

Requirements Change Management in Global Software Development: A Multiple Case Study

Globalization of software continues to gain momentum and attract huge spending (\$US 442 billion in 2014). Despite this huge investment, up to 50% of all Global Software Development (GSD) projects fail due to ineffective management of changing requirements. The repeated experience of failure in such global collaborations, in spite of supporting Collaborative Technologies (CTs), motivates this work. This research examines the challenges encountered in managing changes and investigates the role of CTs in a GSD context.

A multi-case exploratory study is the research approach taken. This resulted in rich and in-depth understanding of change management processes and the role of CTs, firmly grounded in empirical data. The research provides a novel model that captures the practices of managing both formal and, more notably, informal requirements change requests which is a poorly understood area. The research also provides a mechanism to visualize the distributed dimensions of a GSD project in a single snapshot. Furthermore, eight new GSD challenges are identified, providing further insights for practitioners. Also discovered are some new characteristics of powerful proxy clients, adding to the present understanding of this role in GSD literature. Finally, several new CT-related obstacles are uncovered and recommendations are made to overcome them.

PhD Thesis Synopsis

by

Waqar Hussain

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Primary Supervisor; Tony Clear

Other Supervisors; Jim Buchan, Daniela Damian, Stephen MacDonell