Can your organisation benefit from embracing the open source way?

A recent Forbes article indicates that corporate engagement with open source communities has grown to become a strategic imperative over the past couple of decades. An increasing number of companies are paying their employees to contribute to such communities. This is one manifestation of a broader growing trend toward closer collaboration between companies and open source communities. Well-recognised companies such as Google, Uber, Facebook, and Twitter have open sourced their projects and encouraged their employees to contribute to open source communities. Among software developers who contribute to such communities, estimates suggest that up to 40% of them are paid by their company to do so. Some companies see this as an opportunity to enhance their employees' skills while others aim to influence open source product development to support their own complementary products and services. Regardless of the motives, managers should consider the impact of such arrangements on the employees involved.

Traditionally the open source movement has been characterised by a strong ideology based on helpfulness, open sharing of knowledge, reputation-building through high-quality contributions, and credit for individual contributors. Moreover, a distinguishing aspect of open source is its emphasis on requiring source code to be freely available and open to modification by anyone. Such values and norms are not typical of most corporate environments, making for an interesting opportunity to observe whether companies can make such arrangements work. Our research team was particularly interested in understanding whether there are any benefits or pitfalls to companies embracing a similar ideology when assigning employees to open source communities.

To probe these considerations, we conducted a study of 186 employees of companies who contribute to one open source community. Our study evaluated how strongly employees embraced the ideology that characterises the open source movement. We also evaluated how strongly employees believed the co-workers in their company embrace the ideology. We then observed the code contributions of these employees to the open source development project over a nine-month period.

Is there a benefit to embracing the open source way?

The short answer is yes. Employees reported feeling more committed to their company and made more code contributions to the open source development project when they felt their company environment strongly embraced the open source ideology—even if they themselves did not. They also felt more committed and made more code contributions when their company assigned them to an open source community that embraced the ideology to the same degree as they themselves did. This hits a trifecta for companies that embrace the open source way. First, employees are more committed to the company, which is highly desirable for the retention of software talent in a tight labour market. Second, by making code contributions to an open source development project, employees are able to enhance and expand their skillset. This strengthens the company's intellectual capital. Finally, the code contributions help advance the company's strategic objectives for collaborating with the community.

What are the implications for companies and open source communities?

Not surprisingly, we found that employees were generally more committed to their company and to the open source community when they felt that they embraced the ideology to the same degree as those around them. What was more interesting was the observation of what happens when there is a mismatch in how much the company or the open source community embrace the ideology relative to the employee. The news is universally negative for open source communities. Employees felt less committed to the open source community when they felt that those in the community did not embrace the open source ideology to the same degree that they themselves did. Similarly, employees felt less committed to the open source community when they felt the community embraced the ideology too much relative to what they were comfortable with. In both instances the research found that these less committed employees made far fewer code contributions to the open source community, thus failing to advance their company's interests.

The findings were more encouraging for companies—particularly those that are bold in creating an environment that embraces the ideology. As already noted, employees in such companies reported greater commitment and made more code contributions. In contrast, employees who strongly embraced this ideology but felt their company did not support it exhibited lower company commitment and made fewer community code contributions.

What does embracing the open source way do for employees?

So why does the open source way engender such goodwill among employees? Social psychologists believe that people are intrinsically motivated by work environments that support three basic human psychological needs: autonomy, relatedness, and competence. The open source way affords employees the autonomy to decide what code to work on and when to do so. Open source is inherently a social coding process, connecting employees with a broad array of developers within and outside of the company. It enables them to feel socially connected. Finally, the widely observable recognition that employees receive for their code contributions—through named credit—fosters a sense of accomplishment and competence. It offers a lasting digital imprint of their technical competence that can be shared with others.

What is the takeaway?

The findings suggest that engaging employees in open source communities has ramifications for the company itself. Reaping the benefits requires companies to provide a value system supportive of the open source ideology. In fact, the companies that are most successful at attracting software development talent (e.g., Google, Facebook) already embrace this ideology as part of their corporate culture. Employees at these companies are afforded a fair degree of autonomy in their work, feel a sense of relatedness with their co-workers, and receive frequent feedback and recognition regarding their competence in their technical work. At least on this front, there is a clear benefit to embracing the open source way to conduct work.

Companies that wish to employ developers who contribute to open source communities have a few decisions to make. They must decide which developers will make contributions. They also must decide how they portray themselves with respect to open source communities. Given these findings, it seems it is in the best interest of the company to present itself as embracing the open source ideology. This could be done through emails advertising the financial support of open source communities. Alternatively, they could become platinum sponsors of well-known open source conferences such as ApacheCon and LinuxCon.

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Notes:

- *This blog post is based on the authors' paper [The Impact of Ideology Misfit on Open Source Software Communities and Companies](#), MIS Quarterly.*
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