

ABSTARCT

Implementation & Analysis of CMMI's Advance Project Management Process Area Model

By: Syeda Umema Hani (MS CE-SW/2001/038, umema_hani@yahoo.com)

Under Supervision of Madam Mehnaz & Aqil Burney

Integrated business applications like Enterprise Resource Planning system (ERP) is a strategically important business tool for long-term success in an increasingly competitive global marketplace. Such systems require the integration of data and business processes across the Organization or whole Enterprise. Being a part of software development team we knows that such systems requires to achieve customers coordination and commitment from management, user and vendor down to the requirement level, and without detailed knowledge of their business and efficient control of requirements, implementers waste large amounts of time.

This arise a need for finding suitable Process or standard to follow which may cover all possible aspects of ERP's Project Management Processes because the quality of a product is largely determined by the quality of the processes that are used to develop and maintain it. For this purpose applying multiple models that are not integrated within and across an organization have proven useful to many organizations. But it has been problematic for those organizations that would like to focus their improvement efforts across the disciplines within their organizations it becomes more costly in terms of training, appraisals, and improvement activities. The differences among discipline-specific models, including their architecture, content, and approach, have limited these organizations ability to focus their improvements successfully. On the other hand CMMI presents a set of integrated models that successfully addresses multiple disciplines and has integrated training and appraisal support to solve these problems.

Objective of this thesis is to introduce and analyse an authentic suitable Process or standard for Software Project Management specially for ERP systems that will help the Projects Managers to control every side of implementation, enabling it to occur much faster, saving months, even years of valuable time by tracking vendor commitments and promises at the requirement level and tightly track performance and irregularities.

This thesis describes analysis and implementation of Advance Project Management Process Area (APMPA) of CMMI model, which includes set of processes and practical guidance that force Project Manager toward continuous process improvement of Enterprise Business for more reliable and higher-quality delivery of software products and services to the customers. This thesis describes and discusses each specific practice, which comes under each Individual sub process area of CMMI's APMPA using case study of General Internationals ERP system.