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The Capability Maturity Model of Software or the (CMM), established in part by the Software Engineering Institute, the ISO 9000 series and standards, which was established by the International Standards Organization. Both groups share one if not many concerns with quality and process management. They are motivated by similar concerns and plausibly interact.

The function of this paper is to compare and to also contrast the CMM and ISO 9001. According to, Philip A. Laplante in What Every Engineer Should Know about Software Engineering, The Capability Maturity Model for Software describes the principles and practices as: "Underlying software process maturity and is intended to help software organizations improve the maturity of their software processes in terms of an evolutionary path from ad hoc, chaotic processes to mature, disciplined software processes (Laplante 147).

The CMM is organized into five maturity levels. Laplante defines the maturity level as, "A level in which a well-defined evolutionary plateau toward achieving a mature software process". In this article, each maturity level provides a level in the foundation footing for continuous growth. Below are the 5 levels of maturity from the CMM Institute: Initial: Unpredictable and reactive. Work gets completed but is often delayed and over budget. Managed: Managed on the project level.

Projects are planned, performed, measured, and controlled. Defined: Proactive, rather than reactive. Organization-wide standards provide guidance across projects, programs and portfolios. Quantitatively Managed: Measured and controlled. Organization is data-driven with quantitative

performanceimprovement objectives that are predictable and align to meet the needs ofinternal and external stakeholders. Optimizing: Stable and flexible. Organization is focused on continuous improvement and is built to pivot andrespond to opportunity and change. The organization’s stability provides aplatform for agility and innovation (CMMI®Institute 3).

These levels set goals or benchmarksfor the company to look forward to and to be able to make sure that the companyis staying competitive within the market. Not just currently but as timeprogresses and the company progresses over time. From these five steps or wellin this case the path, it can show the company the path they need to take awhere they currently stand.

As it grows the higher maturity levels it can reach. CMM and ISO 9000are not so different in terms of they are both providing instruction and guideson how to make sure the business is functioning to it’s highest potential. According it the internationalOrganization for Standardization, “ the ISO 9000 – Quality management addressesvarious aspects of quality management and contains some of ISO’s best knownstandards. The standards provide guidance and tools for companies andorganizations who want to ensure that their products and services consistentlymeet customer’s requirements, and that quality is consistently improved.

“ Some of the mainpoints that were outlined in QualityManagement Principles were the following:· An organization should achieve and sustain thequality of the product or service produced so as to meet continually thepurchaser’s stated or implied needs. · An organization should provide

confidence to its own management that the intended quality is being achieved and sustained. · An organization should provide confidence to the purchaser that the intended quality is being, or will be, achieved in the delivered product or service provided.

When contractually required, this provision of confidence may involve agreed demonstration requirements.