

Survey1

Dear XXX,

I am a researcher at XXX University. I'm investigating how a large-scale ecosystem such as OpenStack with hundreds of companies involved is formed and sustained. We expect our study could help people better understand the practices and sustain ecosystems. I would appreciate if you would be willing to participate in this research study that should not take more than three minutes of your time.

I would much appreciate it if you could please indicate which of the following randomly selected commits were made by you, and whether the company you belong to is right or not:

<https://github.com/openstack/nova/commit/c5c58cb20def79401a374f863983a343139b53f3>

Yes | No | Not Sure

During this period, you are hired by __NTT__

Yes | No | Not Sure

Your answer is extremely important for our study! Please note your information will be kept privacy and we will only publish common statistics.

Thank you very much for your time and cooperation.

Best regards

Survey2

Dear XXX,

I am a researcher from ***. I am investigating how a large-scale ecosystem such as OpenStack with hundreds of companies involved is formed and sustained. We expect our study could help people better understand the practices and sustain ecosystems. I would much appreciate if you would be willing to participate in this research work that should not take more than three minutes.

We obtained commercial objectives of a company joining OpenStack through qualitative analysis of online documents. And we quantified the contribution of a company through its input developers and submitted commits. The following is an analysis report for XXX company:

1. Participation motivation: interested in the new technology brought up in OpenStack or the survival mechanism of OpenStack ecosystem
2. The performance of contributions along three dimensions:
 - a. On average in a release of OpenStack, the developers from Tunnel Vision Laboratories account for 0.06%, and the commits submitted by these developers account for 0.01%. In the most related sub-project of OpenStack, the developers from Tunnel Vision Laboratories account for 3.0%, and the commits account for 6.0%.
 - b. On average in one release, Tunnel Vision Laboratories tend to make contributions to 0.4% of sub-projects in OpenStack. (The above percentages are calculated based on an average performance of Tunnel Vision Laboratories in all the participated releases. We quantify companies' contributions by the developers they provide and the commits made by those developers.)
 - c. "Orchestration" is the type of sub-projects where XXX company most prefer to make

contributions.

Conclusion: the community players such as the Linux Foundation, and research groups driven by interest are minor contributors.

(The conclusion is based on XXX company and other companies that have the same motivation and similar contribution performance.)

We learn that you have been an outstanding developer of XXX company. Could you tell us your view on this conclusion?

- A. Strongly agree
 - B. Agree
 - C. Neutral
 - D. Disagree
 - E. Strongly disagree
- And why?

Your answer is extremely important for our study! Please note your information will be kept privacy and we will only publish common statistics.

Thank you very much for your time and cooperation.

Survey3

I am a researcher in XXX University. I'm investigating how a large-scale ecosystem such as OpenStack with hundreds of companies involved is formed and sustained, and the impacts that commercial participation may have on the community. We expect our study could help people better understand the practices and sustain OpenStack ecosystems.

After verifying the affiliations of contributors, we quantified each organization's contributions and found a decrease of independent volunteers' participation in several projects in OpenStack. We want to investigate why this happened. Before that, it is necessary to ask for the community's perspective towards the importance of independent volunteer to OpenStack. We understood you have contributed a lot to OpenStack. I would much appreciate it if you could please answer the following three questions (please note all the answers will be kept anonymous and only for research purpose):

Q1: Do you agree that volunteers play an important role in the development of OpenStack?

- A. Strongly agree
- B. Agree
- C. Neutral
- D. Disagree
- E. Strongly disagree

And why?

Q2: Compared with developers contributed by companies, are there any projects or tasks that are more suitable for independent volunteers to do in OpenStack? And why?

Q3: Will multiple companies' participation attract volunteers in a project of OpenStack?

Thanks a lot if you could offer any insights! Sorry if this bothers you.