
A comparative study on CMMI development tools & its use's assessment in the Lebanese region

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Abstract

Capability Maturity Model Integration is a process improvement approach aiming at enhancing the development practices and the end product quality. Five Capability-Maturity levels are defined; all companies start at the unpredictable, poorly controlled and reactive level one. Levels 2 & 3 are the most reached ones where processes follow specific guidelines in order to be characterized and proactive. Levels 4 and 5 are related to the management and the optimization of the development efforts and introduce more controlled processes. Our study is conducted to see where the Lebanese Software Companies stand from the application of standards in their development process; it shows that very few companies have well defined process development lifecycle where others are adopting ad-hoc practices for their activities. In the absence of real and effective quality measurement, most of the companies are relying on their after delivery services and good management work for their business. Limited initiatives directed by specific requests to apply international Quality Assurance/Quality Control tools were taken for the improvement of the software development and the application of the CMMI or other models. In this paper we present the quality control practices through the example of the Lebanese companies, the probability of applying international standardized process improvement tools during the early phases of the Development Life Cycle and finally we define a framework assuring all activities of the CMMI Process Areas of Maturity level 2. Such framework will allow companies to increase their productivity, reduce time to deliver a good quality product, thus increasing profit and customer satisfaction.
