Review on Quality Models for Open Source Software and its reflection on Social Coding

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***Abstract* — Social Coding Sites (SCSs) are social media services for sharing software development projects on the Web, many open source projects are currently being developed on SCSs. Assessing the quality is a crucial element for better selection of a specific project serving people requirements or needs. In this paper, we reviewed existing traditional models which evolved prior the evolution of open source software as well as open source quality models. We evaluated the selected models according to their reflection with respect to social coding project success factors: sociality, popularity, activity and supportability. Eight models were included in our research as we only selected models that introduces explicit metrics well defined for measuring, neither a process nor a generic methodology. Based on our selection criteria, a summary of the findings we obtained is that existing models doesn't fully consider or cover social factors for open source software evaluation hence there is a need for a model to measure the maturity / quality of open source projects from social factors perspective. We have also evaluated the existing models against a selected open source project hosted on social coding GitHub to assess each model applicability. Some of the measurements from the existing models were not applicable for evaluation.**

***Index Terms*—open source, quality models, social coding, OSS, maturity models.**