

IT MATTERS WHO YOU FOLLOW

RESEARCH FEATURE

WHEN LOOKING AT OPEN source projects, Qin Weng, PhD, assistant professor of Information Systems and Business Analytics at Baylor University's Hankamer School of Business, saw lots of good work being done. However, there was also a gaping hole.

"So few open source projects were actually becoming successful," Weng said. "I wondered how more could succeed."

Open source projects offer code anyone can access, examine and modify. As Weng explains, thinking about how recipes are used online can help us understand the nature of open source projects.

"It's similar to how a person might find a recipe that interests them, study it and then change it for their own uses," Weng said.

Open source thrives on active participation of individuals and organizations by shared interests. Weng and her study co-author, Franck Soh, knew the open source software community website GitHub had unique social media features not all sites had: Project imitators receive stars on their project pages that show a project's popularity. They wondered if that social media feature could offer insight to the success of some projects. If so, those findings could help other project initiators chart a path to success.

It was actually Weng's daughter who gave her this aha moment.

"One day my 5-year-old came home from school very excited because she had received a star on schoolwork," Weng said.

That's when Weng realized how powerful the motivation of those GitHub stars could be.

To test the theory, Weng and Soh decided to use the number of stars project initiators receive to judge their success on a project. They evaluated years of data collected on GitHub. While the data was enormously valuable, the challenge was that the data files were massive. Luckily, Weng had a decade of experience with databases. To make it usable, Weng downloaded several years of GitHub data into a database and spent months cleaning it up so they could use it for project analysis.

They found having a broad social network was an indicator of a project's success. When a project's initiator had more followers and followed more people, the

project tended to fare better. This exciting discovery was published in The Journal of Strategic Information Systems in the study, "The Influence of Project Initiators' Person-to-Person Followership on Project Popularity in Open Source Communities: The Role of Reach and Importance."

The implications of this study are multifold and can be used in many ways. First, "stars" available on GitHub are unique and many platforms do not offer similar social media features. Based on how this social media feature helped indicate and track success, it would be advisable for more platform owners to initiate similar social media features.

Project initiators can also use the learnings about followers to maximize the benefits of available networks. Those projects that can attract followers are more likely to be successful. Furthermore, following people points to diversity of information and exposure. Instead of just following many people, based on the findings, it's advisable for project initiators to be strategic about the people they choose to follow. Following random people does not seem to be as powerful as following people who have broad networks. That's how person-toperson followership can be most beneficial.

On the heels of this enlightening study, Weng is looking to dive even deeper into what makes projects successful by examining characteristics of project initiators and developers.

"We want to explore relational and cognitive variables such as trust, norms, values and culture," Weng said.





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