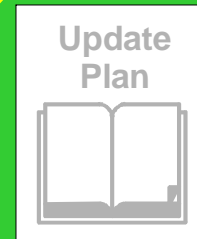
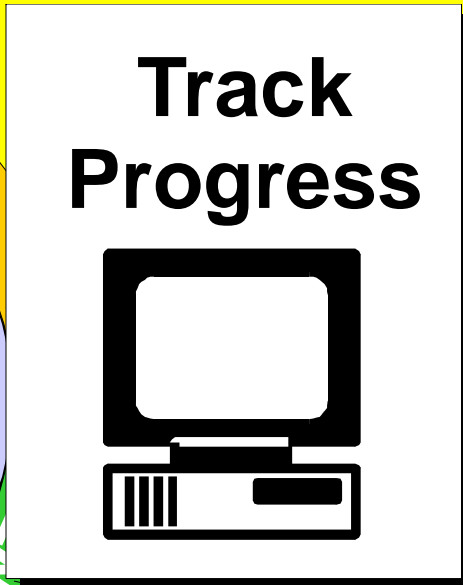
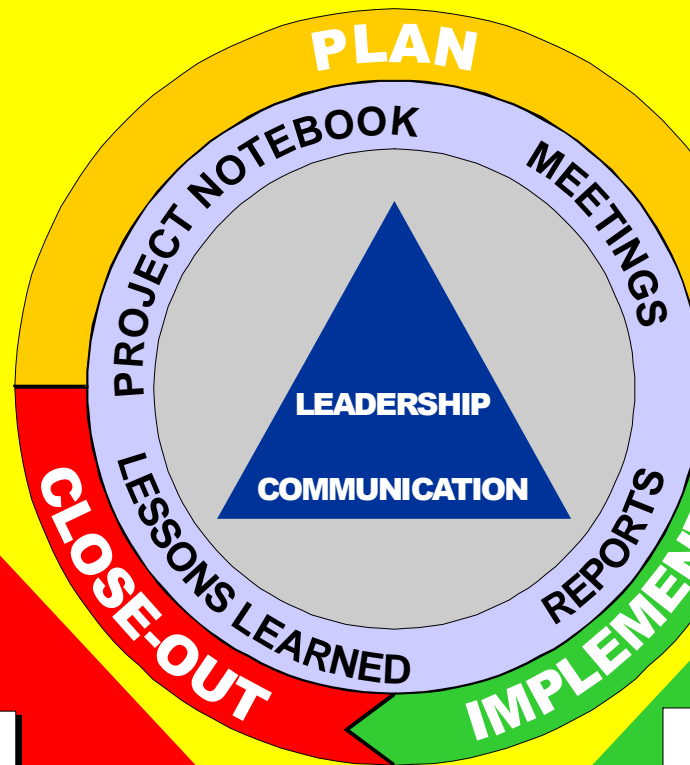
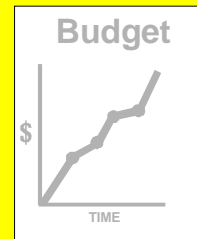
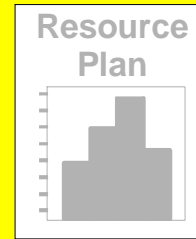
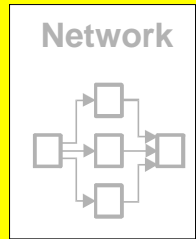
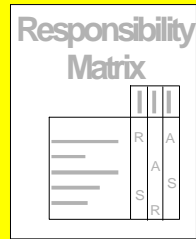
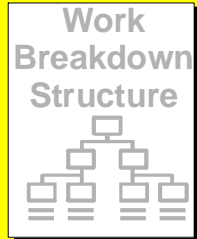
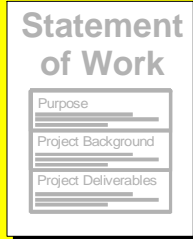
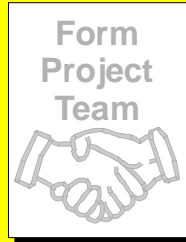
Project Progress Review Meetings

- ★ 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

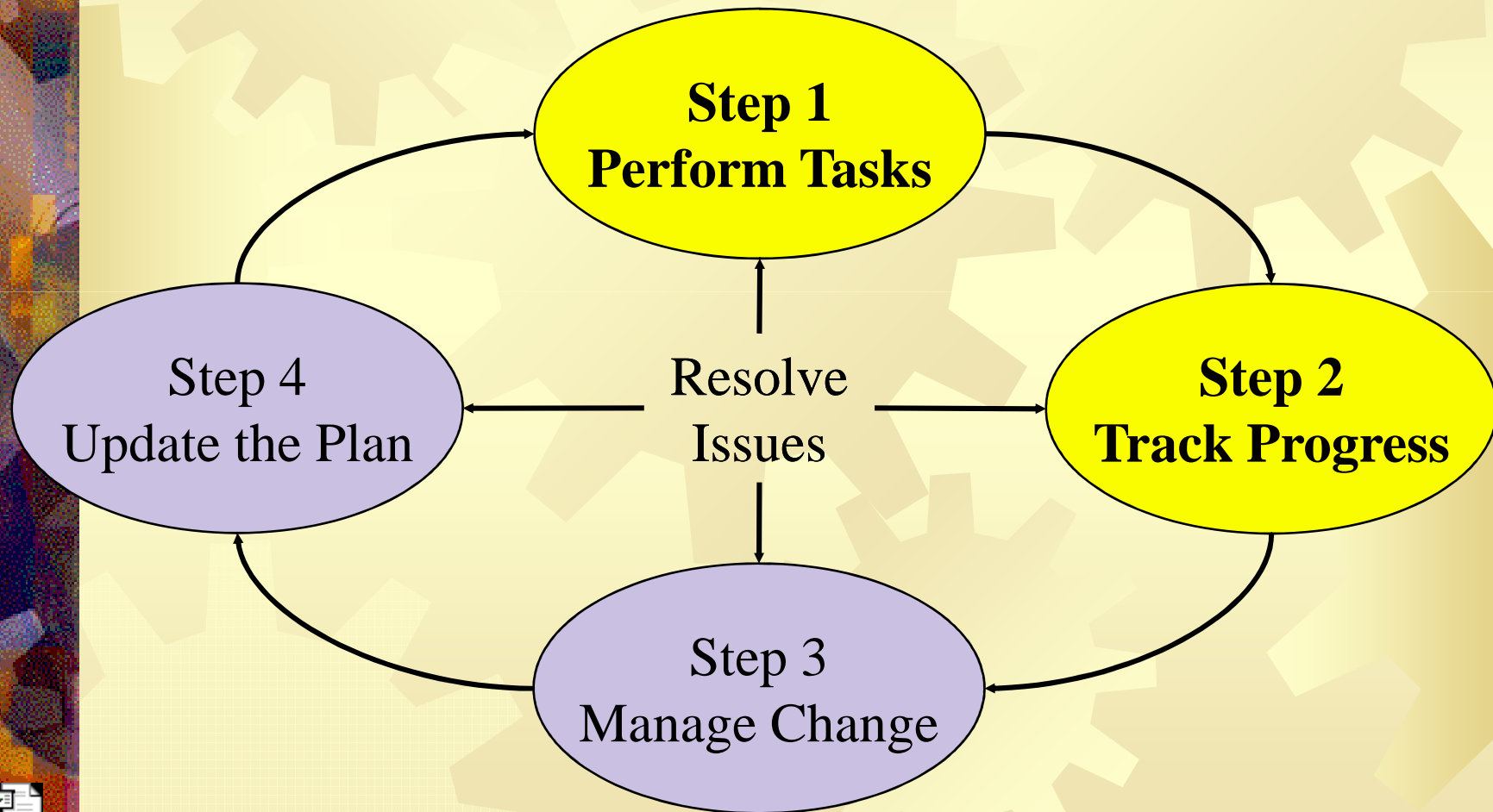


Break Timer

Roadmap to Project Management Success



Project Tracking and Control



Break Timer

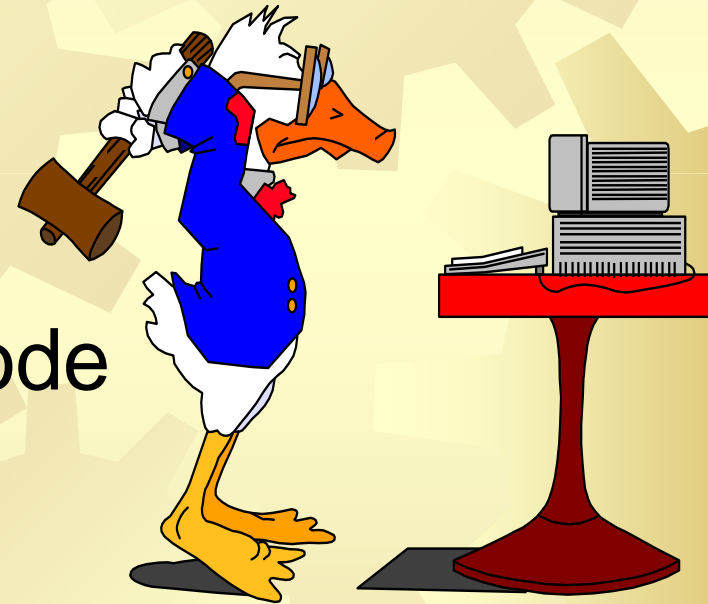
Compare Progress to Plan

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



Quality Reviews

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



Break Timer

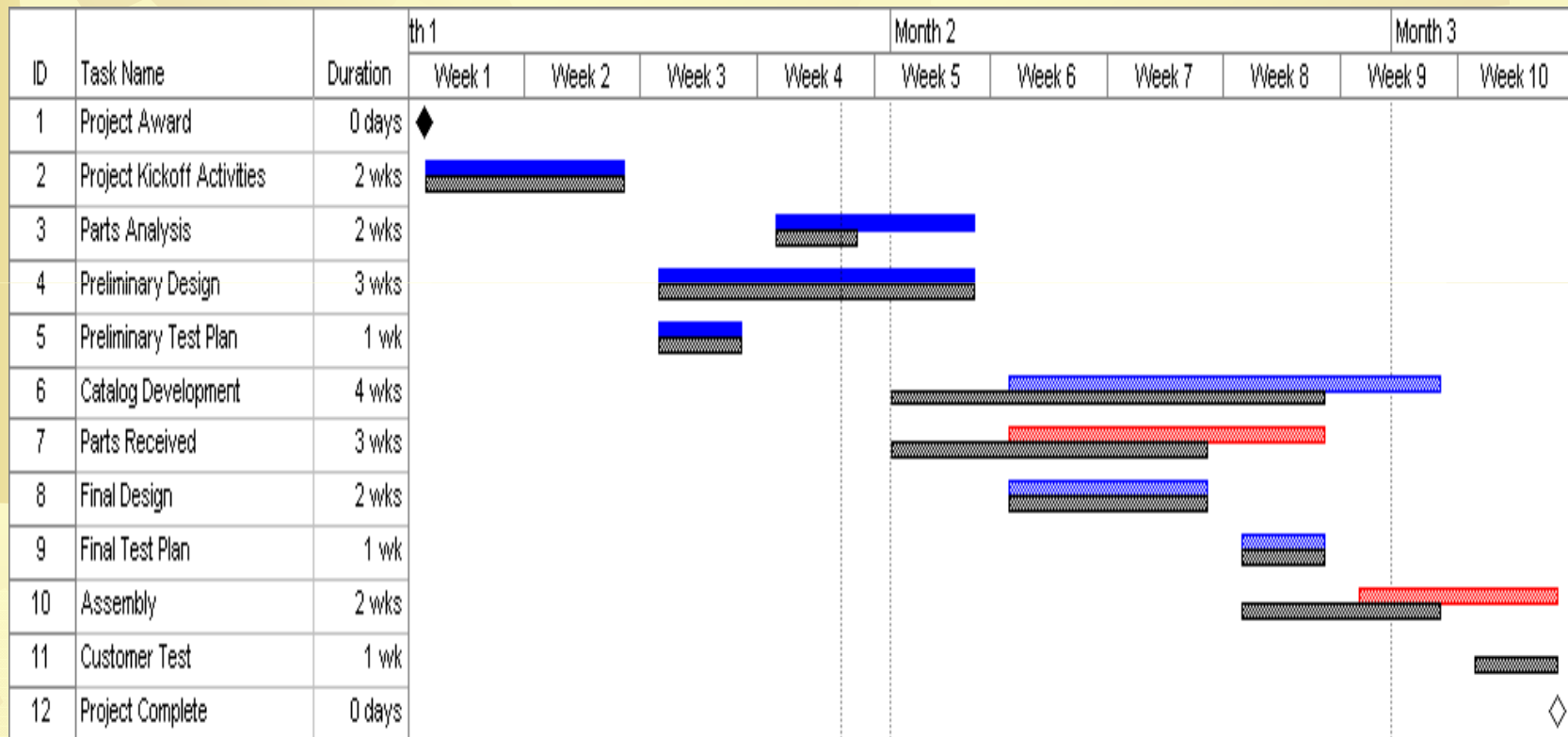
Schedule Performance Charts

- Gantt charts
- Cost Performance



Break Timer

Gantt Chart



Break Timer



Cost Performance

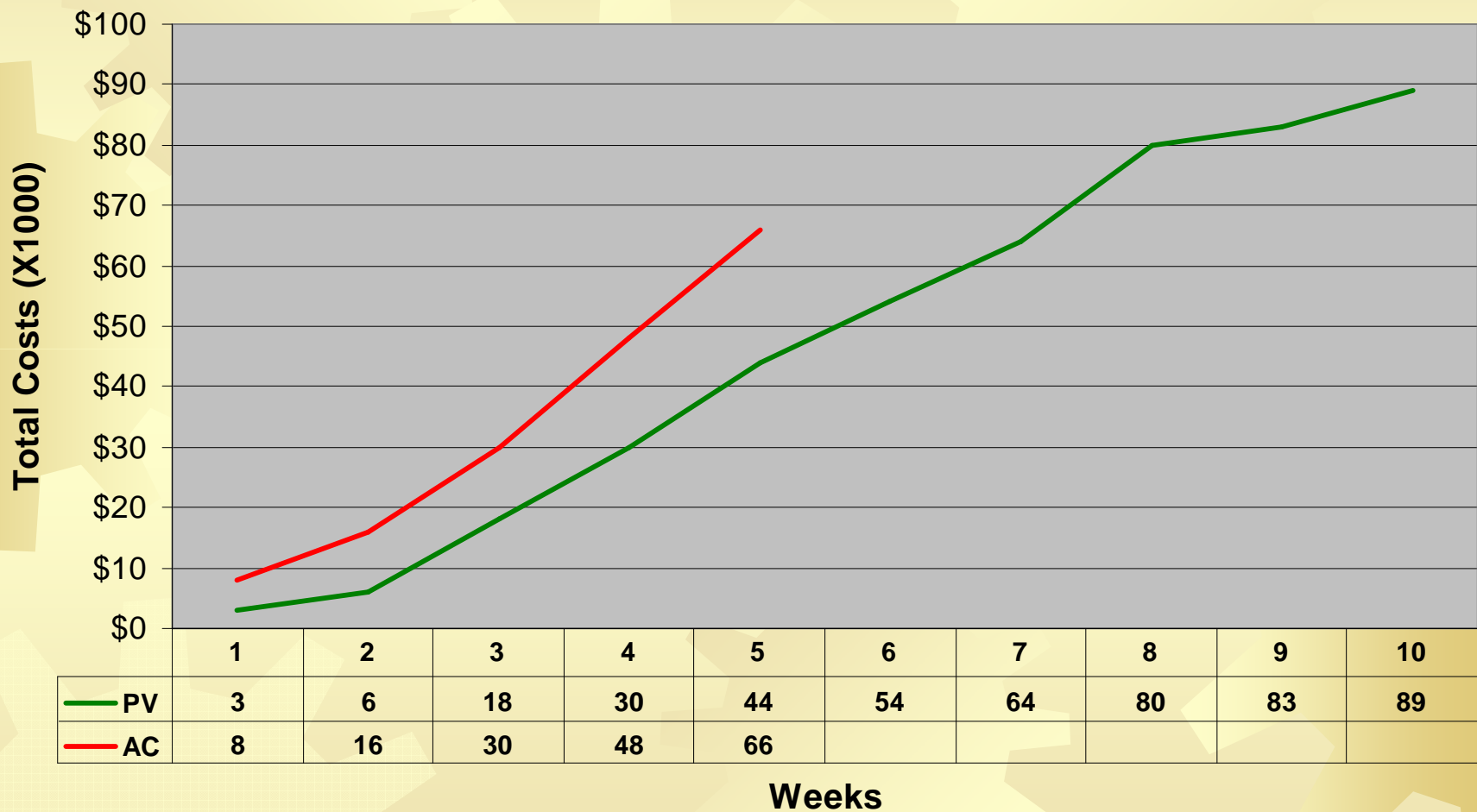
Week	Planned Value	Actual Costs
1	\$3,000	\$8,000
2	\$6,000	\$16,000
3	\$18,000	\$30,000
4	\$30,000	\$48,000
5	\$44,000	\$66,000
6	\$54,000	
7	\$64,000	
8	\$80,000	
9	\$83,000	
10	\$89,000	



Break Timer



Cost Performance Chart

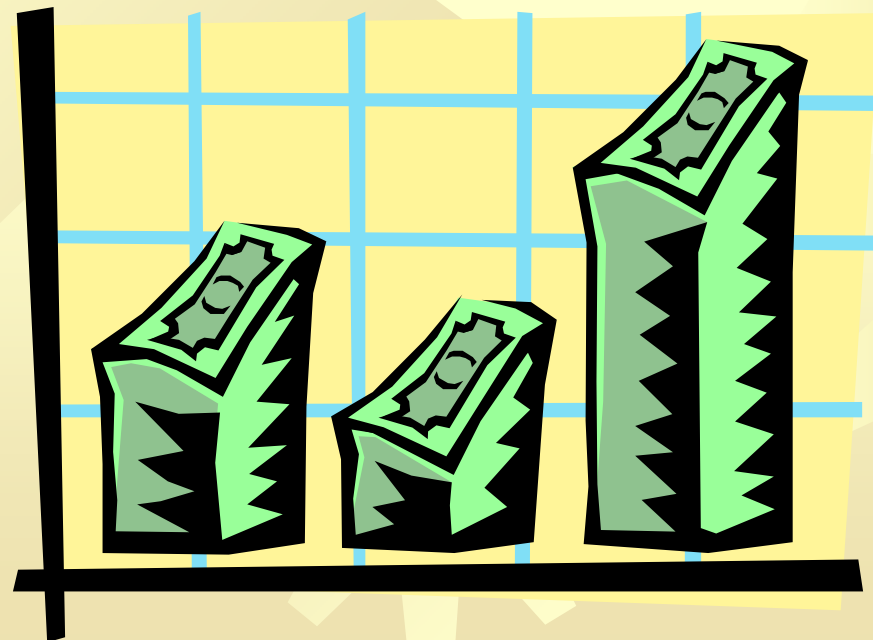


Break Timer



Earned Value Analysis (EVA)

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

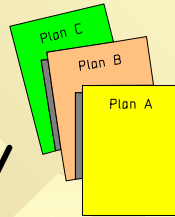


Break Timer

Project Management Plan

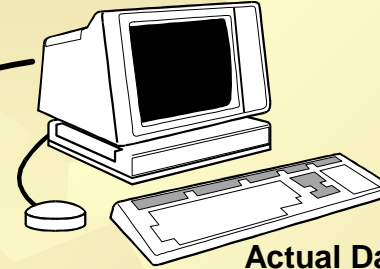
Deliverables identified in the WBS.

EV Criteria (calculating % complete)

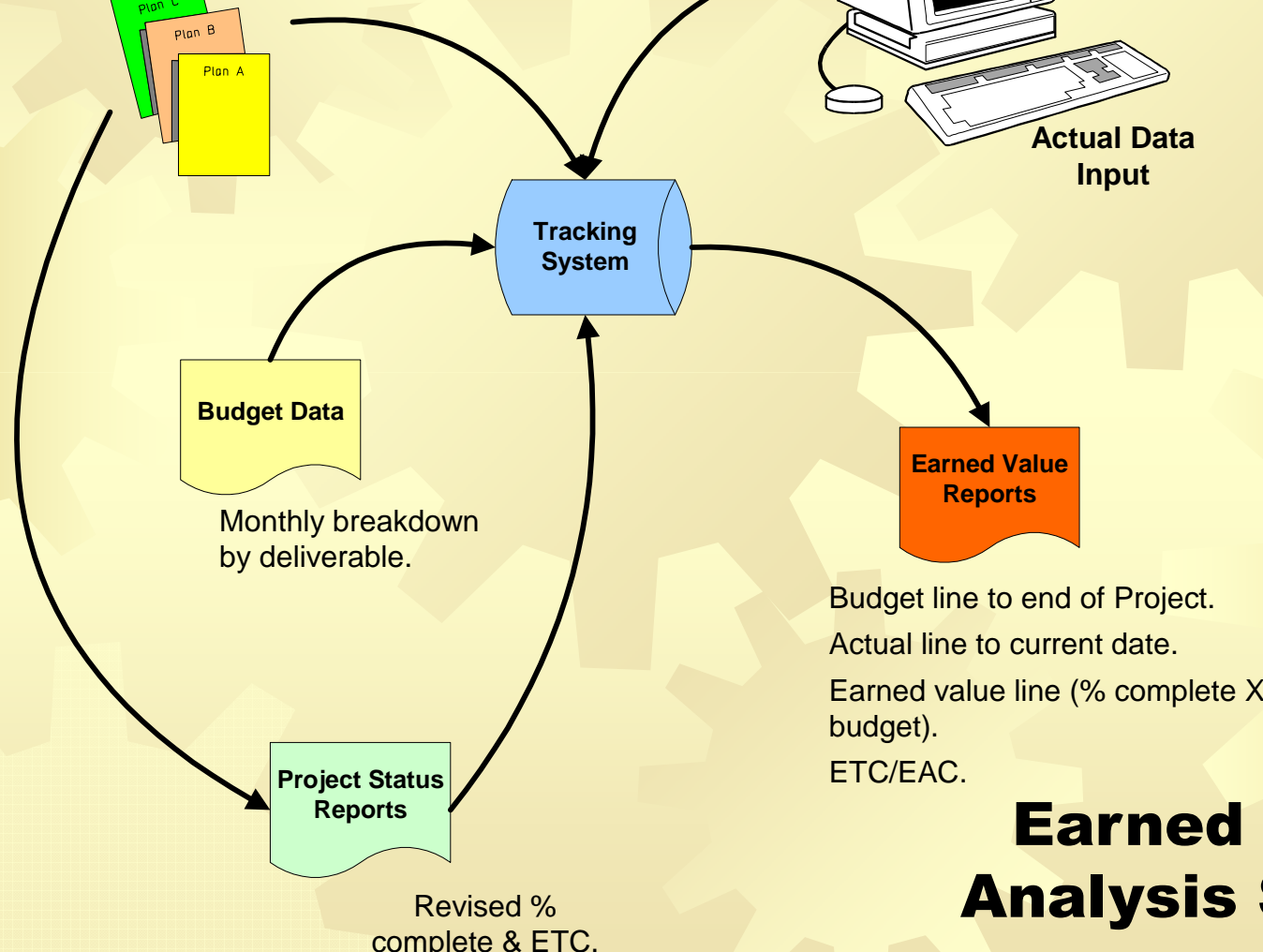


Time reporting at the Work Package level.

Payroll/time report at the same level.



Actual Data Input



Earned Value Reports

Budget line to end of Project.
Actual line to current date.
Earned value line (% complete X budget).
ETC/EAC.

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.



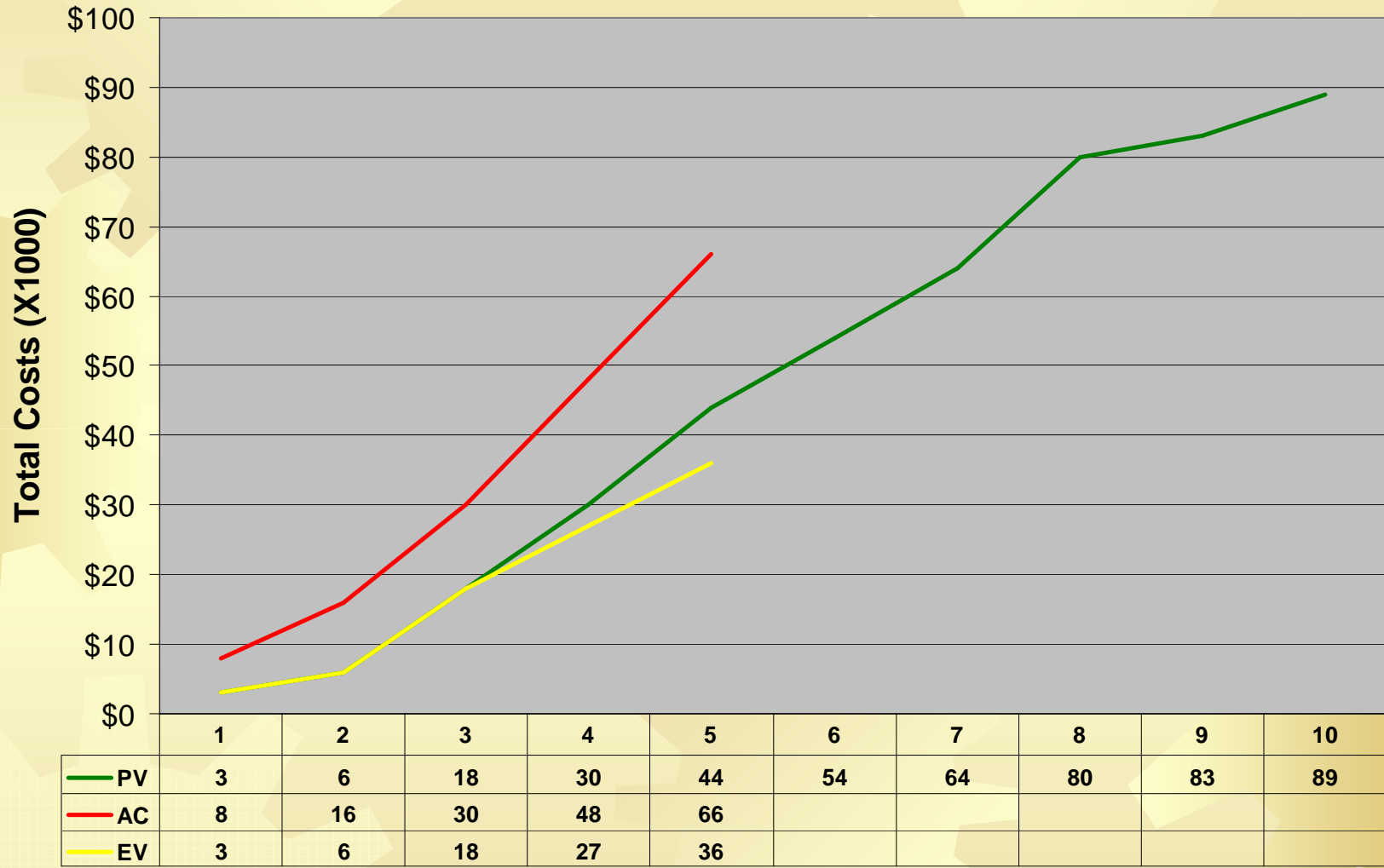
Earned Value Costs

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		



Break Timer

Earned Value Analysis



Weeks

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

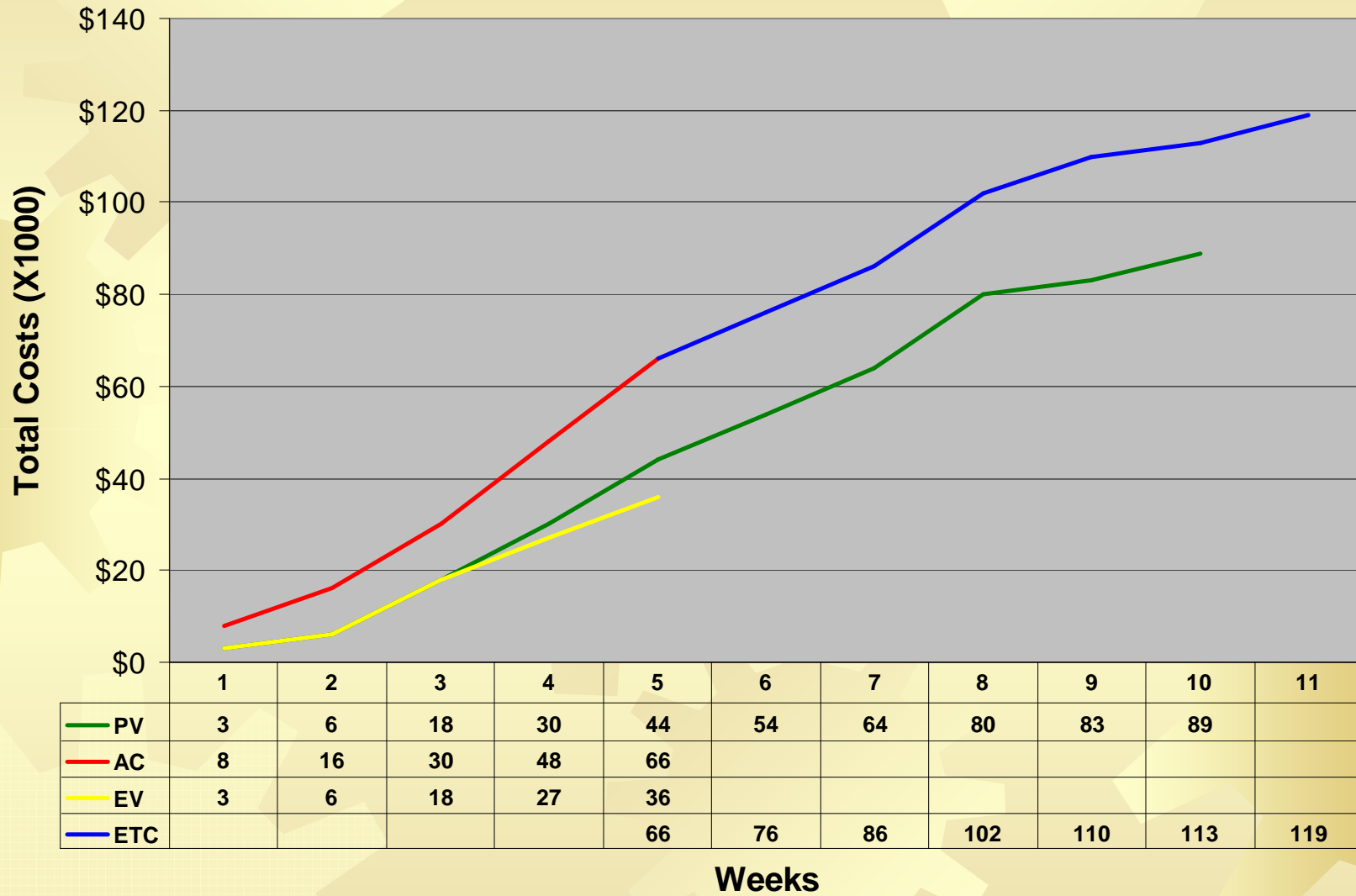
EVA Parameter	Indicator Value
CV	-\$30,000
CPI	0.545
SV	-\$8,000
SPI	0.818
% Complete	40.4%
% Spent	74.2%



Break Timer



Earned Value Cost Projections



EVA Projections

Estimate At Completion (EAC) = BAC/CPI

$$= 89/0.545 = 163.3$$

Estimate to Complete (ETC) = EAC – AC

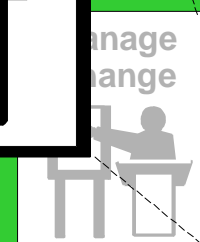
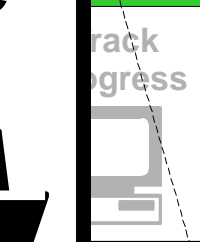
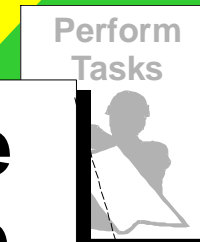
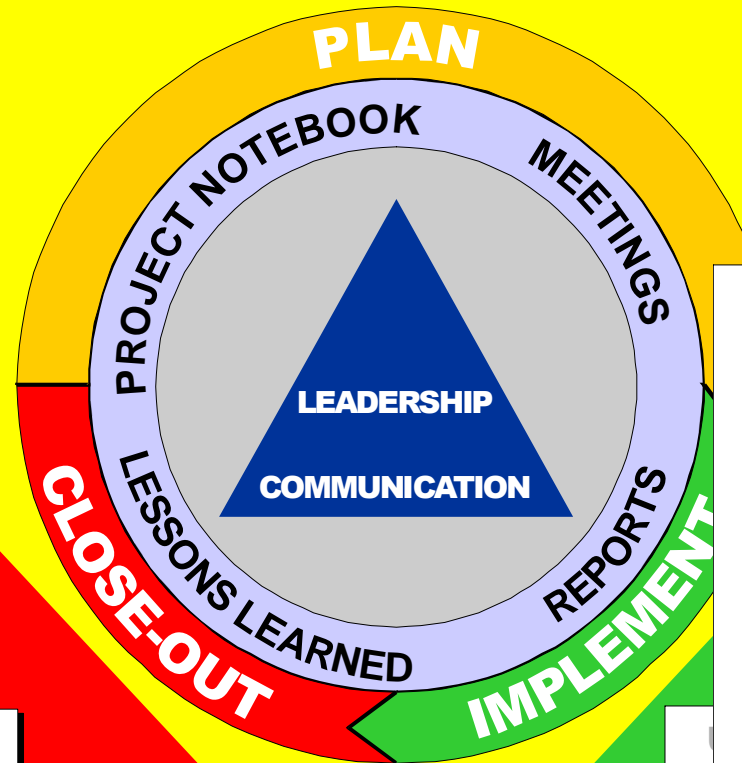
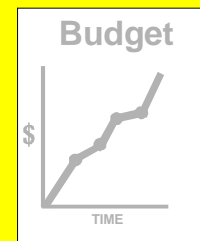
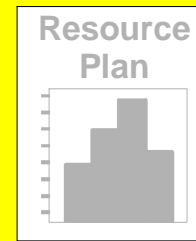
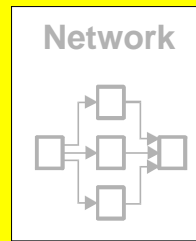
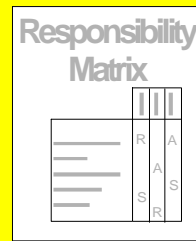
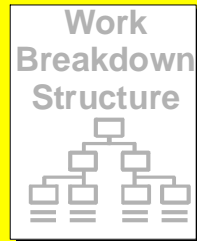
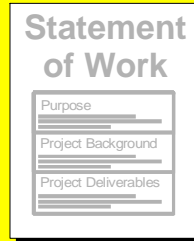
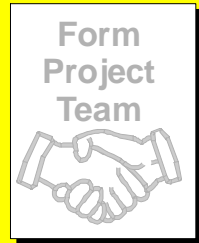
$$= 163.3 – 66 = 97.3$$

Estimated Additional Time = 2.2 Weeks

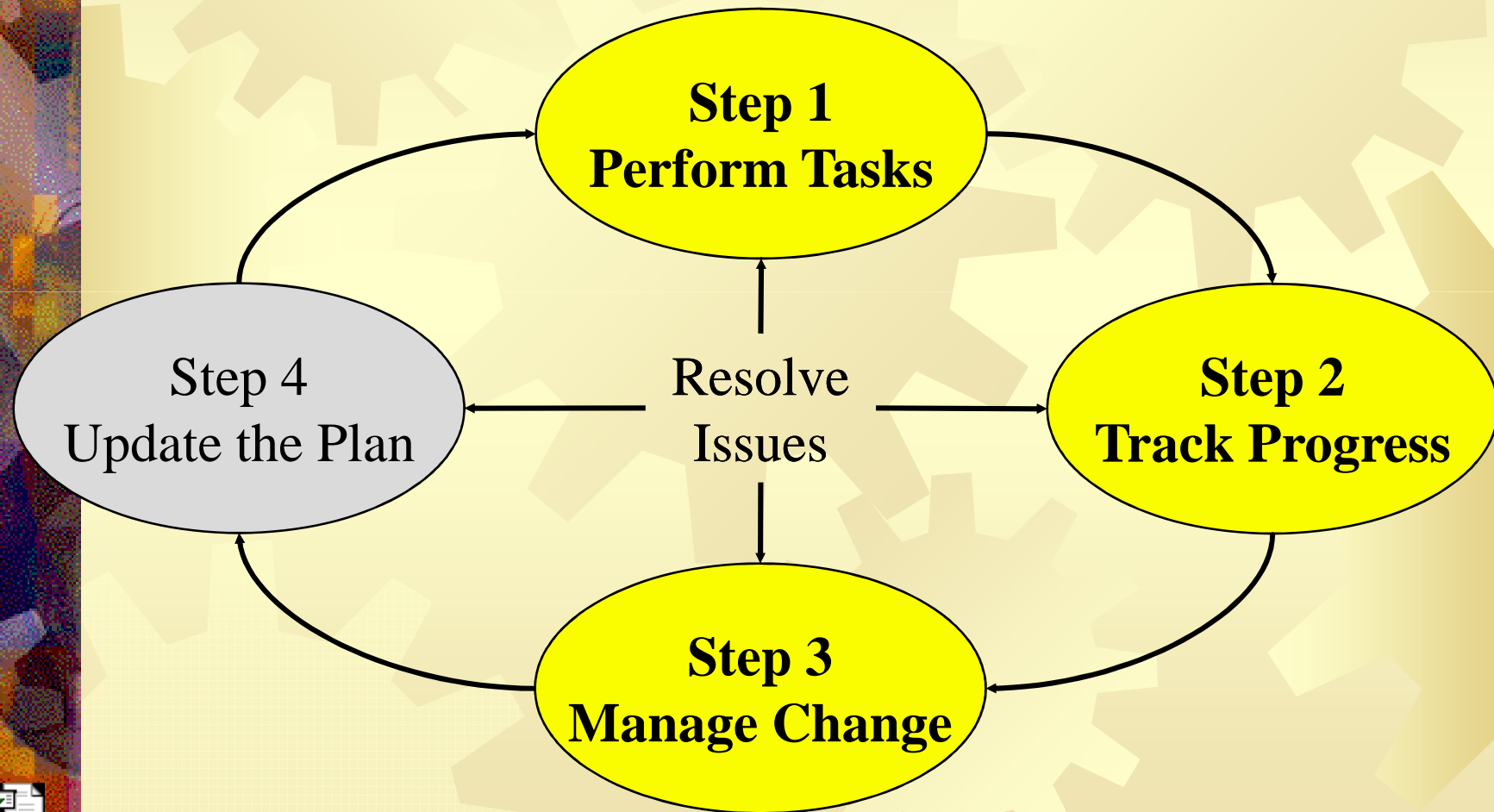
To complete this project it is estimated to take an additional \$97,300 and it will be approximately two weeks late.



Roadmap to Project Management Success



Managing Project Change



Break Timer

Categories of Change

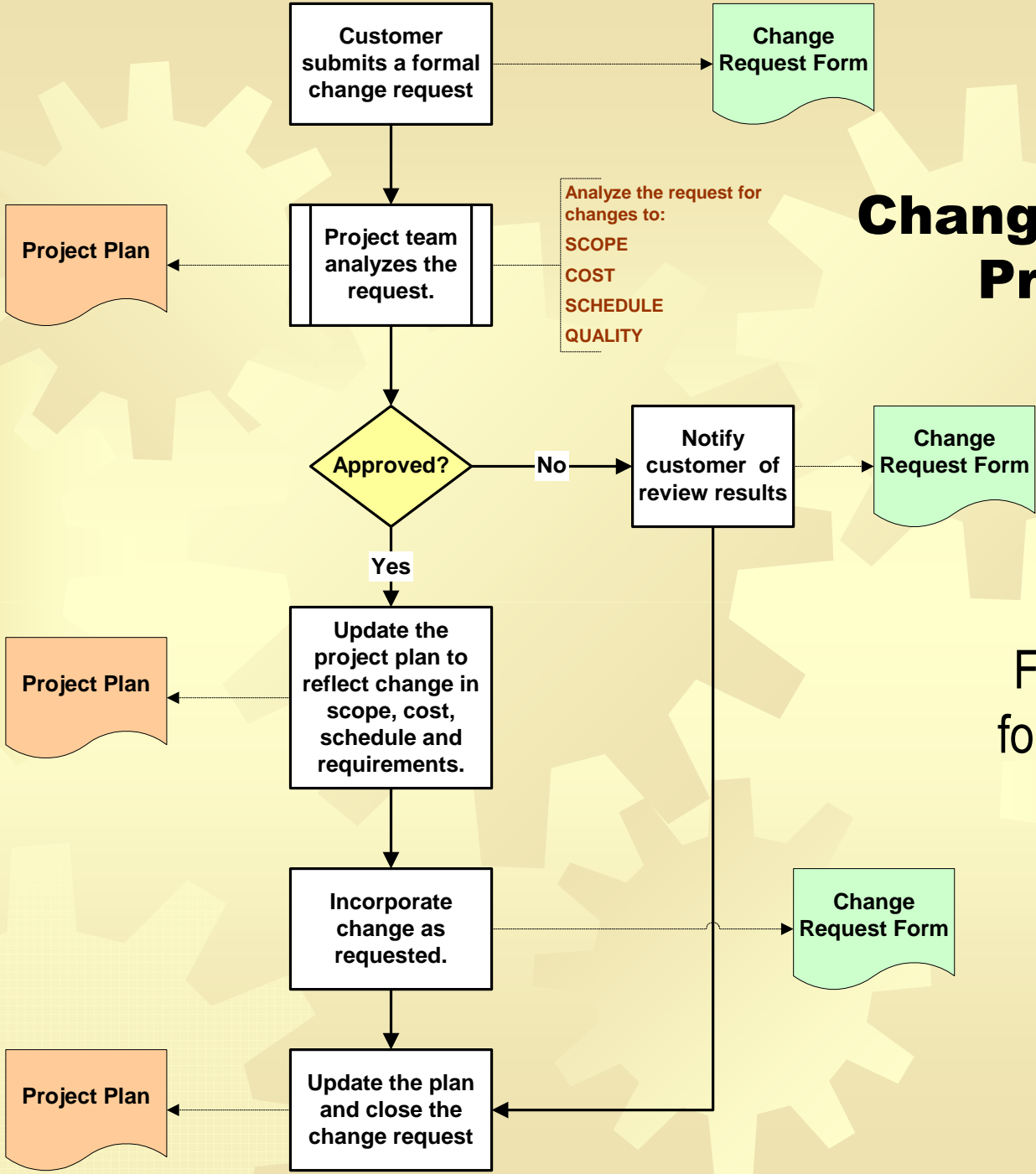
- Customer requested
 - Typically the largest source of change
- All others
 - Internal company requests
 - Government regulation
 - Team members



Break Timer



Change Request Process



Formal plan for controlling change.

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.

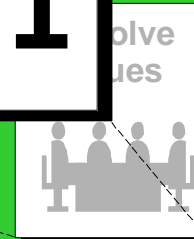
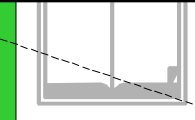
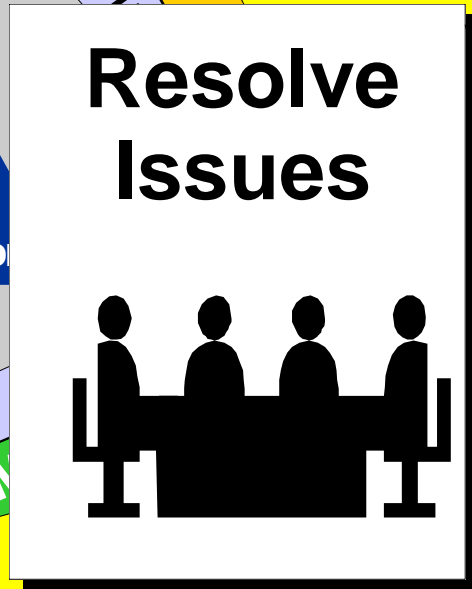
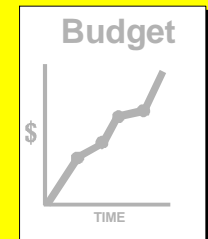
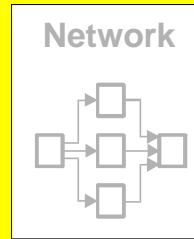
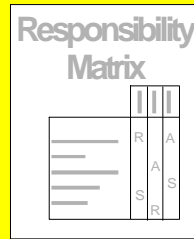
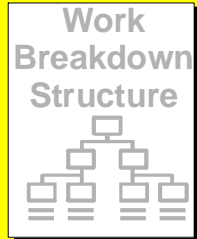
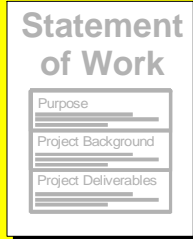
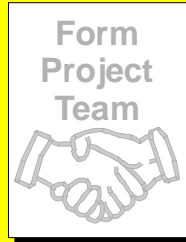


Decision Matrix

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

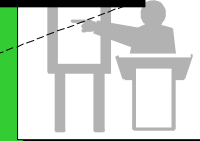
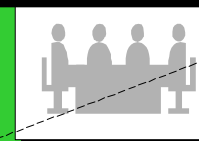
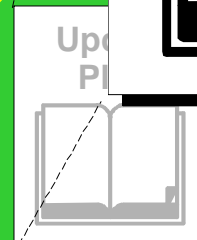
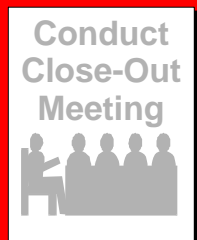
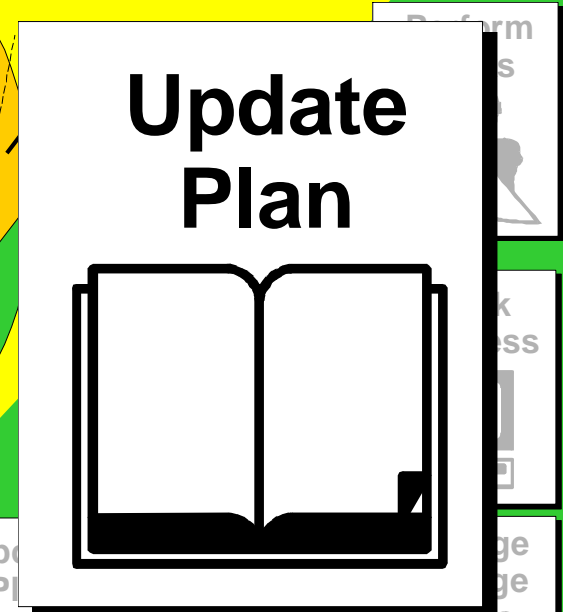
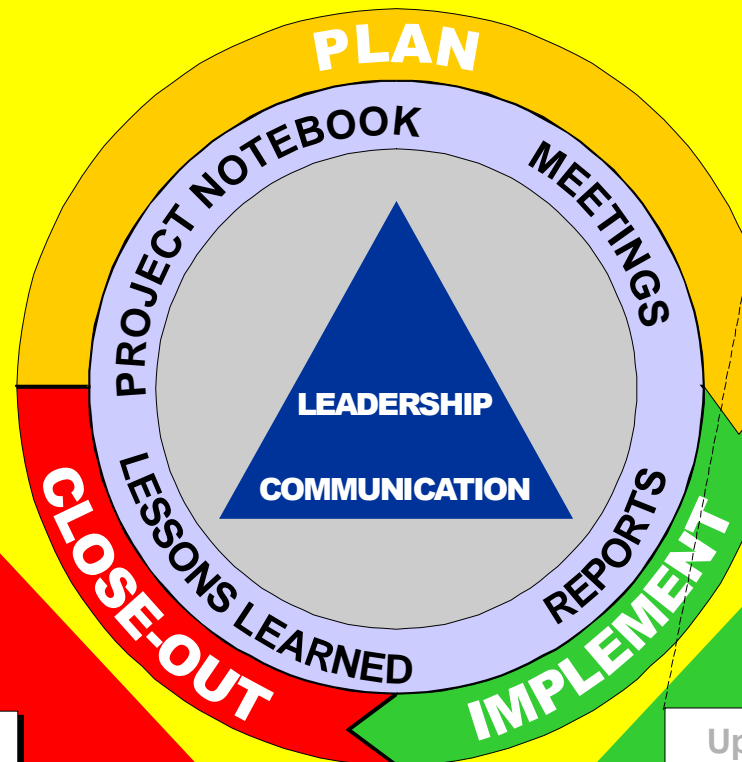
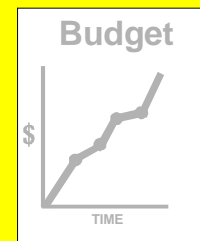
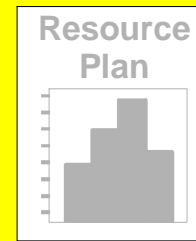
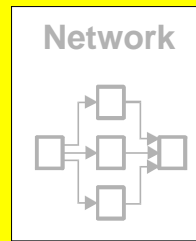
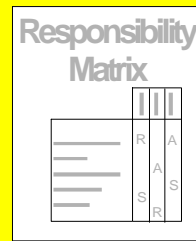
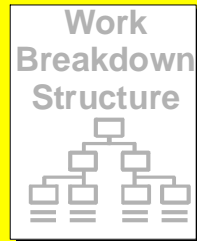
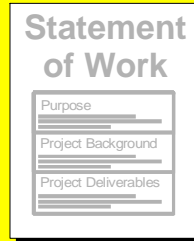
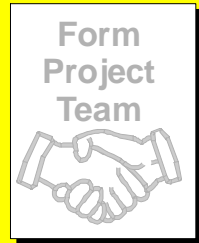


Issue Resolution

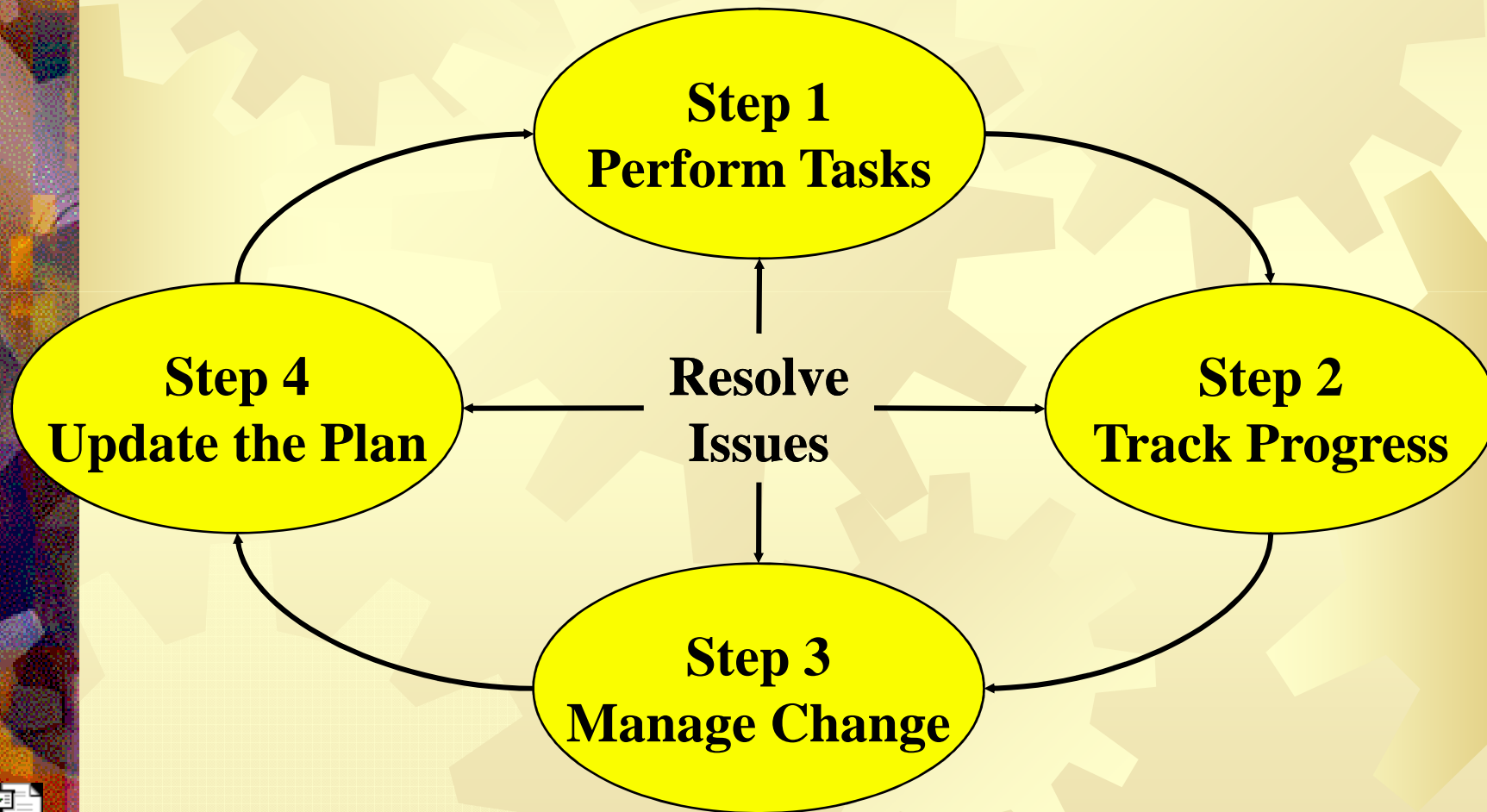
- ✱ Disagreements that should be ...
 - ✱ Documented
 - ✱ Assigned
 - ✱ Scheduled
 - ✱ Tracked
 - ✱ Escalated
 - ✱ Resolved



Roadmap to Project Management Success



Plan Updates



Section 4.0

End of Implementation Phase



Break Timer

