

MISQ Archivist

The Impact of Ideology Misfit on Open Source Software Communities and Companies

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Abstract

Corporate involvement in open source software (OSS) communities has increased substantially in recent years. Often this takes the form of company employees devoting their time to contribute code to the efforts of these communities. Ideology has traditionally served to motivate, coordinate, and guide volunteer contributions to OSS communities. As employees represent an increasing proportion of the participants in OSS communities, the role of OSS ideology in guiding their commitment and code contributions is unknown. In this research, we argue that OSS ideology misfit has important implications for companies and the OSS communities to which their employees contribute, since their engagement in such communities is not necessarily voluntary. We conceptualize two different types of misfit: *OSS ideology under-fit*, whereby an employee embraces an OSS ideology more than their coworkers or OSS community do, and *OSS ideology over-fit*, whereby an employee perceives that their coworkers or OSS community embrace the OSS ideology more strongly than the employee does. To develop a set of hypotheses about the implications of these two types of misfit for employee commitment to the company and commitment to the OSS community, we draw on self-determination theory. We test the hypotheses in a field study of 186 employees who participate in an OSS community. We find that OSS ideology under-fit impacts the company and the community in the same way: it decreases employee commitment to the company and commitment to the OSS community. In contrast, we find that OSS ideology over-fit increases commitment to the company but decreases commitment to the OSS community. Finally, we find that employees' commitment to their company reinforces the impact of their commitment to the OSS community in driving ongoing code contributions. This provides a holistic view of OSS ideology and its impacts among an increasingly pervasive yet understudied type of participant in OSS research. It provides insights for companies that are considering assigning their employees to work in OSS communities as well as for OSS communities that are partnering with these companies.

Keywords: Open source software, OSS ideology, P-E fit, misfit, self-determination theory, commitment, code contribution, polynomial regression