

Paper Five Summary

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Reference

Nagappan et al. [2] listed below.

Important Keywords

Organizational metrics Metrics designed to give a balanced view of organizational complexity with respect to software development. The authors argue that these metrics, as a measure of organizational structure, greatly affect product quality.

Failure-proneness The probability that a particular piece of software will fail in production. The authors hope to reduce this by incorporating organizational metrics into models.

Feature Extraction

Future Work The authors hope to replicate the study with other Microsoft projects as well as organizations outside of Microsoft. They have mentioned that they are already begun collaborating with the Fraunhofer research institute (pg. 10) for this purpose. The authors also hope to research open source teams and their "virtual organizations", global software development, and even the social and cognitive aspects of the engineers themselves.

Possible Improvements

- The phrasing in particular sections is grammatically incorrect. Here are a couple examples: "The deeper in the tree is the ownership the more focused the activities, communication, and responsibility" (pg. 4) and "The lower level is the ownership the better is the quality" (pg. 5). More editing should have been done to fix these errors.

Connection to Other Papers

References

- [1] Erik Arisholm, Lionel C. Briand, and Eivind B. Johannessen. A systematic and comprehensive investigation of methods to build and evaluate fault prediction models. *J. Syst. Softw.*, 83(1):2–17, January 2010.
- [2] Nachiappan Nagappan, Brendan Murphy, and Victor Basili. The influence of organizational structure on software quality: An empirical case study. In *Proceedings of the 30th International Conference on Software Engineering*, ICSE '08, pages 521–530, New York, NY, USA, 2008. ACM.
- [3] Olivier Vandecruys, David Martens, Bart Baesens, Christophe Mues, Manu De Backer, and Raf Haesen. Mining software repositories for comprehensible software fault prediction models. *J. Syst. Softw.*, 81(5):823–839, May 2008.