**CMMI = *Capability Maturity Model Integration***

**The CMMI is a** **process improvement** **framework** that provides a structured approach for organizations to improve their processes and capabilities. **It was developed by the Software Engineering Institute (SEI) at Carnegie Mellon University in the 1990s and has since been widely adopted by organizations in a variety of industries.**

CMMI is a model that defines a set of **best practices** for software development, project management, and organizational management**. It consists of five levels of maturity, with Level 1 representing the lowest level of process maturity and Level 5 representing the highest.**

**An overview of the 5 levels of CMMI maturity:**

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| --- | --- |
| Initial  (**Level 1**): | * At this level, **no process is defined** or when it is defined, it is not controlled. * Organization at this level, **project success is depending on the capabilities of individuals**, not on using proven processes. |
| Repeatable/Managed  (**Level 2**): | * At this level, organization **have** **basic project management** **processes** to plan, monitor and control cost, schedule, and quality. * **Projects success** can be repeated but quality may differ from one project to another project. |
| Defined  (**Level 3**): | * At this level, organization **have** **well-defined** **procedures and standards** for development and maintenance. * Company’s specific procedures and standards are applied to all projects. |
| Quantitatively Managed  (**Level 4**): | * At this level, **software process performance and product quality data are collected.** * Any inappropriate variation will be investigated to make sure that it will not happened again. |
| Optimizing  (**Level 5**): | Organization at level 5 **focus on** **continuously process improvement** |

CMMI is designed to help organizations improve their project management processes in a structured and systematic way, **with the goal of increasing efficiency, reducing defects, and improving customer satisfaction**.