OPEN SOURCE SOFTWARE PROJECT MANAGEMENT FROM QUALITY ASPECTS

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Abstract

The breakthrough of Open Source Software Development (OSSD) is not only evident when looking at the gradually rising interest in OSS related research but also when observing the software business. Clearly OSS provides many opportunities for companies to speed up their software development and lower its costs. However, there are risks involved in using products developed under Open Source Software model such as multitude of licenses, lack of liability in the quality of the products.

The main characteristic of OSSD model is Internet based development in distributed environment. In this environment, the existence of project management practices is questionable or could differ from the commonly used styles. However, it is a known fact that project management plays the role of driving and sponsoring the quality considerations. Therefore, what level of weight could be put on quality related activities in OSSD environment through project management? This paper explores the quality management activities of open source software project management.

This research uses 'The Guide to Project Management Body of Knowledge', Edition 2004 as the standard guide in seeking the quality , management aspects of open source software development model. The main quality processes of quality planning, quality assurance and quality control are studied and compared with OSSD approach to identify the activities of similar concept.

Outcome of the research recovered that Open Source Software project management considerations on quality management is un-negligible. The level of attention on Quality Management aspects is very high and surprisingly light weighted to match the OSSD model. However, it was also observed that there is a slight imbalance in the activities within quality management.

DECLARATION

I hereby certify that this dissertation does not incorporate, without acknowledgement, any material previously submitted for a Degree or Diploma in any University and to the best of my knowledge and belief, it does not contain any material previously published or written by another person or myself except where due reference is made in the text. I also hereby give consent for my dissertation, if accepted, to be made available for photocopying and for interlibrary loans, and for the title and summary to be made available to outside organizations.

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The above particulars are correct to the best of my knowledge.

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Thank You,

YM Ranaweera

Table of Content

List of Figures

Abbreviations

ANSI	-	American National Standards Institute
CoQ	-	Cost of Quality
F-OSSD	-	Free & Open Source Software Development
FOSS	-	Free and Open Source Software
GPL	-	General Public License
OSS	-	Open Source Software
OSSD	-	Open Source Software Development
PMBOK	-	Project Management Body of Knowledge
QC	-	Quality Control
QP	-	Quality Planning
QA	-	Quality Assurance
QM	-	Quality Management
LDD	-	Low Defect Density
CS	-	Customer Satisfaction
OSSD-QM	-	Open Source Software Development- Quality Management
MIT	-	Massachusetts Institute of Technology
ACM	-	Association for Computing Machinery
IEEE	-	Institute of Electrical and Electronics Engineers