

Managing project risk when using open source

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Software Failure

- Sainsbury write of \$526M invested in supply-chain automation
- Hershey unable to fulfil \$100M of orders due to failure of \$112M IT system
- 60,000 pensions and benefits claims unprocessed in UK due to IT failure on a budget of £413M
- Sift (UK SME) wasted £1M on cancelled IT rewrite

It should only cost 7p

- Proper
- Planning
- (and) Preparation
- Prevents
- Piss
- Poor
- Performance

Ross Gardler

- Co-founder of OpenDirective
 - Consultancy specialising in open innovation of software
- Open source developer since 1995
- Executive Vice President of The Apache Software Foundation
- Mentor to projects large and small
 - in companies large and small

Managing risk

- Emphasis on MANAGING
- Need to:
 1. Understand common risk factors
 2. Evaluate candidates against those factors
 3. Understand risk management strategies
 4. Allocate project resources to manage risk
 5. Repeat

Common Open Source Risk

Legal

- Does the licence allow you to...?
- Can the software be released under that license?
- Can you release your software under the chosen licence?
- Are there fees associated with the software?
- Are contribution terms acceptable?
- Can the software be bought and removed?

Standards

- Does the software play nicely with other software?
- Can you move away from the software?
- Are the standards used encumbered?
- Who owns and manages the standards?
- Can you influence the standards?

Knowledge

- Can your people work with the software?
- Can your people or sub-contractors adapt the software?
- Can you add to the knowledge?
- Is there a restricted group who control critical project information?
- Is there a paywall to critical information?

Governance

- Can the project pivot without your knowledge?
- Can you influence project strategy?
- Can your interests be blocked?
- Is the playing field level?
- Will your contributions be accepted?
- Will contributions be managed for the good of the project?

Market

- Is there (potentially) multiple suppliers?
- Can newcomers enter the market with new product/services?
- Does one supplier have an unfair competitive advantage?
- Do the majority of project committers work for a single company?
- Is there a supplier who understands your market?

Measuring risk

Apache project

- Labs
 - High risk
- Incubator
 - At your own risk
- Top level projects
 - Managed risk
- Attic
 - At your own risk

What does the incubator do?

- Community development
- Ensure the project is governed according to the Apache Way
 - No BDs
 - Clean IP
 - Supportive and open community
 - Etc.

What if it's not an Apache project?

- Openness Rating
 - Evaluates development model
- Identifies areas of potential risk
 - Plan for risk management
- One part of a larger evaluation process
 - Software Sustainability Maturity Model
 - In addition to development model evaluation
 - Fitness
 - Reusability
 - Capability

Evaluating Openness

More open projects = more flexibility for users

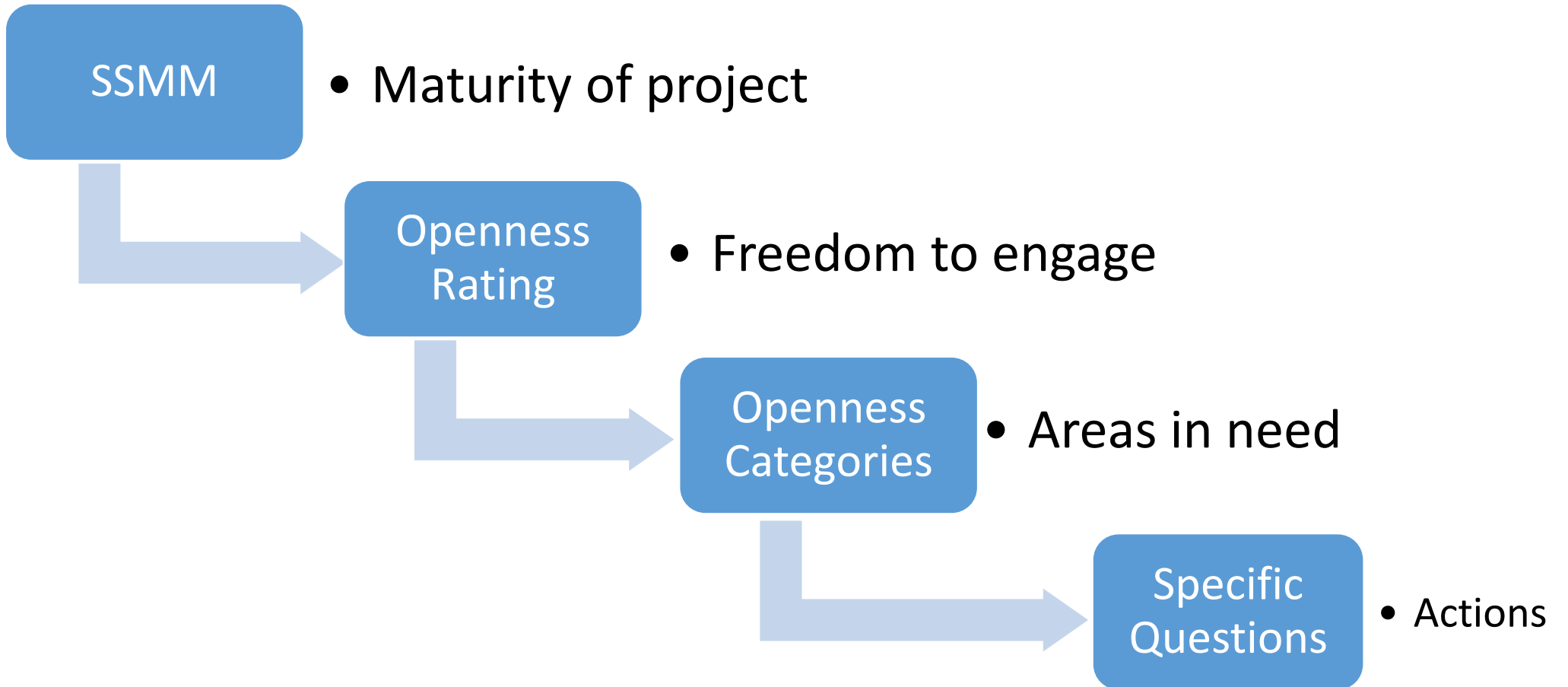
Conducting an openness evaluation

- Series of questions in five categories
 - License
 - Standards
 - Knowledge
 - Governance
 - Market
- Decide on acceptable risk profile
 - Weight categories of evaluation
 - Weight individual questions

Result is a “score”

- Quantitative evaluation
 - numbers are indicators only
- Need to ensure consistency in the evaluation responses
- Low scores indicate areas of risk
 - Compare risk across different alternatives
 - Invest resources to mitigate risk?

Layered evaluation



The Categories

License

- What kind of license?
- IP due diligence
- Traceability

Standards

- Standards compliance
- Openness of standards used
- Royalty or Patent requirements
- Recognised governance body

Knowledge

- How we got here
- Where we are going
- User support
- Developer support

Governance

- Structure
- Succession
- Codes of behaviour
- Transparency
- Accountability
- Who can participate
- Roles of project participants

Market

- Money makes the world go round
- Money pays for developers
- Money raises awareness
- Money provides better user support
- Is there a healthy commercial ecosystem?

Can I use it?

Can I use it?

- In constant development
- Use it and help us improve it
- Open Content (CC-BY-SA)
 - Mail me at rgardler@opendirective.org for a copy
- The sales pitch
 - 1, 2 and 4 day training
 - Consultancy services

Questions

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