

ENGR 310

Lecture 17

24 Mar 2008



MONTANA
STATE UNIVERSITY

College of
ENGINEERING

Mountains & Minds

Managing Risk

1. Building A Plan
2. Executing on the Plan



Typical Approach

- Solve the easiest items first
“BIG Mistake”
- Risky tasks are often on the critical path
- If you don't solve the tough things *“Who cares about the easy ones?”*
- The project is in a growing risk situation



A Good Plan Provides Focus

- Brings attention to management / clients
- Sets expectations
- May effect allocation of resources
- May stop risky projects earlier



A Good Plan Provides Focus

- Prioritizes
- Sets clear responsibility
- Establishes a timeline for decisions



Exercise

- Brainstorm
- Rank
- Chart
- Establish Plan
- Review Often



Brainstorming Risks

Break into Design Teams

Take the next 5 minutes

Brainstorm Areas of Concern / Risk

Come up with 8 Topics



Brainstorming Risks

- Quantity over Quality
- Write down as expressed
 - No judging
 - Don't solve the problem now
- Build on others ideas



Brainstorming Risks

- Cover all aspects of the projects
 - Technical Risks
 - Business / Market Risk
 - Manufacturing
 - Human Resources
 - Supply Chain



Ranking the Risk Items

Probability

- % chance the issue
 - Has a poor solution or
 - Can not be solved in this project

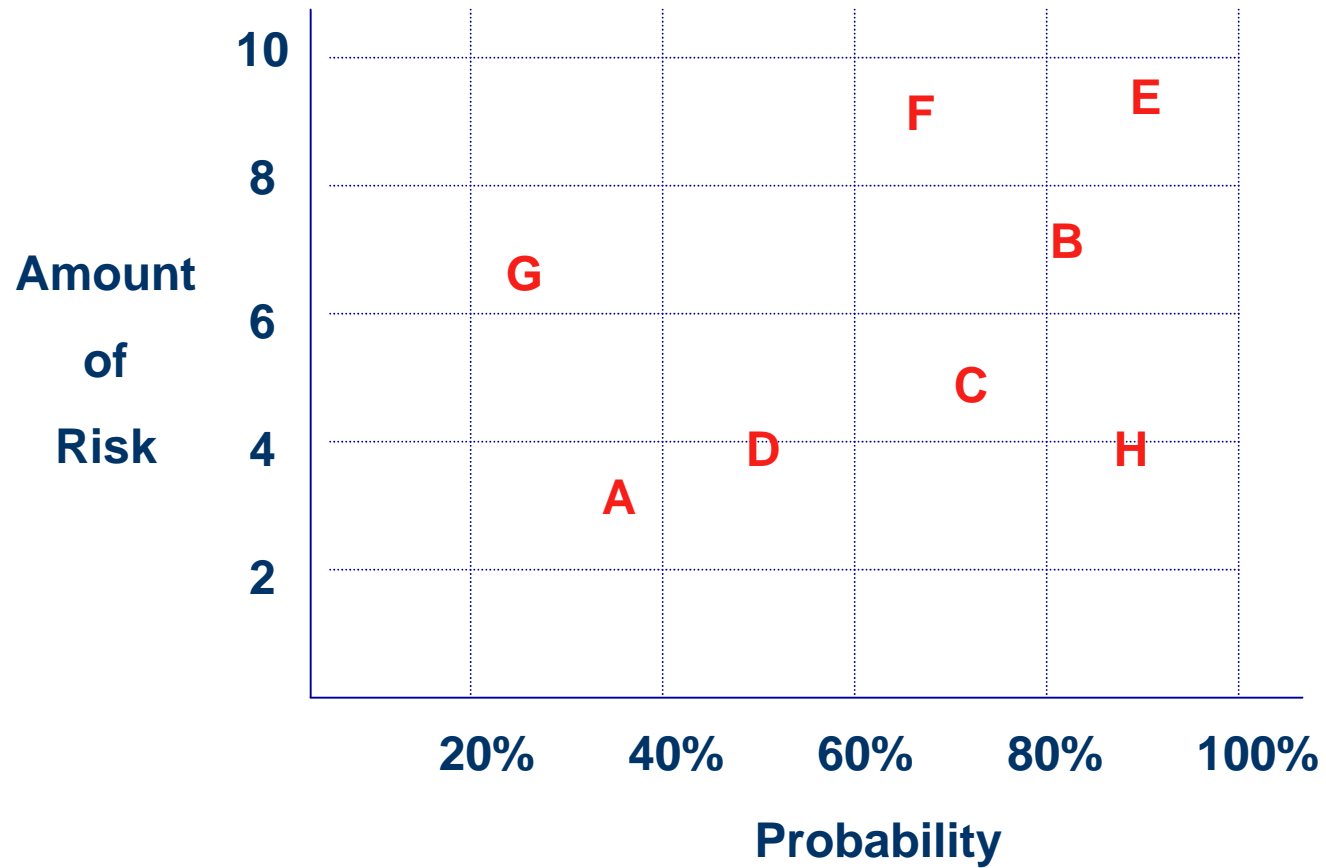
Level of Risk

- Scale of 1 –10
 - Impacts (Schedule, Cost, Functionality)

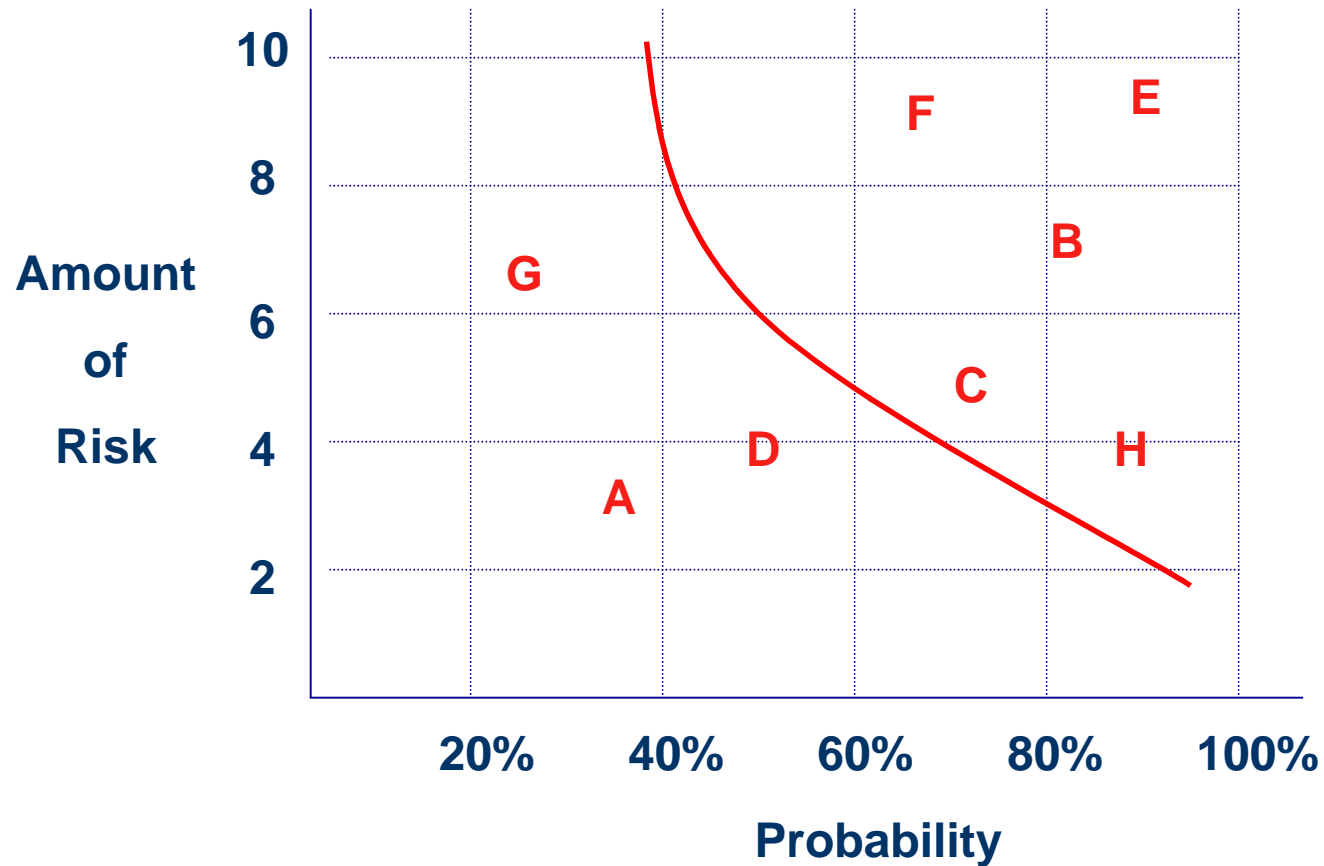
Battery Life 60%, 7



Chart Risk Items



Establish Threshold Line



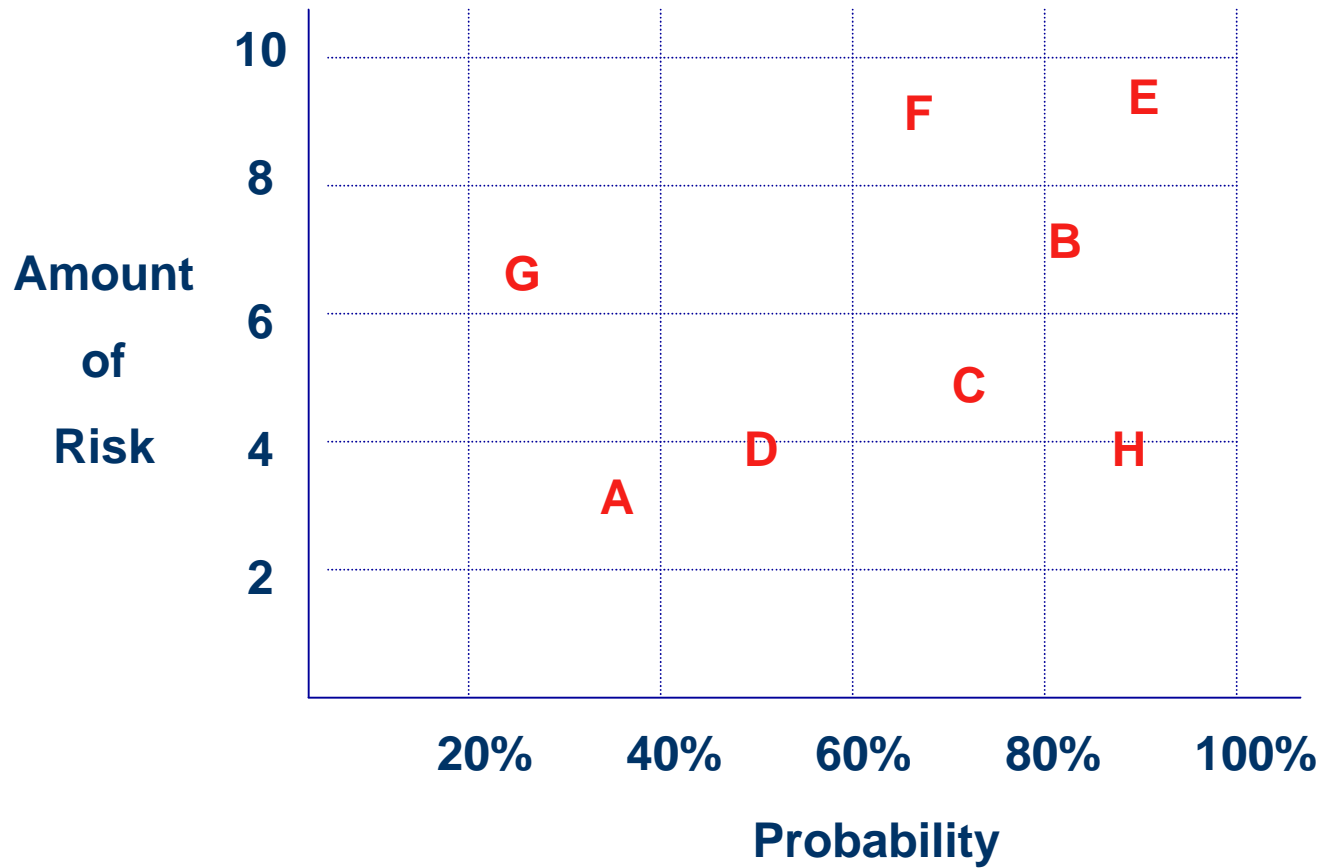
Who and When

For Each Risk Over Threshold

- Decide Who is leading the efforts?
- What are the immediate action items?
- Schedule each task



Review Often



Other Key Points

- Assume Risk only where it provides advantage
- Stay flexible on unresolved issues
- Trade off expense and risk
- Have a back up plan

