

Measuring open source project health

A healthy open source project is one that demonstrates open practices, uses open infrastructure, and cultivates an open culture with the goal of becoming more sustainable. This document outlines considerations you should make when assessing the health of an open source project.

Project life cycle

An [open source project's life cycle](#) affects many other considerations about a project's health. Understanding the project's place in that life cycle will help you contextualize your assessment (e.g., single-person governance can be common when a project is young—but less effective when a project is more mature). Monitoring contributor trends might reveal critical information about a project's short-term or long-term future.

- When was the project founded, and how old is it?
- How often do new contributors join the project?
- How frequently does the project accept new contributions?

Target audience

Well-run open source projects demonstrate a clear understanding of the users (and contributors) they hope to assist and engage.

- Has the project clearly identified a target audience, and who is it?
- Is the target audience the most appropriate one for this project?
- Does the target audience engage with competing or complementary projects?

Governance

Governance [refers to the rules and customs](#) that define who does what in an open source project and how they are supposed to do it. Healthy projects entail thoroughly documented (and continuously evolving) governance models.

- What is the project's governance model, and is it publicly documented?
- Does the model account for both technical and business concerns?
- How do project members make and enforce decisions?

Project leaders

In healthy projects, leaders are visible and easily identifiable. Leaders often coordinate project work and establish a project's vision, and usually have extensive knowledge of project history.

- Who are the project leaders?
- What are the project leaders' responsibilities, and are they focused more on engineering, marketing, or some combination of both?



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Release manager and process

In healthy projects, members have formally documented release processes and identified release managers to supervise those processes.

- Is the project's release process documented?
- Does the project have an identified release manager?
- How often do project release updates occur?
- Do project releases occur on a steady and predictable schedule?

Infrastructure

The tools a community uses to collaborate on a project are almost as important as the people who comprise that community. The most successful projects are those that have the tools they need to do their work—and keep those tools in good working order.

- Does the project have the necessary infrastructure?
- Are infrastructural deficits producing bottlenecks for the project?
- Who is responsible for maintaining project infrastructure?
- Is the project missing useful infrastructural components, and if so, does the community plan to obtain these components?

Goals and roadmap

Healthy open source projects have publicly shared goals and clear processes for reaching those goals. Goals are attainable and clear deadlines exist for tracking progress toward those goals.

- Are project goals clear and public?
- Does the project have a clearly communicated process, and is it also public?
- Do project participants have a history of meeting project deadlines?

Onboarding processes

New contributors are vital to project innovation and success. Healthy projects feature clear, welcoming onboarding materials that assist newcomers who wish to participate in the project.

- Does documentation explain precisely what the project is and how to use it?
- Does documentation help new contributors get involved in the project?
- Does the project accept contributions of more than one type (e.g., development, marketing, project management, event planning)?

Internal communication

Communication channels are key indicators of project health, as are a project's internal communication practices. Issues affecting community health often emerge first in internal channels—such as mailing lists or chat platforms—where contributors and users interact.

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- Does the project have sufficient communication channels?
- Can people find and use these channels effectively?
- Are channels regularly moderated?
- Is channel communication governed by a code of conduct?

Outreach

Outreach is the process of actively promoting a project and making others aware of it. Communities use written materials (e.g., social media, blogs, whitepapers), events (e.g., meetups, conventions), and educational tactics (e.g., demos, training sessions) for outreach. Healthy projects have adequate energy and resources devoted to outreach.

- Does the community use clear and consistent methods for outreach? If not, does it plan to establish a set of outreach methods?
- Are people writing, talking about, and promoting this project and its technologies?

Awareness

The project's target audience must be aware of the project and understand the problems it solves. Awareness is a desired outcome of a project's outreach efforts and can be measured through user and contributor surveys or general marketing analyses.

- Is the target audience aware of the project?
- Can people in the target audience explain the project's uses, features, and advantages over alternatives?
- Do others working in an industry that would benefit from the project know the project exists?

Ecosystem

No project exists in a vacuum. Projects frequently depend on one another. In some cases, similar projects can be competing to reach the same target audiences. A community's interactions with other projects in its ecosystem reflect the project's health.

- What are the project's dependencies and what projects depend on it?
- Is the community sufficiently integrated into the overall project ecosystem, target industry, and organizations that may use the project?
- Do members of that ecosystem view this project favorably?