Project management
Methodologies

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Project Management Maturity Model (PMMM)

• Common language
  – Recognize the need for Project Management
  – Common terminology

• Common processes
  – Successes can be repeated on other projects
  – PM can support other methodologies

• One single methodology for all projects

• Monitoring and benchmarking

• Continuous improvement (Kerzner, 2009, pp. 928-929)
Different PM Methodologies

- There are approximately 150 (Gonzalez, 2010)
- Some of them are:
  - PMBOK
  - Agile
  - Scrum
  - CCPM
  - Rational Rose
  - Six Sigma
  - Waterfall
  - Spiral
  - Prince2
  - Open Source

- A methodology is a set of guidelines or principles that can be tailored to a specific situation (Wideman, 2005)
# A Comparison

<table>
<thead>
<tr>
<th>Guidelines</th>
<th>PMBOK</th>
<th>Agile</th>
<th>CCPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Management Control</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Multitasking allowed</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Expert Team Oriented</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Open Status Reporting</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Continuous Changing Processes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Heavy Risk Management</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Hierarchical Structure</td>
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<td>Yes</td>
</tr>
<tr>
<td>Phase Organization</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

(Perrin, 2007), (CCPACE, 2008), (PMBOK, 2008)
Feature Summary

• PMBOK
  – Structured and well documented
  – Excellent for complex projects

• Agile
  – Team oriented
  – Open documentation and participation

• CCPM
  – Critical path oriented, constrain driven
  – Resource commitment until path is finish
Recommended Model

• Agile Methodology
  – E-mail project has medium complexity
  – Team approach will expedite installation, testing and will show early results
  – Technology is changing faster than before, adaptability is crucial in a global environment
  – Each of the five departments can form a team of data experts on their own and take ownership of the project vision
  – Keep project teams align with the vision, not the vision with the project team
A Case Study

• AUTOViN The automated Vehicle Information Network

• The problem
  – Different methodologies
  – Lack of communication between IT and operations and outdated reports
  – High overhead in projects

• The solution
  – Agile, saving $800,000 in overhead cost
  – 50% reduction in releases per year
  – Teams are cross functional  (Rallydev.com, 2010)
References


Gonzales, M, (2010, July 13) Online Chat, CTU Online

Kerzner, H, (2009), Project Management A System Approach to Planning, Scheduling and Controlling

