Introduction to the
Project Technical Briefing
Implementing Project Technical Briefings in an Organization

Bill Hoberecht – Pinnacle Performance
billh@pinnacleprojects.com
• **Project Technical Review**
  – Presentation of the technology of the project: architecture, innovation plan, designs, technical quality

• **Conducted primarily with projects that deserve additional attention**
  – Important to the company
  – Have above-average technical risk

• **Improves Quality of Technical Architecture & Design Activities**
  – Reinforces management’s interest and involvement in technical success
  – Deep coverage: examination of technology decisions and results
  – Identifies strengths and gaps in technical activities

• **Important element of a quality management system**
  – Complements the frequent attention to project management areas
Technical Review - Meeting Objectives

• Possible Meeting Objectives (specific objectives are dependent upon the project’s situation)
  – To help management become familiar with the project’s technology
  – To show that the project has a viable approach for using the selected technologies
  – To discover significant technical weak points
    • Weaknesses in the technology decisions made by the project, or
    • Deficiencies in the project team’s technology skill set or preparedness for using the chosen technologies.
  – To become aware of any technical innovation being generated by this project
    • Identifying steps being taken to protect this innovation
  – To become aware of any technical innovation being used by the project
    • Showing risk management actions to address this technical risk
Technical Review – Coverage of Technical Areas

• Technical Requirements
  • Performance & System capacity
  • Scalability
  • Availability & Reliability
  • Extensibility
  • Maintainability
  • Manageability
  • Security

• Architecture and Design
  • Logical and/or physical architecture
  • Data model

• Technical Quality
  • Measures of architecture & design quality
  • Measures of software quality
Project Technical Review – High Level Agenda

- Introduction
- Overview of Methods Used on the Project
- Technical Requirements
- The Project’s Technology
- Team’s Technical Expertise
- Recap & Meeting Close
Project Technical Review - Agenda

• **Introduction**
  – Review of Review Meeting Objectives, Format
  – Introduction by each attendee (identify the role for each in this meeting)

• **Overview of Methods Used on the Project**
  – Software Engineering Process
  – Software Engineering Artifacts – Architecture & Design Deliverables

• **Technical Requirements**

• **The Project’s Technology**
  – Architecture
  – Design Decisions
  – Technology Innovation
  – Software Technologies
  – Validation

• **Team’s Technical Expertise**

• **Recap & Meeting Close**
  – Technical Leader’s Assessment of the Technology Viability
  – Agreement that Review Objectives Have Been Met
The series of project reviews includes:

- **Project Management Reviews**
- **Team Reviews**
- **Process Reviews**
- **Technology Reviews**
The series of project reviews includes:

- **Project Management Reviews**
  - **Project Discovery Review**
    - An initial introduction to the projects history, plans and performance
  - **Project Deep Dive Review**
    - A broad & deep review of the project management elements
  - **Project Finance Review**
    - Detailed review of budget, spending, invoicing, funds transfer

- **Team Reviews**
  - **Project Inter-Team Partnering Review**
    - Examination of inter-organizational ‘contracts’ & process, and the success in partnering
  - **Project Supplier Performance Management Review**
    - Overview of SPM methods used & details of supplier performance results

- **Process Reviews**
  - **Project Process Quality Review**
    - A review of the quality management methods used for this project

- **Technology Reviews**
  - **Project Technical Briefing**
    - Presentation of the technology of the project: architecture, innovation plan, designs
  - **Project Configuration Management Review**
    - Examination of the configuration management practices, tools, audits and reports
• Participants
  – Project Technical Lead and their 1st line manager
  – Project executive
  – Selected technical leaders from related project

• Format
  – Presentation by Project Technical Lead, using a fixed agenda
  – Discussion, as needed, on each slide

• Administration of Project Technical Reviews
  – Can be initiated by various parties
    • PMO Head, a Project Executive, Managers of the Technical Team, a project’s Technical Lead
    • Rarely, and only when inter-project relationships are positive, a review might be initiated by technical leaders external to the project
  – Detailed planning of the review is by the project’s Technical Lead
    • Ensures adequate training is completed by the Technical Lead on the Technical Review process & materials
    • Arranges the details of identifying & inviting attendees and securing facilities
- Projects that typically conduct technical reviews
  - Have above-average technical risk
    - Utilizing or creating technology innovations
    - Technology may be purchased, or is being created by suppliers
  - Are experiencing technical problems
    - For existing systems, these systems may have a history of technical issues that could have affected customers or business operations

- Frequency of Reviews
  - A low technology risk project
    - Probably will never conduct this type of review
  - An above-average technology risk project
    - Might have one during an early phase of the project
  - A project experiencing technical difficulties
    - Might conduct one of these reviews at any phase in the project
Effort Involved in Project Technical Reviews

- **Time Investment for a Technically Complex Project**
  - Preparation by the Technical Lead
    - Typically 5 to 10 hours for the first review
  - Review Duration
    - Typically 4-6 hours for the first review
  - Rework Following the Review
    - Effort by the Technical Lead: Typically 20-40 hours over a period of 4 weeks
    - Effort by other Technical Staff: Typically 10-20 hours per person (who is involved in making or reviewing architecture/design information)

- **Not infrequently, significant follow-up action is required**
  - Researching and documenting technical requirements
    - Filling gaps in the team’s understanding of these requirements
  - Updating architecture and design information
    - Ensuring that this documentation reflects current technical plans
  - Revising technical plans
    - To close gaps between requirements and the presented technical plans
These materials enable effective implementation of Project Technical Reviews

- **Introduction to the Project Technical Briefing**
  - This overview provides a high level description of Project Technical Reviews that is useful in briefing executives, managers and the project team members on the benefits of these reviews and steps to use in implementing the reviews in an organization.

- **Training on the Presentation Template**
  - This 30 minute training course on Project Technical Reviews instructs the Project Technical Lead on preparation of the presentation materials, and helps the project executive/manager understand the topics that should be presented and discussed during a Project Technical Briefing.

- **The Project Technical Review Process**
  - This process overview describes the steps of a Project Technical Review.

- **Presentation Template**
  - This MS-PowerPoint presentation template provides all of the slides to be populated by the Project Technical Lead and presented at the Project Technical Briefing – extensive notes for most slides provide a reminder of the instructions provided during the training course on Deep Dive Reviews.
1. Agree that the approach is appropriate, viable and adds value
   – Are our technical activities sufficiently complex, having a higher technical risk? (If not, then these reviews will have little value)
   – Consistent with the management approach within the organization; willingness to prioritize time for these reviews
   – Skills of are sufficient for effective participation in the reviews

2. Train
   – Enable Technical Leads, Project Managers, managers and the Project Executive

3. Establish a culture for conducting these reviews
   – Typically, the first reviews are initiated by managers who are ‘hands-on’ and are close to the technical activities
   – Evolve to a culture where projects that have above-average technical risk will self-nominate for Project Technical Reviews
   – Reinforce the value of the reviews (avoid blame/criticism)

4. Six-Month Management Checkpoint and Re-Evaluation
   – Recap the conducted meetings, results, and value to the organization
   – Identify improvements to the process, training and templates