

Evidence based Guidance for Open Source Development

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Some of the world most successful software products are an outcome of open-source software development. Many commercial software's also partially or fully depend on other open-source software. However, open source software development process is very different than traditional software development process. In open-source software development, the contributors are distributed globally over large distances from each other but they still manage to deliver high-quality software. Traditional research has been done to see what qualities of a software development team help them succeed in a corporate environment. But little research has been done to see which qualities help a team or an individual to succeed in an open-source software development community.

In this research five main principles are tackled to see how open-source software development differ in these principles from its commercial counterpart and traditional beliefs. Five principles that were tackled were Teamwork, Retention of contributors in the project, Ownership of the project, Organizational Hierarchy in an open-source project and common issues faced by open-source projects. For each of these principles, analysis has been done to understand how open-source development differs from traditional beliefs. Based on the learning from this analysis, this research tries to suggest a set of guidelines for an open-source project and a newcomer to an open-source project.