Elevator Academy: Project Management

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Project Management is

_____.

12 Steps for Good Project Management

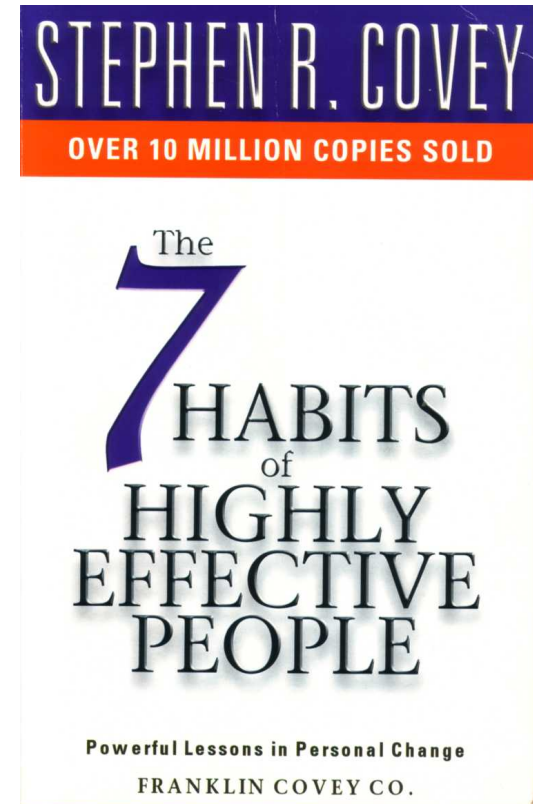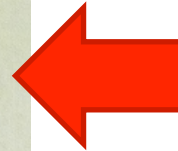| Planning	Doing	Review

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1. **Kick-Off Meeting**

Purpose: Define the Project Outcome
1. What does the end product look like?
2. Can the project be broken into components?
3. How long do we think this might take?
4. Who needs to be involved?
5. What qualities does the outcome have?
6. What does success look like?

VISUALIZING

Understanding Your Project

Complexity (vertical axis)

Difficulty (horizontal axis)

2. **List the Tasks**

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____

- Make a list of <u>everything</u> that will need to get done
- You can add to this later if needed
- Don't worry about the order
- Don't worry about who's doing what

3. Estimate Time for Each Task

1.	Task	2 hrs
2.	Task	1 month
3.	Task	2 hrs
4.	Task	5 hrs
5.	Task	3 days
6.	Task	30 min
7.	Task	1 hrs
8.	Task	2 hrs
9.	Task	7 hrs
10.	Task	1 day
11.	Task	3 days
12.	Task	4 hrs
13.	Task	2 hrs
14.	Task	10 hrs

- Always over-estimate how long something will take
- Use the 30-50% rule

e.g. if you think it will take 2 days to complete, it will probably that 3.

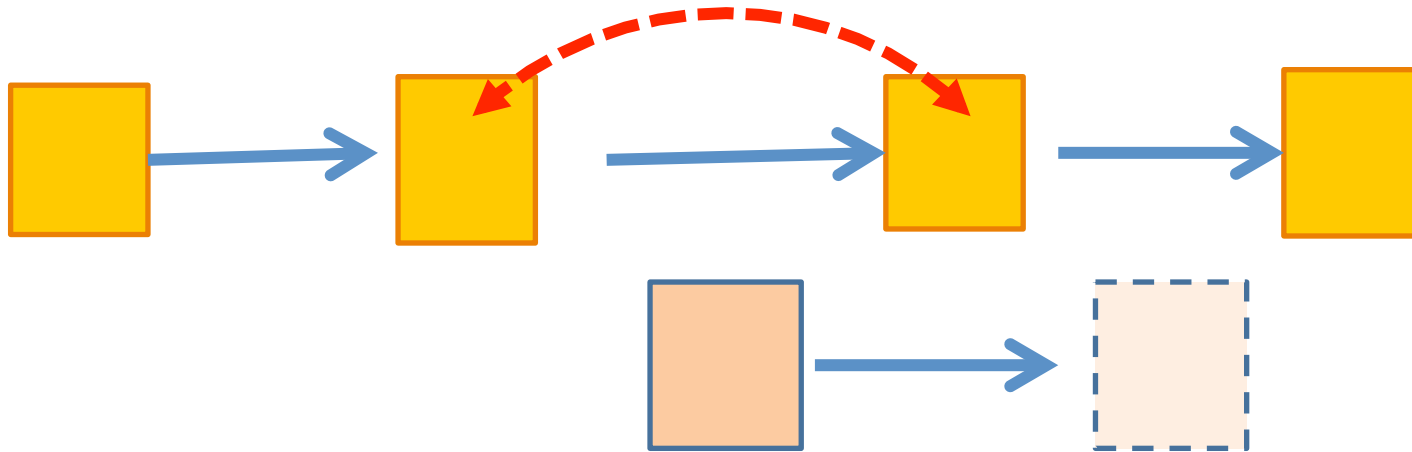If you think it will take a month, it might take 1.5 to 2 months.
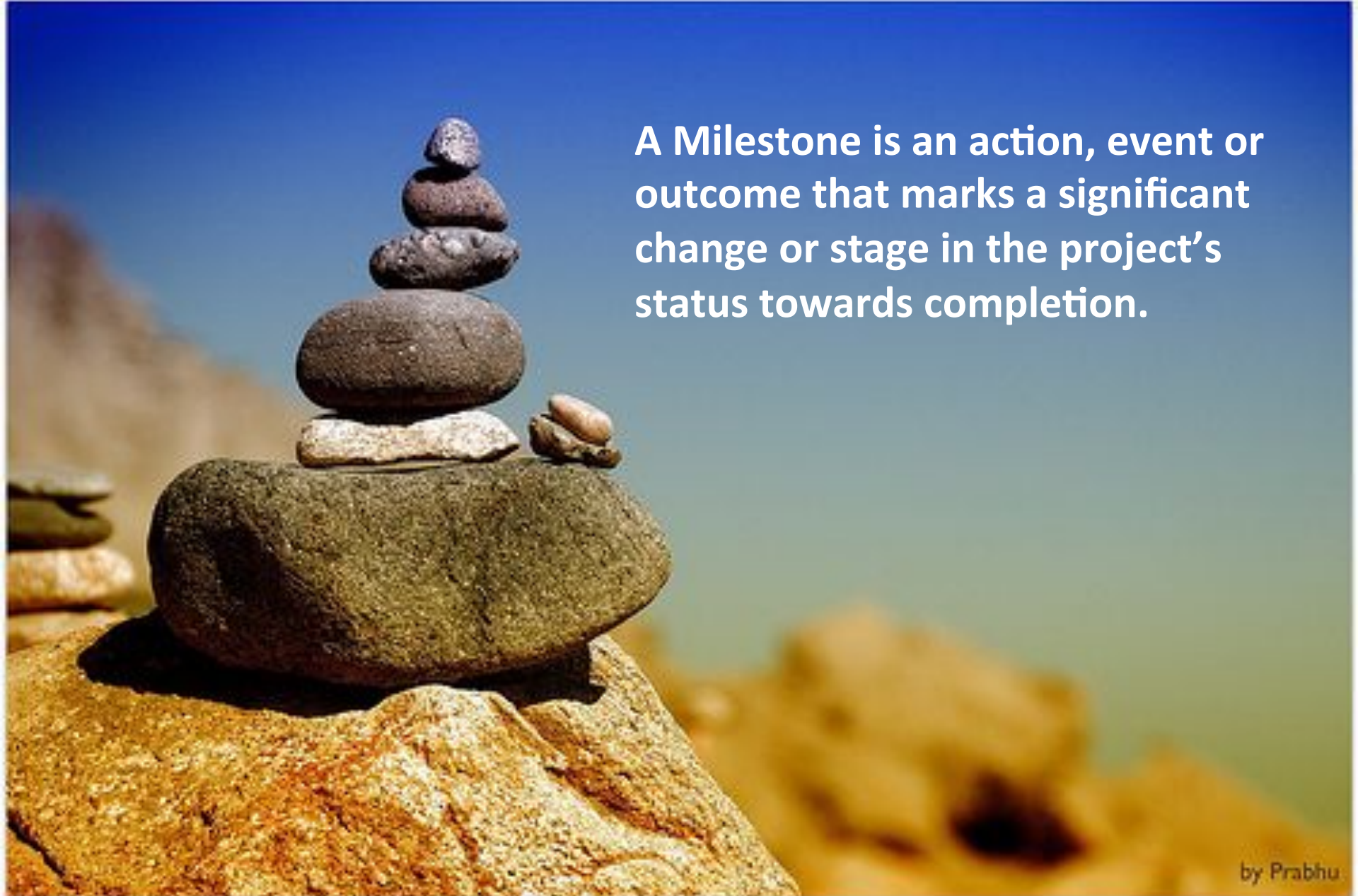
4. Map out the Critical Path(s)
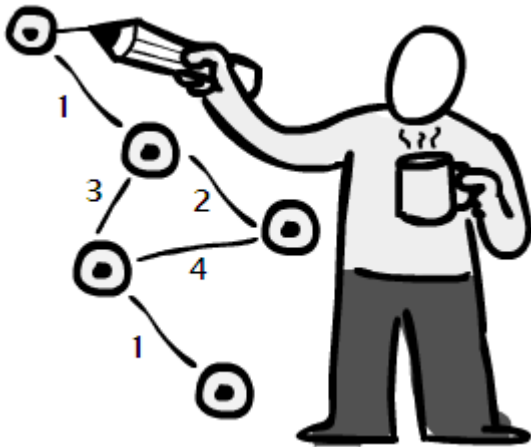
- Put each task on a sticky note
- Lay out the tasks in a logical order
- Connect the tasks with arrows to show the work flow
- The Longest path is the critical path
- Floating tasks can be done at various times
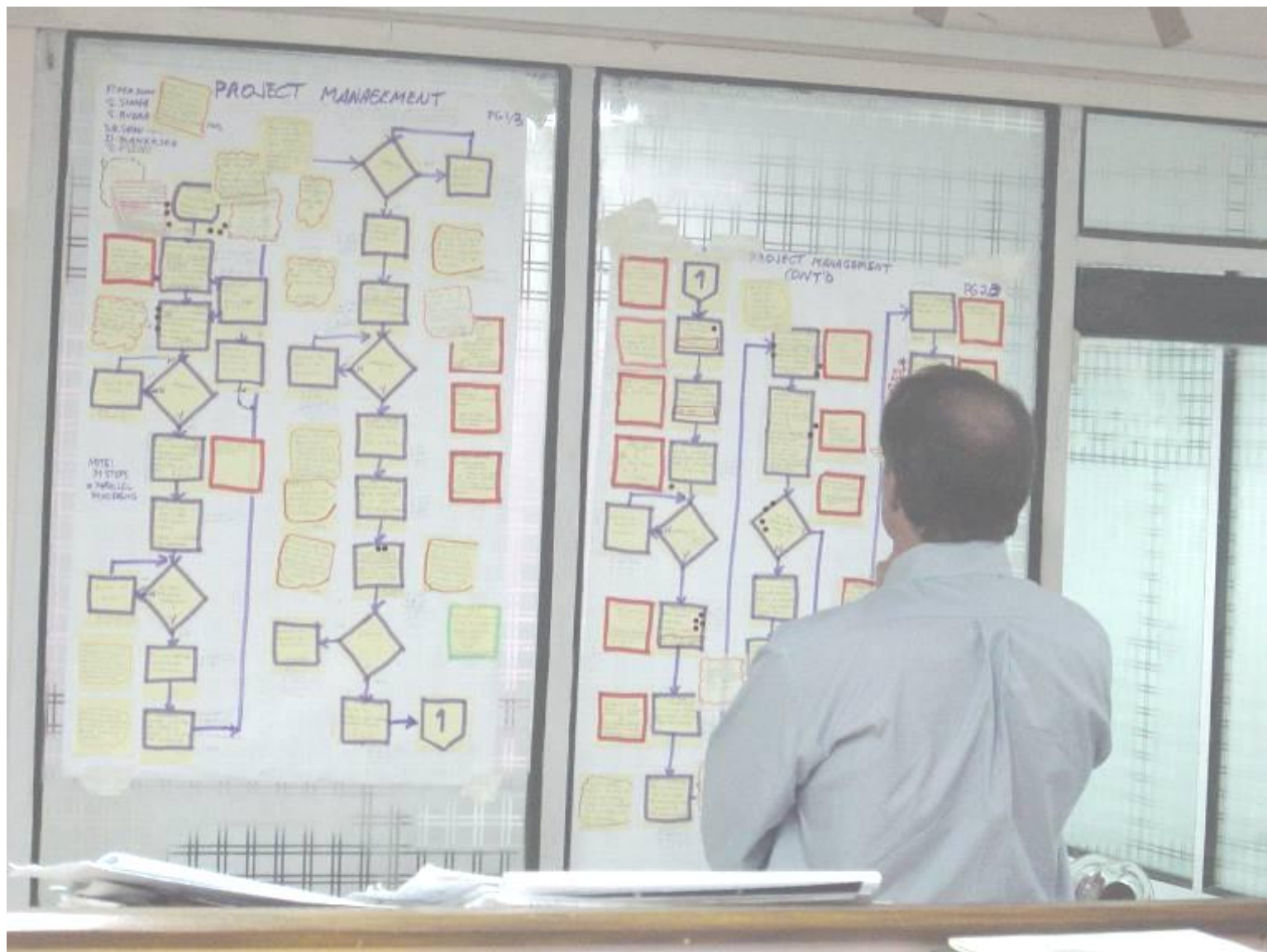
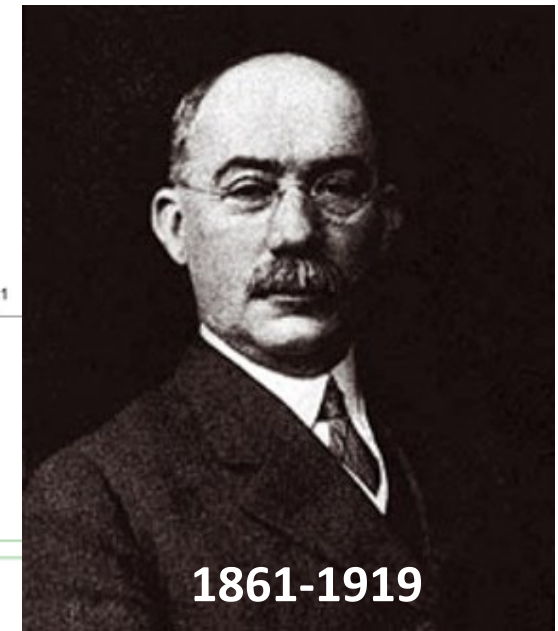# **5.** **Review the Path & Adjust**

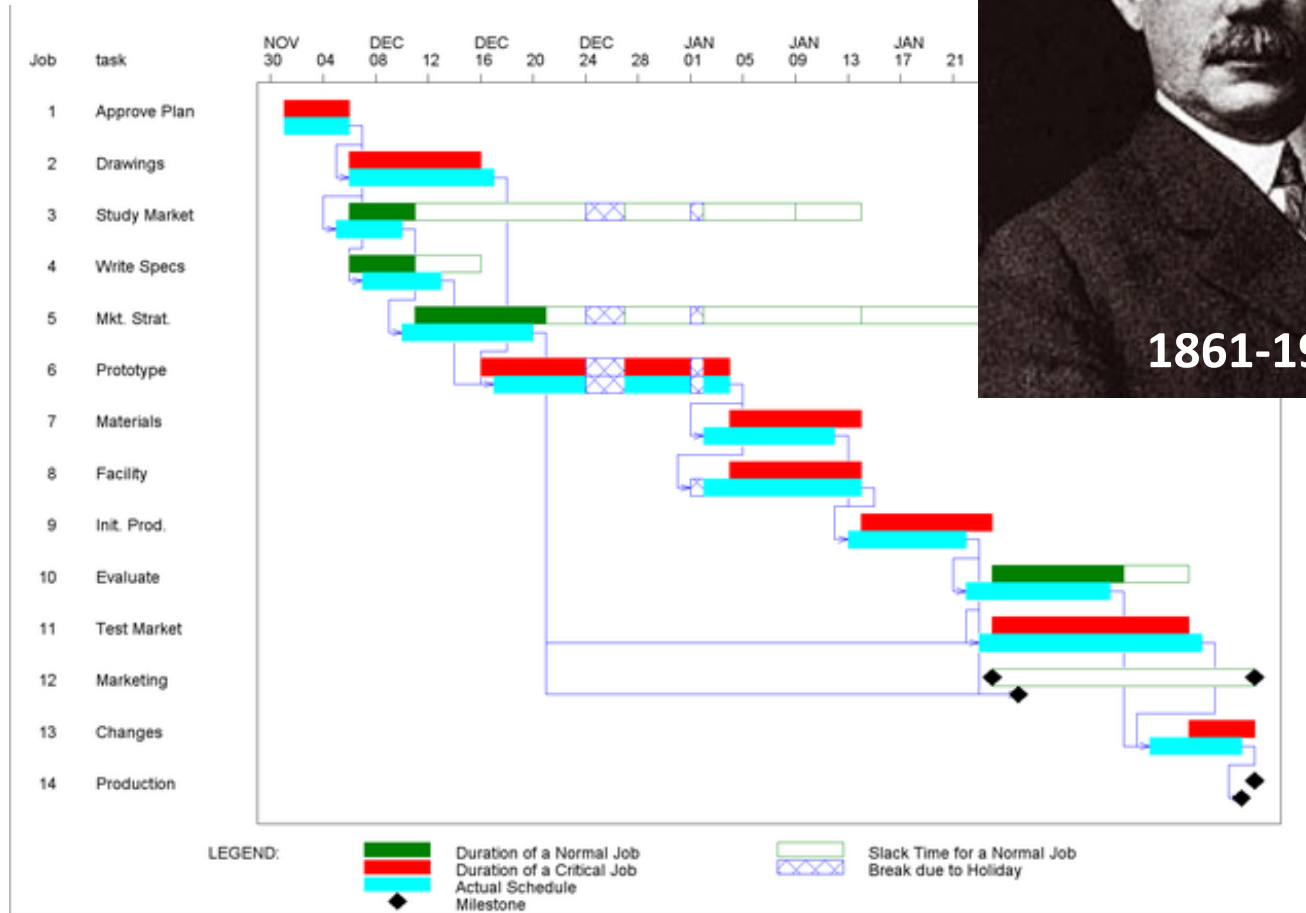- How long will your critical path take? Is this acceptable?
- Adjust the time estimates; shorten where possible
- Switch the order of tasks if necessary
- Shift floating task to times when the work load is lighter
- Which steps are 'Milestones'?

A Milestone is an action, event or outcome that marks a significant change or stage in the project's status towards completion.

by Prabhu

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6. **Make a Gantt Chart**

1861-1919

No.	Step/Activity	People	1 28-Mar	2 30-Mar	3 4-Apr	4 6-Apr	5 11-Apr	6 13-Apr	7 18-Apr	8 20-Apr	9 25-Apr	10 27-Apr	11 2-May
1	Create cabinet layout sketch	S	▨			▨							
2	Label and verify current wiring and pneumatics	D, J, P, K	▨			▨							
3	Remove control panel from the old school beast	S		▨									
4	Create drill diagrams						▨						
5	Install air controllers at feeder 2	P, K		▨									
6	Maintain bill of materials	S, D, J, P, K	▨										▨
7	Rewire PLCs									▨			■
8	Layout and mount power supplies	J, D					▨						
9	Layout and mount PLCs	J, D					▨						
10	Identify and wire unused Cartesian I/O	P			▨								
11	Commissioning and programming									▨			■
12	Design HMI cabinet layout	S		▨									
13	Assemble HMI cabinet	S, D				▨							
14	Remove all power equipment from cabinet	J, D			▨								
15	Emergency stops and stack light	K							▨				

Key:
Planned: ▨
Actual: ▨
Milestone: ■

People Key:
S - Steve
D - Dan
J - Jarrod
P - Paul
K - Kendall

6. **Make a Gantt Chart**

- Use paper, a white board, or MS Excel
- Put your team member's names beside tasks
- Group tasks that are related
- Mark the milestones
- Colour code by type of task or person responsible

- There are other ways to track projects – find one that works for you

RPM 2011

	Drums	Bass	Piano	Lap Steel	Harp	Vocal
☐ 1. In the Restless Night	✓	✓	✓	⊘	✓	I ✓
☒ 2. Forgot Memory	✓	✗	✗✓	✓	✓	⊙
☐ 3. Penelope	✓	✓	✓	B		✓ G
☐ 4. Turtles in Dreaming	✓	✓	✓	✓	✓	⊙ C
☐ 5. Light it up	✓	✓	✓	✓	✓	I C
☐ 6. Oh Dale	✗	✓	✓		✓	I ✓
☐ 7. Captain Alone Again	✓	✗✓	✓		✓	⊙
☐ 8. Bird or Worm	✓	✓	✓		✓	I ⊙
☐ 9. Train Frames	✓	✓	✓		✓	(m) ✓ G
☒ 10. It is What it is	✓	✓				I C
☐ 11. Broken Parts I	✓	✓	✓		B	⊙
12. Broken Parts II	✗	✗		✗	✓	✓

7. **Responsibility & Resources**

- Assign responsibility to each task (or sub-project)
- List the resources needed for each
  - People
  - Money
  - Materials
  - Partners
  - Space
- Prepare the project budget
  - Revenue: Money coming in (cash or in kind)
  - Expenses: The cost of each project component

8. **Identify & Plan for Risk Factors**

What could possibly go wrong?

- Examine each task with the 'risk lens'
- Best and worst case
- Risk mitigation
- Back up plans
- Go or no-go points
- Damage control

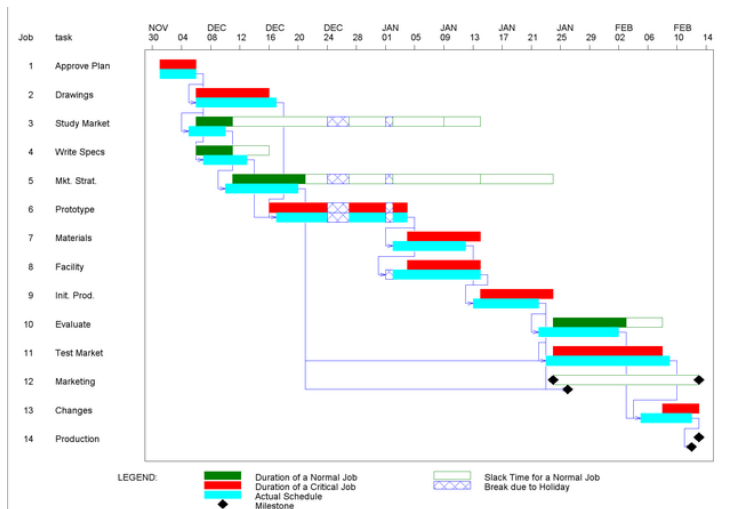# Steps **1** to **8** are all **PLANNING** steps

- Revisit these eight steps before you get going.

- Did you miss anything?

- When you're confident with your plan, go to step **9**.

9. Start the Project

- Use the Gantt Chart
- Track progress (shade in completed tasks)
- Track budget (money in, money out)
- Communicate

10. Monitor Progress

Costs

Resources

Time

Risks

Quality

- Accounting
- Accountability
- Achieving Milestones
- Avoiding Risks
- Adhere to Timeline
- Accessing Resources
- Assessing Quality

Meet Regularly

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11. Make Adjustments (Reschedule)
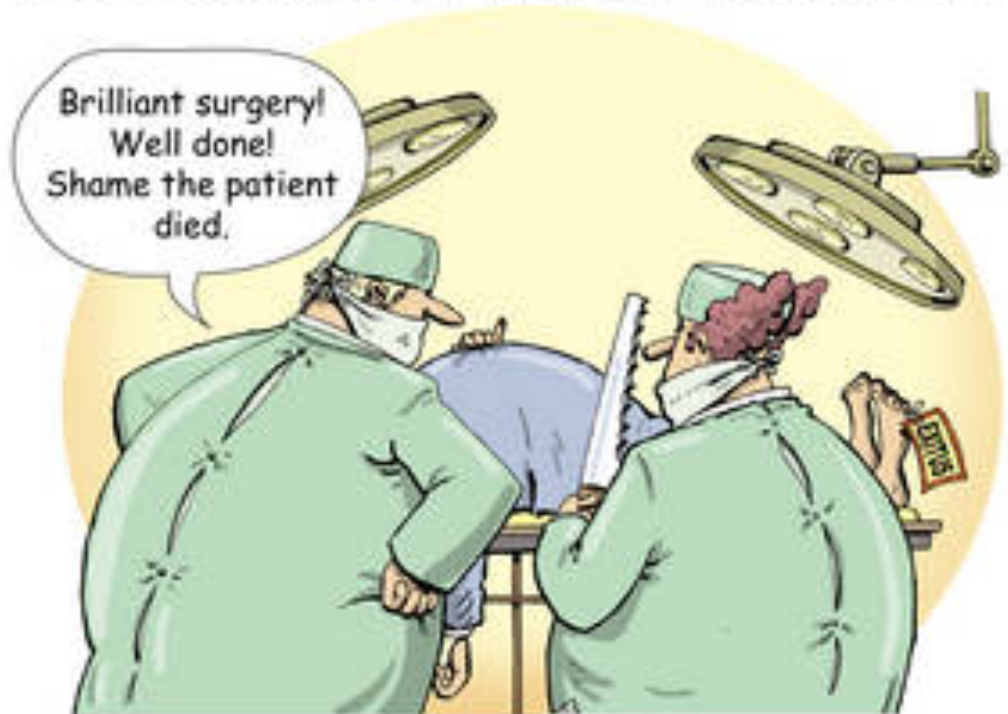
Costs

Resources

Time

Risks

Quality

- Adjust timelines (reschedule tasks)
- Update the Gantt Chart
- Re-assess costs, risks, resources
- Adjust quality factors (spent time on things that matter)

12. Evaluate – What did we learn?

- Were milestones met?
- Were targets achieved?
- Outputs vs Outcomes

Project Management in **12** Steps

1. **Kick-off Meeting - Define & Visualize**
2. **List the tasks**
3. **Estimate the Time**
4. **Map out Critical Path**
5. **Review the Plan**
6. **Make a Gantt Chart (who, what , when)**
7. **Responsibly and Resources Review**
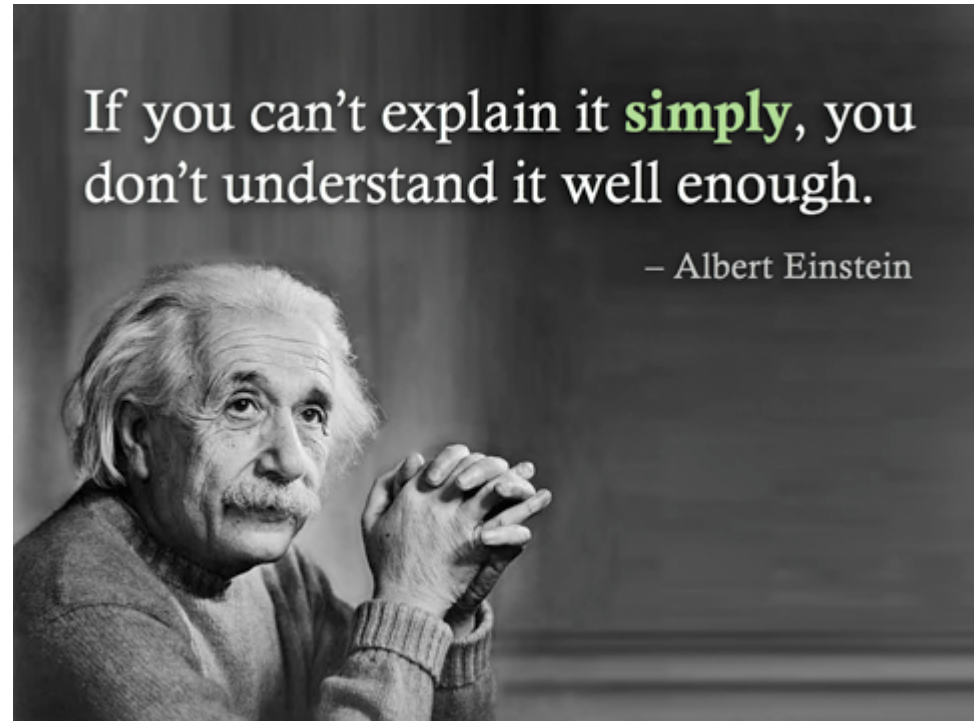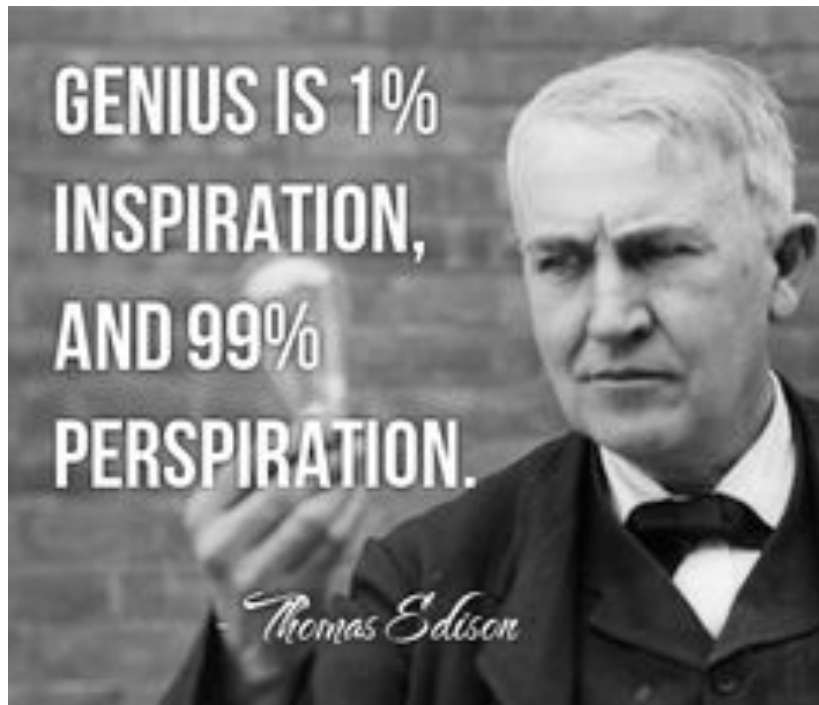8. **Identify & Plan for Risk Factors**

Planning

9. **Start the Project**
10. **Monitor**
11. **Make Adjustments**

Doing

12. **Evaluate Outcomes**

Review

Things to Think About

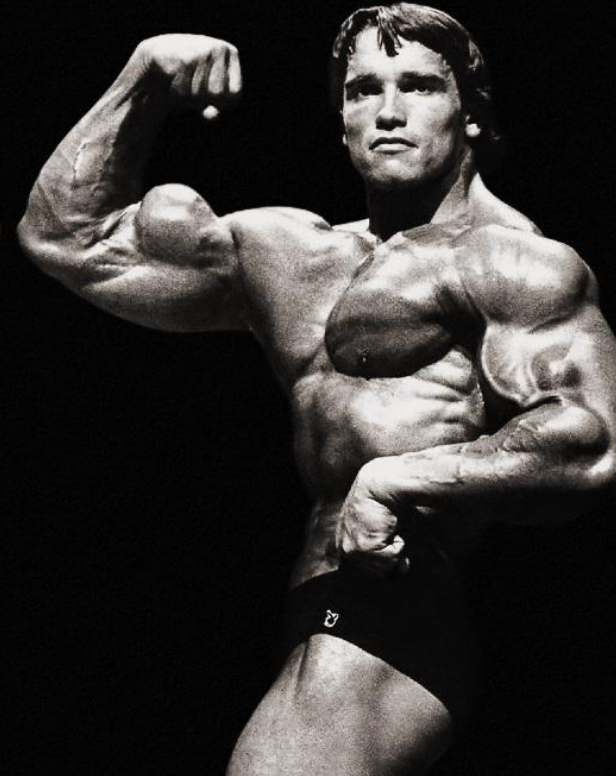**Understand what you need to do and then actually do it**

Use your Mentors

"Surround yourself with only people who are going to lift you higher."
Oprah Winfrey

YOU CAN'T CLIMB THE LADDER OF SUCCESS WITH YOUR HANDS IN YOUR POCKETS

Actually Do Stuff

Project Management is

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