

Assurance of Open Source Projects



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- 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

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

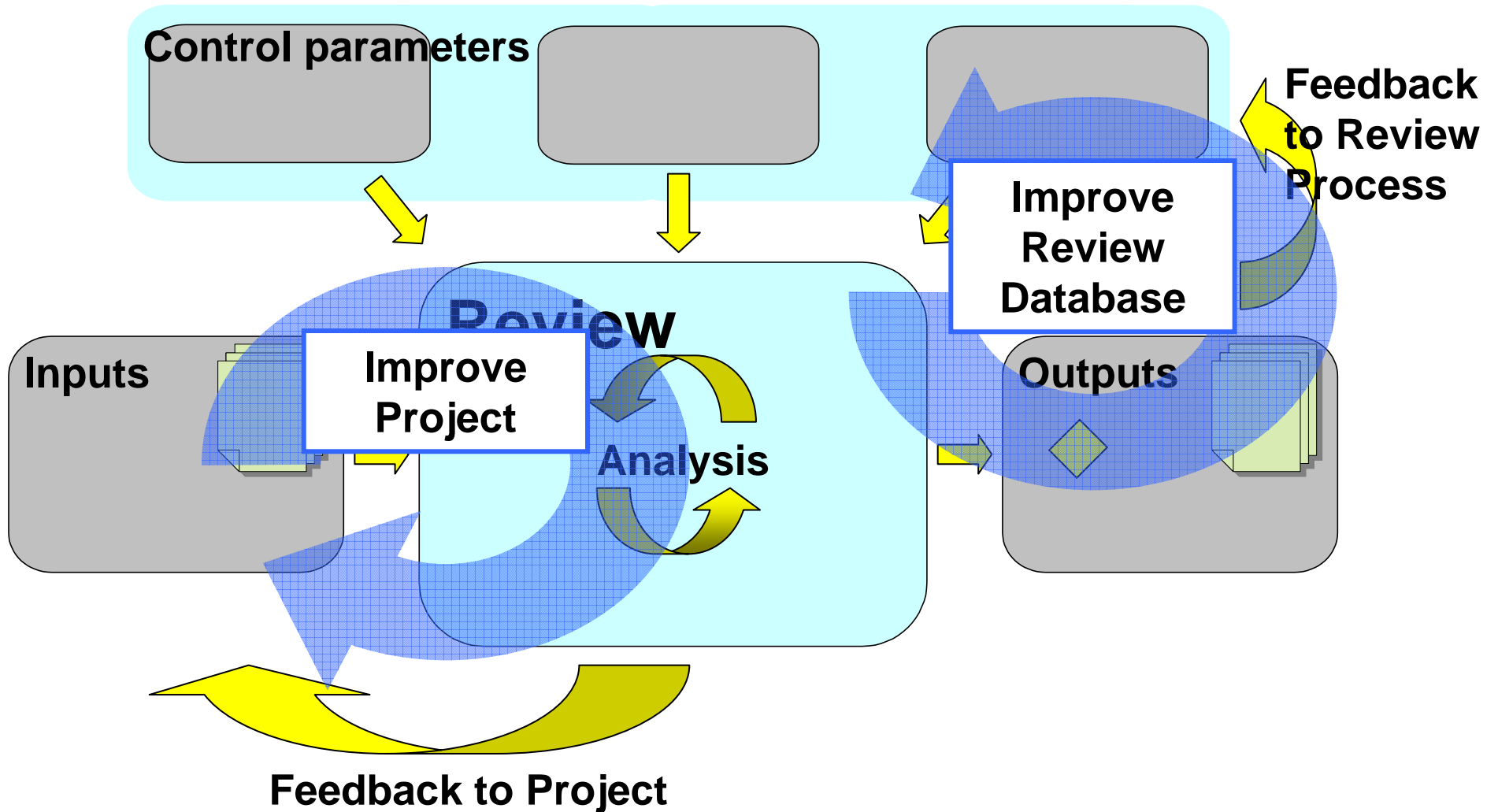
Setting up Project Assurance

- 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



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

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Appendix – added details

Addressing Procurement

- Variable functionality, quality and usability
- Look for strong, active community
- Talk to references
- Consider integrators to respond to tenders
- Consider pilots and proofs of concept
- Watch for accreditation

Governance: Consider assurance to support information flow between projects...

	Set Direction	Implement	Assure
Steer - Set priorities - Set resources	Programme steering group Project Board	Sponsor / SRO	<i>Audit</i> <i>Assurance</i> Assuring a common view of status becomes key
Manage - Align resources, goals & standards - Manage people, risks & events	Management of the commons becomes key e.g. EA & PMO (at which level do they operate?) e.g. org versus departmental taxonomy	Programme Mgr Architect Info Architect	e.g. COBIT, tech assurance (how much advisory versus audit?)
Execute - Build processes & systems		Feature team 1 Feature team 2 DBA / Infra	<i>Peer review</i>

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

