How to measure success in open source contribution

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Mar-2019

Success? What success?

- We are often required to reflect upon our investment in open source and determine whether it is successful or not
  - Triggers may be
    - decision making time – Should we add or remove resources from the effort
    - New projects – should we try to replicate our success?
    - Our group or personal KPIs
    - Those pesky questions from other groups or individuals - Is it worth our effort? Why do we investing? Where is our return?

- Success of the open source project and our organization’s success in it are two different things
  - We may be unsuccessful in a successful project, and vice versa

Quick and easy success KPI?

- Counting the amount of commits or lines-of-code seems like an easy metric

- But, it has many pitfalls. It may not

be as relevant as you may think

- Side effects may include:
  - Creating an illusion of success
  - Driving developers into making low

  quality contributions. Preferring quantity over quality
  - Overlooking other important types of contributions
  - Arms race with other organizations and companies
  - Accounting like tricks to “cook the books”
- The easiest to measure metrics may not indicate real outcomes

Doesn’t hurt to have a goal. Or two.

- Success should be measured against goals
  - Your goals will determine your KPIs. It is easier to define the desired outcome when you have goals
  - The same action might be supportive of one goal, but obstructive to another
- How to determine your goals
  - Top down, derived from some higher level strategy
  - Bottom up – Look at what you have already been doing and try to group into buckets that will turn into goals

- Validate and update your goals from time to time
  - Items may have shifted during flight

Got my goals. How do I turn them into metrics?

- If the goals are quantitative in nature, it should be straight forward
  - If the goal is “more features”, counting the number of accepted blueprints/proposals might help
  - If the goal is “better quality”, we can count the number of bugs squashed by our teams
- If the goals are more qualitative or subjective, we have to work harder
  - What if my goal is improving my organization’s reputation?
  - How do I measure my influence in the community?

Some KPIs to consider

- How many technical proposals or blueprints that you initiated or supported got accepted by the community?
  - Pros
    - Proposals lead to features, which are the true outcome
  - Cons
    - Might encourage low quality proposals
    - We have limited control over the faith of proposals

- How many tickets/issues were resolved by our team?
  - Pros
    - Indicate we are working on what really matters to the community
  - Cons
    - Might encourage creating unnecessary issues
    - What if it was a joint effort?

More KPIs

- How many tickets/issues we created got resolved by the community
  - Pros
    - Indicates we leveraged the community to our benefit
  - Cons
    - What if we have different interests?

- How many key positions do we hold?
  - How many PTL, committer, Release manager positions are filled by people from our organization
  - Pros
    - A good indication of our clout in the community
  - Cons
    - Arms race with other organizations
    - Not putting the communities best people forward

Let’s get more creative

- How many proposals/blueprints we blocked
  - If our goal is to prevent the project going in some direction, let’s count actions that support this goal
  - Pros
    - Indicates how we are actively promoting our goals
  - Cons
    - May be hard to measure – What if multiple organizations

      objected?
    - Lets not make it into a habit

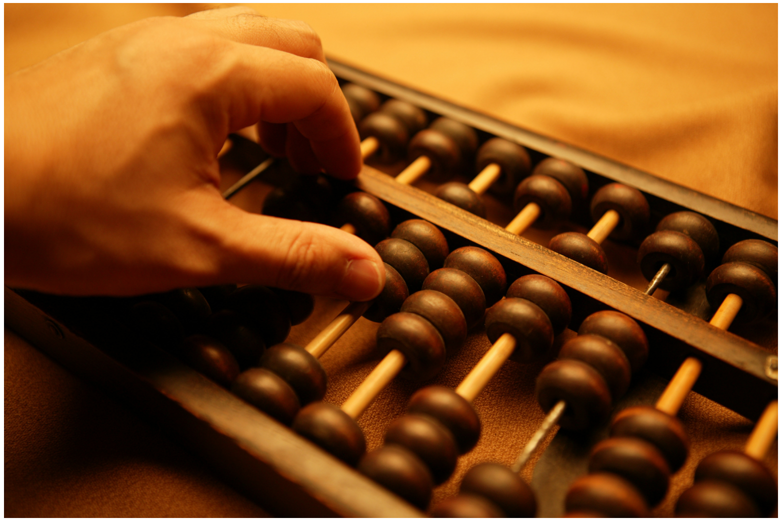
- Counting knowledge base contributions, security vulnerability reports
  - Pros
    - Encourage contribution in those less desirable areas
  - Cons
    - Risk of over doing it

Measuring indirect contributions and external metrics

- Counting other contributions to the community
  - Hosting and sponsoring events
  - Donating labs
  - Posting supportive publications
- Count external KPIs
  - Mentions. In the press, blogsphere, or elsewhere
  - Measure adoption of the open source project by our own organization (how?)
  - How many of your customers/ partners adopted the project (But how do you determine <u>your</u> part in it?)

Should I stop measuring commits?

- Not necessarily
- Use it together with other KPIs but treat it as a “pulse check”. One of many vital signs
- Try to avoid the pitfalls
  - Don’t motivate developers to create unnecessary commits
  - Look at things like trends and anomalies, not absolute numbers
  - Try to filter out sporadic events (seed code contribution, some sweeping changes across the project, etc.)



Open discussion

- What is your organization measuring?
- What do you think about the metrics discussed today?
- What else should we look at?

Thank you!

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