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[IJCA Special Issue on International  
Conference on Reliability, Infocom Technology and Optimization](#)

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ICRITO

Year of Publication: 2013

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{bibtex}icrito1302.bib{/bibtex}

## Abstract

Many risks due to human factors are latent in a software development project. If suitable management can be performed to these risks and a software development process can be improved continuously, we will lead the project to improve in the productivity and quality of software product. In this paper, we analyze the process data collected from actual software development projects, and clarify the process factors which affect the quality of software product, by using multivariate analysis. Further, we also discuss a method of quantitative project evaluation based on a software reliability growth model, which helps us to give useful quantitative measures for determining project completion.

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## Index Terms

Computer Science

Software Engineering

## Keywords

Principal Component Analysis   Multiple Regression Analysis   Structural Equation Modeling   Logistic Regression Analysis

Software Reliability Growth Model

Geometric Poisson Model

