

Health and sustainability is operationalized differently

What are the goals in scientific open source software?

Mozilla is leading the way on diversity and inclusion.

How do we operationalize quality?

What can we put on a dashboard that reflects ?

Relates to sustainability

Hints of project dynamics - hard to fit into a category

What do we mean by sustainability?

Do we want a project to continue to add new features

New project -- yes grow

Fix bugs

Continue to develop new software

Dependant on os project -- want it to be around

Dysfunctional project may not welcome new contribs

Low bus factor?

Poor governance or no governance?

Can I use this open source metric to predict whether this project will ship quality software

Dysfunctional project may produce for short period of time

You can come up with set categories and an outcome variable (5 years)

Multiple paths to success

Correlation

Multiple recipes for success

Many variable are possible

Different recipes for success

Project Genres

Organizational configurations

Is Growth a part of sustainability

For flask you don't want growth

other projects may need growth (example - accounting software)

Consideration for Different types of projects and different phases of lifecycle

Project users and sponsors set the goals

Project leaders and maintainers need to know if they are reaching the goals

Metrics and measurables

Impact and reward metrics

How many web apps use our framework

Challenge is to know what to measure day to day to reach goals

Project types sorted by goal sets

How to classify project types

User and sponsors have goals

Projects are collections of contribs who have overlapping goals

If every project has different goals how do we measure success?

Manager - What is it about flask that you want to measure

Enterprise chicken plucking

Users and contribs may not be aware of goals

How to understand the health of supply chain

Contains an array of projects with different goals

How do the goals of users and contribs compare?

OSS board members have little control over contrib

Users are only concerned with their own feature

Balance between motivation and and what needs to be done

We can implement your feature if we do something else - mentoring

Convincing tech to contrib in places that are needed

Socialization or onboarding

Generativity vs technical depth

Tasks to enhance the base

How to mentor contribs

Openstack sets priority for next release

Top to bottom discussions

Includes workshops and meetings

Delivered?

Board meetings

Features only added if devs are devoted

If developers are opposed to adding new features that users request the value of the project could diminish

Conversion rate - does the user bring resources to the project

Forum for all stakeholders to discuss features

Is there a forum -- yes or no

How to measure collaboration of all stakeholders

Frameworks to help a project get started? That work? That don't work?

How easy is it to download and run your project or time to set up dev environment may relate to contrib likelihood

Documentation

Questions

Resources for contribs

Actionable transparency - harness a resource (more visibility)

How to code

Patch

Report a bug

Time to Set up a dev environment?

How long does it take to report a bug

Contributability factor

UI Testing

AB testing

Transparency testing

Must account for motivation

Lower the bar to make ease of contrib

No research on difficulty in finding code location to contrib

Dead code may affect ability to contrib - hanging new code in wrong place

Code coverage

Presence of dead code

As projects grow, redundancy grows

Measure redundancy

Level of commitment

Some contribs want low level

Ease of contrib can help determine level of commitment

One time fix vs ...

Learning curve in Git

Git culture

Development history

Projects as sources and Syncs for

Above project level -- health of ecosystem

Do projects push their code upstream?

Maintain their own version of a library

Maintainer utility -- Steward

Dead code

Role emerge organically?

Community effort to remove dead code

Slow build - libreoffice

Requires a lot of resources

Losing implicit knowledge

Density of contribution over a time period

How long have you been involved

Distinguish between moderating work and code

Contribution versus discussion