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Motivators for adopting social computing in global software development: An empirical study

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Abstract

Managing communication in collaborative global software development (GSD) projects is both critical and challenging. While social computing has received much attention from practitioners, social computing adoption is still an emerging research area in GSD. This research paper provides a review of the academic research in social computing and identifies motivators for adopting social computing in the GSD context. We applied the systematic literature review (SLR) and questionnaire survey with 35 software industry experts to address the research objective. Firstly, we implemented a formal SLR approach and identified an initial set of social computing adoption motivators. Secondly, a questionnaire survey was developed based on the SLR and was tested by means of a pilot study. The findings of this combined SLR and questionnaire survey indicate that real-time communication and coordination, knowledge acquisition, expert feedback, and information sharing are the key factors that motivate social computing adoption in GSD projects. The results of *t* test (ie, *t* = .558, *P* = .589) show that there is no significant difference between the findings of SLR and questionnaire. The results of this study suggest the need for developing social computing strategies and policies to guide the strategic adoption of social computing tools in GSD projects.

KEYWORDS

empirical study, global software development, social computing, systematic literature review