

Capability Maturity Model Integration (CMMI)



What is CMMI?

- CMMI (Capability Maturity Model Integration) helps in improvement in the quality of products and increase efficiency in development in hardware and software.
- The aim of the CMMI effort is to sustain process and product improvement
- It is used to bring down redundancy and carry off inconsistency
- It is experienced by those using many standalone models
- It incorporate disciplines such as systems engineering and software engineering.



How can CMMI help?

- CMMI helps by providing a way which helps hardware and software development from product origin through deployment and care.
- CMMI focus on better processes in an organization.
- CMMI models provide direction for development or amending processes that confirm to the business goals of an organization



CMMI Staged Representation





LEVEL NO	MATURITY LEVEL	PROCESS CHARACTERISTI CS	BEHAVIOUR S
LEVEL 1	Initial	Process is irregular, inadequately controlled and reactive	Focus on "fire fighting"; Strength is low- Defeat is high



LEVEL NO	MATURITY LEVEL	PROCESS CHARACTERIS TICS	BEHAVIORS
LEVEL 2	Managed	Process is qualified for projects and is frequently reactive	Over trust on experience of good peoplewhen they go, the process goes.



LEVEL NO	MATURITY LEVEL	PROCESS CHARACTE RISTICS	BEHAVIORS
LEVEL 3	Defined	Process is identified for the organization that is proactive	Desire on outlined process. People interpret, affirm and follow the process



LEVEL NO	MATURITY LEVEL	PROCESS CHARACTERIST ICS	BEHAVIORS
LEVEL 4	Quantitative ly managed	Process is deliberated and controlled	Greater sense of teamwork and mutuality



LEVEL NO	MATURITY LEVEL	PROCESS CHARACTERI STICS	BEHAVIORS
LEVEL 5	Optimizing	Focus is on uninterrupted quantitative betterment	Focus on "fire prevention"; improvement countered and trusted, and impacts measured.



Appraisals

- The standard appraisal method is SCAMPI (Standard CMMI Appraisal method for Process Improvement).
- Appraisal is divided into three classes-
- 1. SCAMPI A- Maturity or Capability Level Rating
- 2. SCAMPI B- User acceptance or test appraisal
- 3. SCAMPI C- Data collection tool and gap analysis



Benefits of CMMI?

- Customer satisfaction
- Efficiency
- Cost forecasting
- Risk management
- Supplier management
- Schedule
- Productivity
- Return on investment