
Assurance of Open Source Projects

27 October 2005

1



Contents

- The value of Open Source Software (OSS)
- Two types of OSS project
- The challenges of implementing OSS systems
- Using Project Assurance to address these challenges
- Setting up a Project Assurance programme

The value of OSS

- Low licence costs
- Open data standards
 - Interoperability and exchange
 - Future proofing
- Visibility into all code
 - Ease of evolution and support
 - No vendor lock in
 - Protection against vendor failure
- Active support community

Growing range and maturity

- Range of applications is growing and maturing
 - Operating system
 - Database
 - Application server
 - Office productivity
 - Content management
 - CRM
 - Scientific
- Quality can be high (but sometimes it isn't)
- An increasingly attractive base for developing systems

Two types of OSS project

1) Building OSS

- Dependent on active community
- Deep review process can give high quality
- Agile and test-driven development
- Co-ordination and collaboration among distributed teams
- Product development is a specialist domain
- Provides basis for type 2

2) Using OSS within projects to deliver wider systems

Legal and Social Challenges

- Multiplicity of licences

- Diverse range of stakeholders
 - Clients and users
 - Project team
 - Dispersed communities of developers
 - Varying governance structures
 - Varying objectives and incentives
 - Ideological commitment

- Complex procurement
 - No-one to respond to Invitations to Tender

Technical Challenges

- It's software!
- Complex procurement
 - Variable documentation of component capabilities
 - Variable component quality
- Variable skills and tools support
- Configuration management
 - Complex component configurations and dependencies
 - Dispersed repositories
 - Lightweight methodologies
- Having the code can be a mixed blessing
 - Need to understand it, & tweaking leads to quality and CM issues

Role of Project Reviews

- Projects fail when they lose touch with reality, e.g.
 - Misunderstand the real objectives of the system
 - Can't separate actual progress from wishful thinking
- OSS projects have some distinct reality challenges
 - Dispersed teams / community
 - Divergent objectives
 - Ideological noise
- Project reviews help keep in touch with reality
- OSS acceptance of review makes adoption easier

Independent Assurance

- Independent check on objectives and status
 - Are plans and objectives feasible?
 - Are all stakeholders aligned in understanding of objectives?
 - Does everyone have a realistic understanding of status?

- Facilitation of project review meetings
 - Helps bring issues into the open in a productive way
 - Identifies issues that people “too close to the project” miss

- Access to a database of past experience
 - Ensure that good practice is being followed
 - Avoid making common mistakes

Setting up Project Assurance

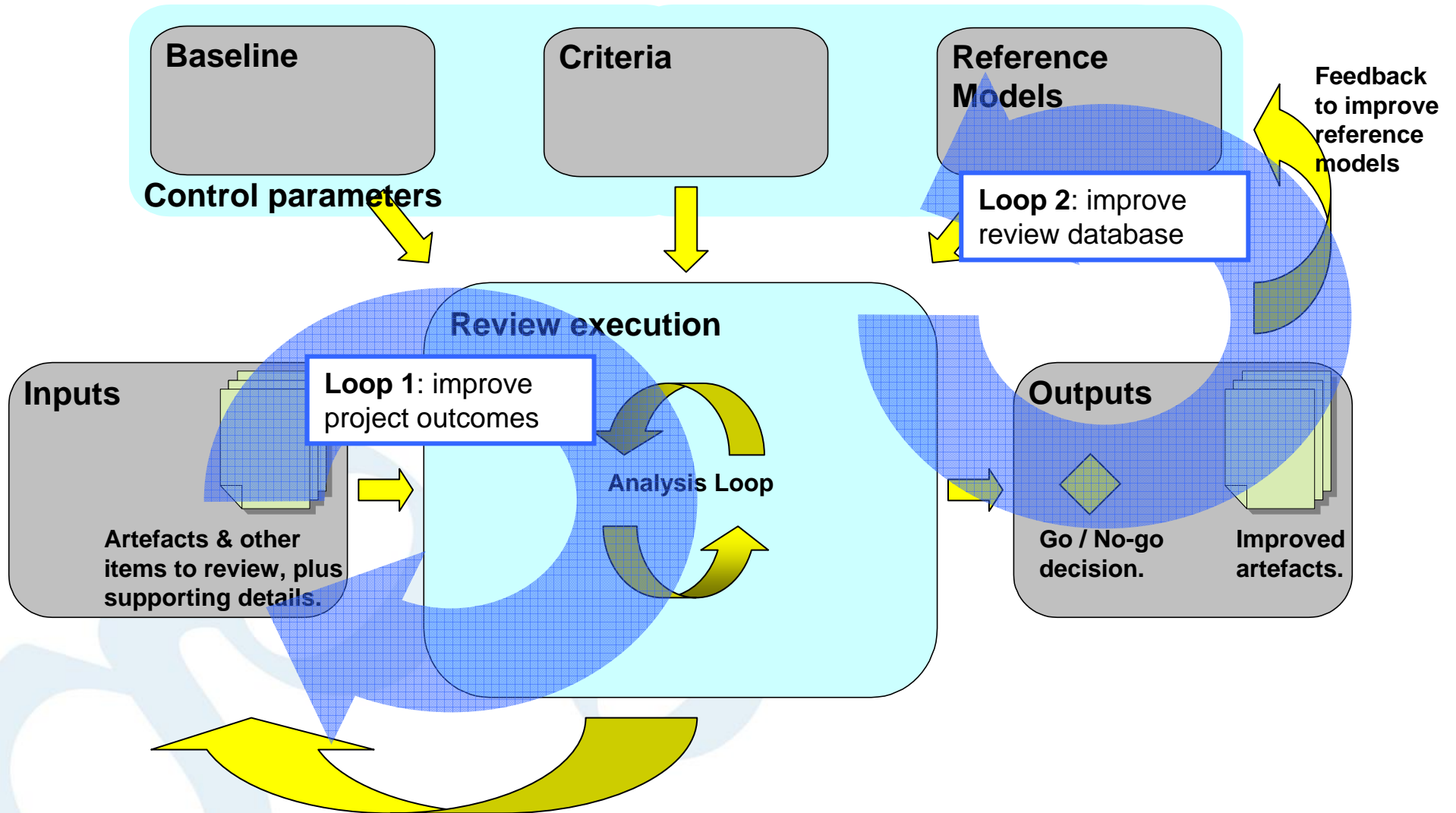
- Project Review or Independent Project Assurance?
 - Who are the stakeholders?
 - What is at stake?
 - How does this project relate to broader governance?
 - How will you trade off concerns such as privacy / openness?
 - How will you support reviewers?

- Project review is a process for organisational learning

Project Governance

	Set Direction	Implement	Assure
Steer	Steering	Sponsor	Indep. Assurance
Manage	Mgt of the commons	Proj Mgr	Proj. Review
Execute		Team	Test & QA

Double loop learning improves project outcomes and review effectiveness...



Database of checklists retains history

- Objectives
- Critical Success Factors
- Roles and Responsibilities
- Plans
- Technical architecture and good practice
- Risks
 - OSS challenges
 - User experience
 - Technical

Summary

- Range of maturity of OSS options is growing
- OSS is software!
- Non-enthusiast usage faces specific challenges
- Look for and participate in community
- Address configuration management
- Independent assurance is always valuable, but many aspects of OSS marry especially well to it

Thank You

Graham Oakes

graham@grahamoakes.co.uk

www.grahamoakes.co.uk

Graham Oakes Ltd



■ Making sense of technology

- We help people work out how to use technology to achieve business goals.
- We deploy highly experienced consultants with a diverse set of technical, management and people-centred skills. Our principal, Dr Graham Oakes, is a highly skilled systems engineer with over 20 years' experience in the industry and a track record of delivering highly innovative solutions.

■ Clients

- **National Savings & Investments** – Leading team developing IS Strategy for NS&I and BPO partner (Siemens Business Services)
- **Amnesty International** – Defined enterprise content management strategy to support information sharing between researchers, activists and external partners (e.g. journalists, other NGOs).
- **Cisco Worldwide Education** – Defined financial models, competitive marketplace and potential infrastructure partners to commercialise Cisco's e-learning assets in Europe.
- **The Open University** – Defined enterprise architecture, customer relationship management strategy, and business case for renewing course production systems.
- **Oxfam** – Defined strategy and business case for content management and customer relationship management systems.
- **Intermediate Technology Development Group** – Defined enterprise architecture for knowledge sharing amongst communities of researchers and project teams in first and third world.
- **MessageLabs** – Helped define & implement technology strategy for customer and partner self-service portal.
- **Sapient Ltd** – Helped define & implement risk management strategy for customer billing solution.

■ Services

- Business and technology alignment
- Integrated business, technical and human architecture
- Technology innovation
- Project execution and review

