Responsibility Assignment Matrix (RAM) — Purpose

- Ensure that all tasks are assigned to people
- Show levels of involvement of people to work
Linkage Between WBS and OBS
## Responsibility Assignment Matrix

### RASIC Method

<table>
<thead>
<tr>
<th>Marketing Study</th>
<th>Project Manager</th>
<th>Customer</th>
<th>Team Member</th>
<th>Senior Management</th>
<th>Support Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify Potential Market</td>
<td>C</td>
<td>S</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify Survey Population</td>
<td>C</td>
<td>R</td>
<td>S</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>Develop Survey</td>
<td>R</td>
<td>I</td>
<td>S</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>Test Survey on Sample</td>
<td>R</td>
<td>I</td>
<td>S</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>Finalize Survey</td>
<td>R</td>
<td>A</td>
<td>S</td>
<td>I</td>
<td>S</td>
</tr>
<tr>
<td>Conduct Survey</td>
<td>R</td>
<td>I</td>
<td>S</td>
<td>I</td>
<td>S</td>
</tr>
<tr>
<td>Collect Survey</td>
<td>R</td>
<td>I</td>
<td>S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analyze Data</td>
<td>R</td>
<td>A</td>
<td>S</td>
<td>R/S</td>
<td>I</td>
</tr>
<tr>
<td>Report Results and Suggestion</td>
<td>R</td>
<td>A</td>
<td>S</td>
<td>A</td>
<td>S</td>
</tr>
</tbody>
</table>

**Legend**

- **R** - Responsible
- **A** - Approve
- **S** - Support (Does the Work)
- **I** - Inform
- **C** - Consult
RASIC Coding System

- **R** = Responsible
  - Ensures that the assigned work is completed
- **A** = Approve
  - Approves that the work meets all requirements
- **S** = Support
  - Does the work
- **I** = Inform
  - Is kept informed of work status
- **C** = Consult
  - Is consulted on the work
Guidelines

- Team member names should be shown across the horizontal axis in the final matrix.
- There should be only one R and one S for each activity if possible.
- Every activity should have an R and an S. R/S for an activity is acceptable.
- The project manager will have the majority of Rs.
- The customer and senior management have the majority of As and Is.
Project Schedule — Purpose

- Determine if requested completion date is possible.
- Identify start and completion dates of all work.
- Determine the controlling sequence of activities.
- Provide data for resource allocation.
- Track progress by providing a baseline.
Scheduling

**Step 1:** Estimate Activity Durations
Estimating Techniques

- **Deterministic**
  - Best Guess
  - Delphi (Consensus)

- **Probabilistic**
  - Program Evaluation Review Techniques (PERT)
Scheduling

**Step 2:** Determine Activity Sequence By Creating a Network Diagram
WBS/Network Diagram Linkage
Network Diagram Methods

Arrow Diagram Method

Precedence Diagram Method
Create a Network Diagram

- **A** is the first activity
- **B, C** and **D** are dependent on **A**
- **E** and **F** are dependent on **B**
- **G** is dependent on **C**
- **H** is dependent on **C** and **D**
- **I** is dependent on **F** and **G**
- **J** is dependent on **E, I,** and **H**
- **J** is the last activity
Precedence Diagram Method

Logic Connection

Activity
Scheduling

**Step 3:** Calculate the Schedule Using Critical Path Method (CPM) Procedures
What’s is the Critical Path?

- Riskiest path in a project
- Path with the most important activities
- Path with least slack
- Path with least resistance
- Path with longest duration
- Path to Emerald City
What’s is the Critical Path?

- Path with least slack
- Path with longest duration
Determine the Critical Path

- A = 2 weeks
- B = 1 week
- C = 3 weeks
- D = 1 week
- E = 4 weeks
- F = 3 Weeks
- G = 2 weeks
- H = 1 week
- I = 2 weeks
- J = 1 week
Scheduling

Step 4: Show the Schedule by Drawing Gantt and/or Milestone Charts
Enhanced Gantt Chart

<table>
<thead>
<tr>
<th>Task</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>April</th>
<th>May</th>
<th>June</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task B</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Task C</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Task D</td>
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<td></td>
</tr>
<tr>
<td>Task E</td>
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<td></td>
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<tr>
<td>Task F</td>
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</tbody>
</table>

- Critical
- Non-Critical
- Slack/Float
Gantt Charts

- Simple to construct
- Easy to interpret
- Good for management reporting
<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
<td>3</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
</tr>
<tr>
<td>H</td>
<td>1</td>
</tr>
<tr>
<td>I</td>
<td>2</td>
</tr>
<tr>
<td>J</td>
<td>1</td>
</tr>
</tbody>
</table>

**Gantt Chart Solution**

- **Critical**
- **Non-Critical**
- **Slack/Float**
Develop a Project Schedule

- Prepare a project schedule for the room you are going to paint.