Risk Management Is Project Management For Grown-ups

Presented by Tim Lister
This is a risk...
This is a risk...  

This is a problem.
## Structure of the CMM®

<table>
<thead>
<tr>
<th>Level</th>
<th>Focus</th>
<th>Key Process Areas</th>
<th>Result</th>
</tr>
</thead>
</table>
| 5 Optimizing | Continuous Process Improvement | Defect prevention  
Technology innovation  
Process change management         | Productivity & Quality                            |
| 4 Managed | Product and Process Quality     | Quantitative Process Mgmt.  
Software Quality Management          |                       |
| 3 Defined | Engineering Process           | Organization process focus  
Organization process definition  
Peer reviews  
Training program  
Inter-group coordination  
Software product engineering  
Integrated software mgmt.          |                       |
| 2 Repeatable | Project Management            | Requirements management  
Software project planning  
Software project tracking  
Software subcontract mgmt.  
Software quality assurance  
Software configuration mgmt. | Risk                  |
| 1 Initial   | Heroes                      |                                                                                 |                       |
What Does it Cost to Build a Swimming Pool?
2 Ways to Think About Risk...

- A *risk* is a potential problem.
2 Ways to Think About Risk...

- A risk is any variable on your project that, within its normal distribution of possible values, could take on a value that is detrimental, even fatal, to your project.
We Can’t Avoid Risk...

• All projects with benefit but no risk were completed long ago.

• You can’t control many of the variables that could be risks.

Version 8.0 Will be ready when you need it!
Avoiding a risk usually lowers the value of the product.

(Value inside a Risk.)
A Risk Ritual...

- Identify risks
- Assess risk exposure
- Determine which risks to manage
- Form action plans for direct risks.
- Form mitigation plans for indirect risks.
- Determine contingency fund.
- Build tripwires into project plan.
- Keep the process going...
Identify Risks

• Don’t start with a blank sheet -- www.sei.cmu.edu then “software risk management”

• McConnell’s *Rapid Development*

• Sweep for risks using brainstorms

• Keep tribes separate
Assess Risk Exposure

• Determine probability of risk becoming problem.
• Determine cost/effort if it does become a problem.

Oh, that on-coming train!
Determine Which Risks to Manage

- Is there a profitable trade-off here?
- Are there any actions I can take now that will either lower the probability or the cost?
- Should I try to contain this risk by building some contingency into my plan?

abulia, also aboulia [uh-BOO-lee-uh; uh-BYOO-\, noun: Loss or impairment of the ability to act or to make decisions.]
Form Action Plans for Direct Risks

- Some risks you can mitigate immediately.
- This mitigation will cause you to change project plan, product definition, staffing plan...something!
Form Mitigation Plans for Indirect Risks

- Some risks you can’t mitigate now.
- Determine actions if the problem manifests.
- Determine tripwire for risk-problem transition.
- Build in contingency.
Indirect Risk Mitigation…
Risk 3: All functionality may not be ready to go at start of new fiscal year.
Mitigation: Build “bridge code” between old system and new, using sub-systems 3 and 4 of old until all is ready.
Probability: 50%
Tripwire: If all DDRs are not passed by 12/21/1999, we build bridge.
Cost: Al + 2 contractors = 6 work months = $170,000.
Keep the Process Going

• No reason to believe that you can identify all risks in one go.

• Review risks for changes in likelihood and opportunities for new actions.

• Retire a risk; they all move up the list.
Good Luck on your project...
Good Luck on your project…
Just don’t count on it!