

# RISK MANAGEMENT IN IT and Critical Path Variability

**David McCloud** BA, MCPM, PMP

23<sup>rd</sup> IPMA World Congress, Helsinki  
17<sup>th</sup> June 2009

# AGENDA



- 1:00**      **WHAT IS RISK**
- 1:05**      **WHY IS IT IMPORTANT**
- 1:10**      **INFLUENCING FACTORS**
- 1:15**      **CRITICAL PATH VARIABILITY**
- 1:20**      **END**

**20 minutes!**

# **RISK & UNCERTAINTY**

## **PROBABILITY x IMPACT**

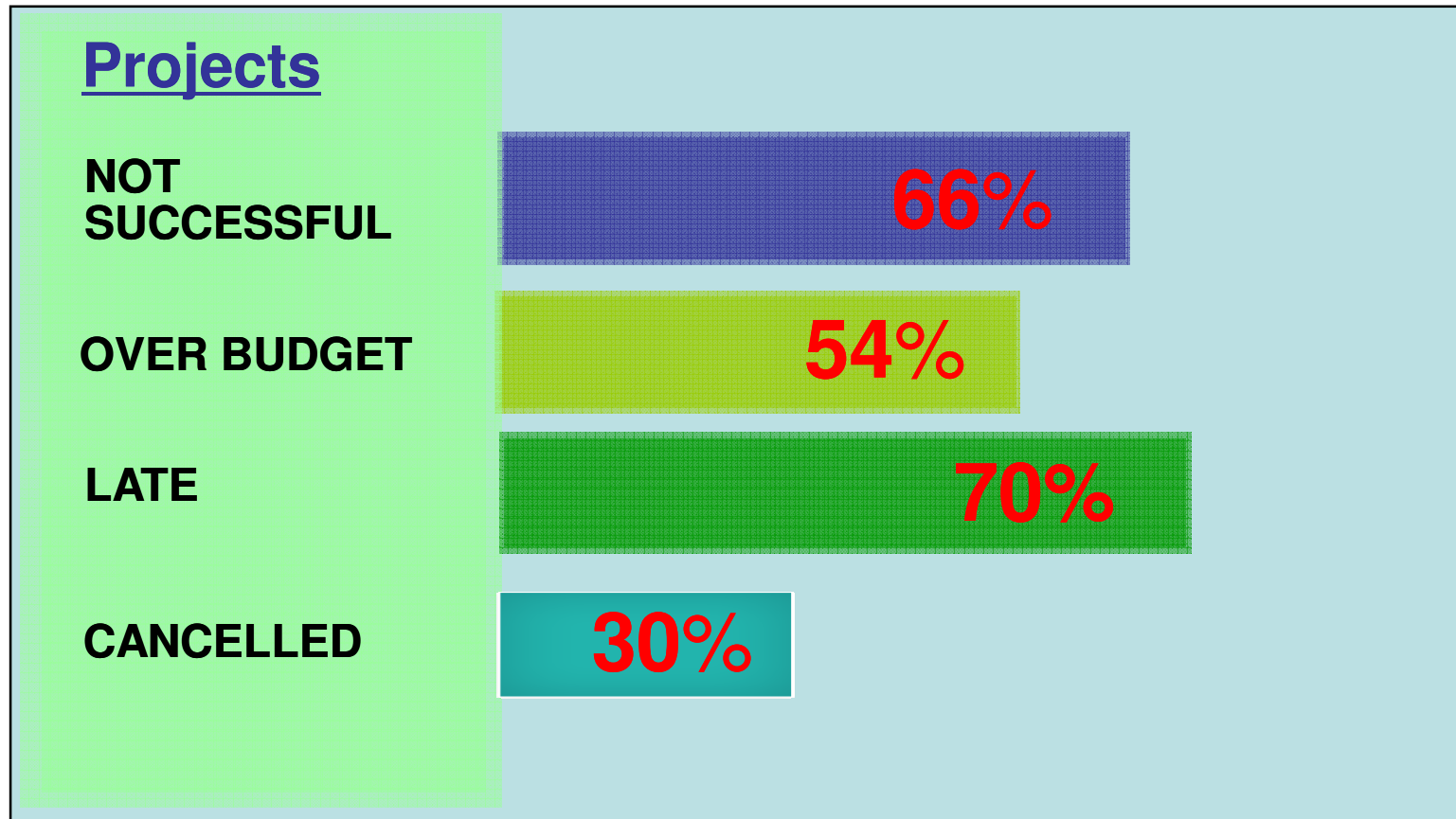


**CONSIDER IF THE RISK IS MANAGABLE!**

# RISK MANAGEMENT PROCESS

1. **RISK MANAGEMENT PLANNING** – Decide on how to approach, plan and execute risk management activities.
2. **IDENTIFICATION** – Identify, describe & categorize the risks
3. **ANALYSIS** – Estimate the risk impact, probability, and manageability
4. **PRIORITIZATION** – Determine the importance of the risk
5. **OWNERSHIP** – Identify and agree to the risk ownership
6. **DECISION** – Decide whether to treat (do something about) the risks
7. **RESOLUTION** – Plan and implement the action plan
8. **MONITORING** – Track the risk level changes and report

# MANAGING RISKS ARE IMPORTANT



# WHY DO “IT” PROJECTS FAIL?

Project Impaired Factors		% of the Responses
1.	Incomplete Requirements	13.1%
2.	Lack of User Involvement	12.4%
3.	Lack of Resources	10.6%
4.	Unrealistic Expectations	9.9%
5.	Lack of Executive Support	9.3%
6.	Changing Requirements & Specifications	8.7%
7.	Lack of Planning	8.1%
8.	Didn't Need It Any Longer	7.5%
9.	Lack of IT Management	6.2%
10.	Technology Illiteracy	4.3%
11.	Other	9.9%

Project failure is not defined only by objective criteria but by the *perception* of the stakeholders.

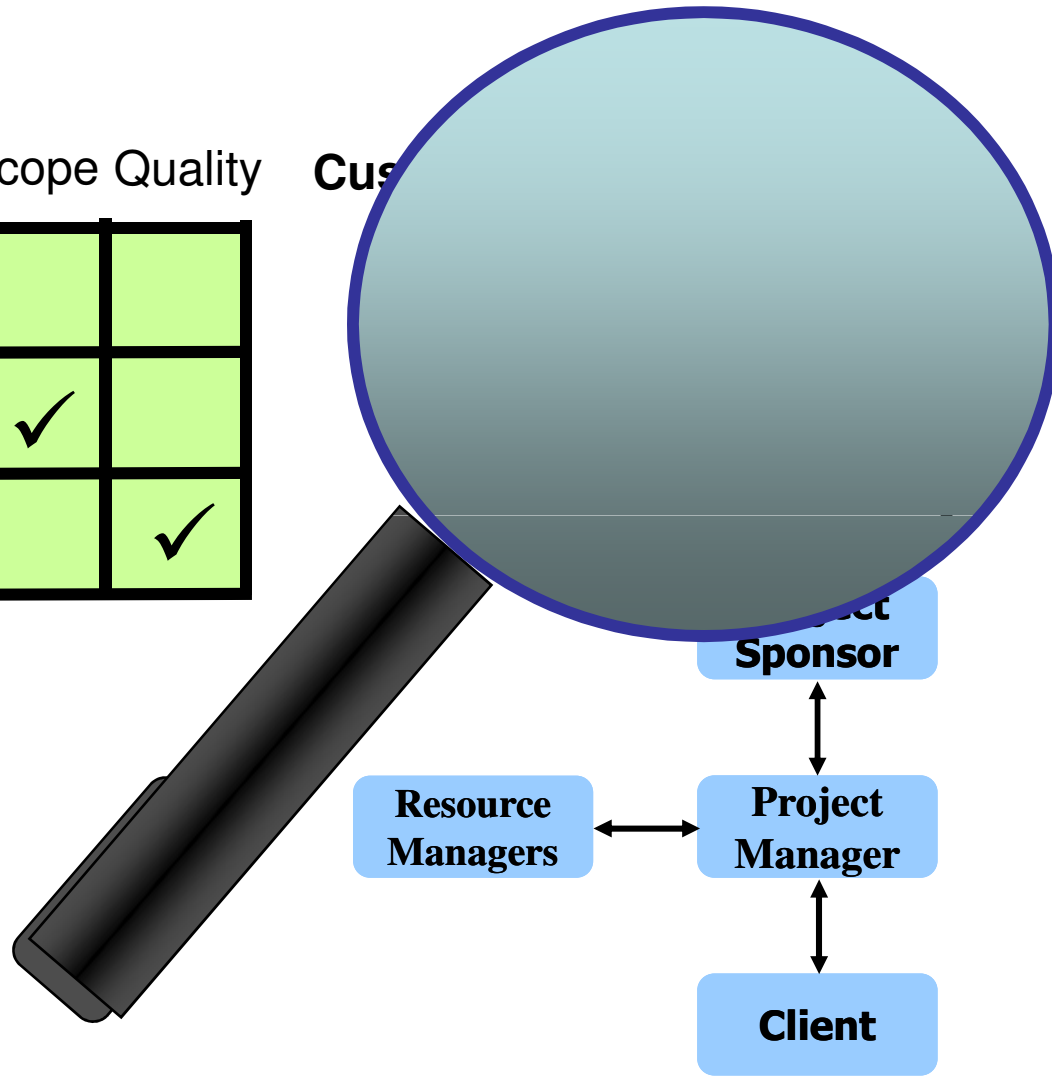
# FACTORS THAN INFLUENCE SUCCESS

## Reasons for missing the boat:

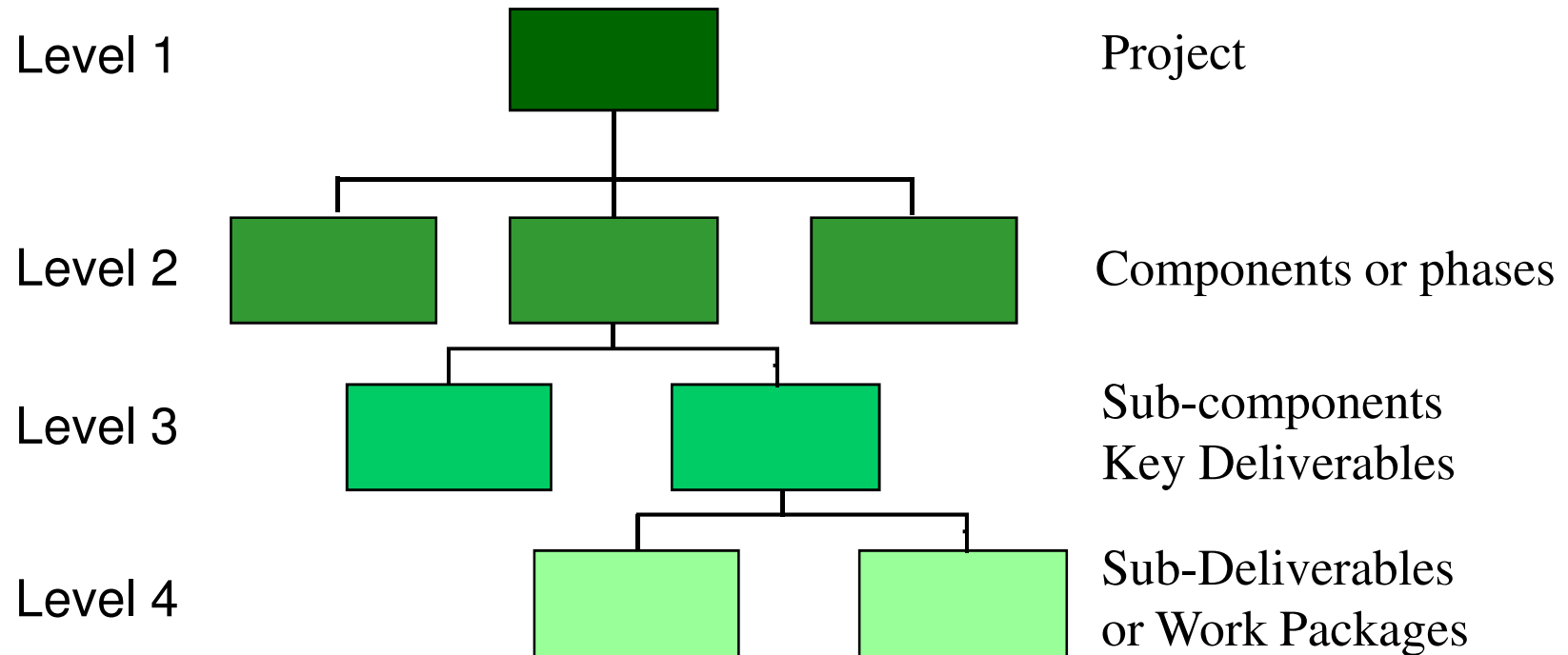
- Misinterpretation of customer expectations
- Omissions or underestimating scope
- Inaccurate work breakdown structure
- Failure to account for risks
- Inappropriate skill levels use in estimating
- Failure to use correct estimating techniques
- Failure to use forward pricing rates for overhead, administrative, and indirect costs
- Poor risk and dependency analysis

# AGREEMENT OF CONSTRAINT PRIORITY

	Schedule	Cost	Scope	Quality
Must Have	✓			
Nice to Have			✓	
Accept Result		✓		✓

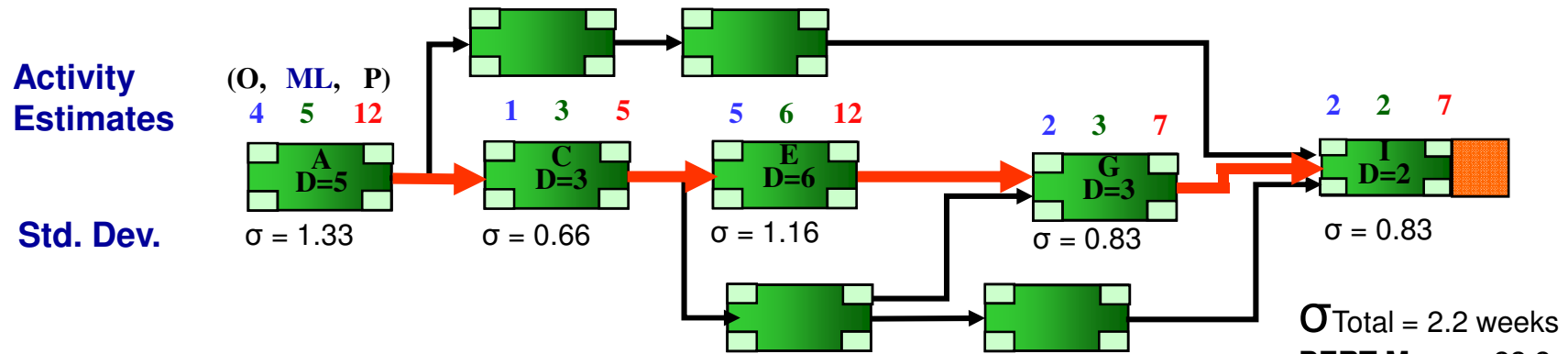


# DECOMPOSING SCOPE TO REDUCE UNCERTAINTY



The deliverables are broken-down “into smaller, more manageable components to give a better understanding of the risks.

# CRITICAL PATH DURATION VARIABILITY ANALYSIS

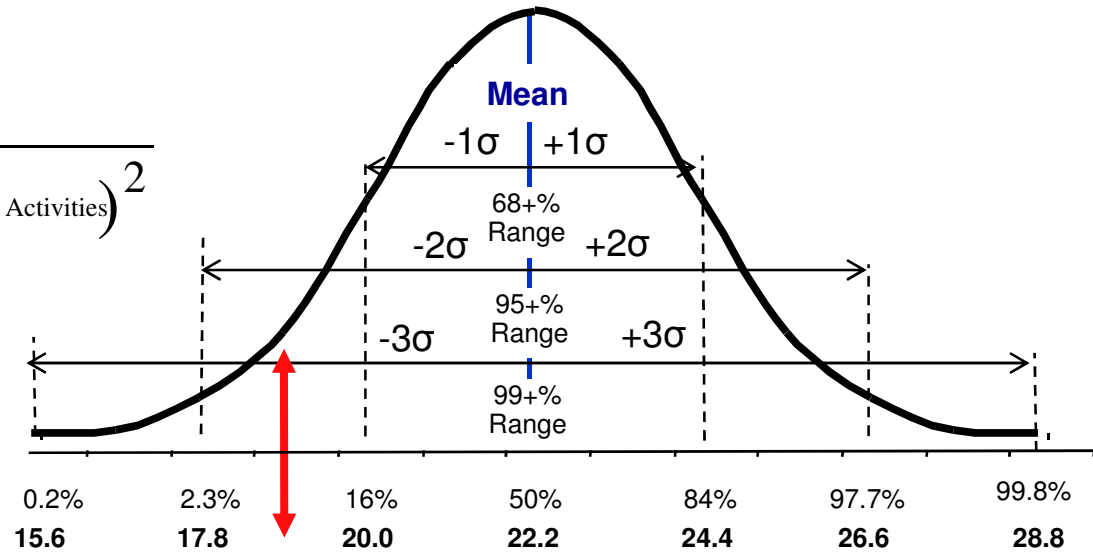
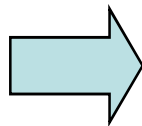


$$\text{PERT * (mean)} = \frac{O + 4ML + P}{6}$$

$$\text{PERT*(std.dev.)} = \frac{P - O}{6}$$

$$\text{Std.Dev (project)} = \sqrt{\sum (\text{Std. Dev(Critical Path Activities)})^2}$$

Use the normal curve to determine the probability of success



# **CONCLUSION**

**DELIVERY SCHEDULES ESTIMATES  
ARE PREDICTABLE**

**RISK ANALYSIS IS A VITAL COMPONENT OF AN  
EFFECTIVE AND EFFICIENT DELIVERY CAPABILITY**

**THANK YOU !**

**David McCloud** BA, MCPM, PMP

Email: [mccloud.david@gmail.com](mailto:mccloud.david@gmail.com)