BITS Pilani
presentation

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Lecture No. 13

CMMI Capacity Levels

Maturity Level	Name	Description
Level 1	Initial	No structured process. Everything is ad hoc and chaotic.
Level 2	Managed	Projects follow basic project management practices.
Level 3	Defined	Organization-wide standards are used in all projects.
Level 4	Quantitatively Managed	Uses data and metrics to manage and control processes.
Level 5	Optimizing	Focus on continuous improvement using innovative ideas and feedback.

Difference from Maturity Levels:

- **Capability Levels** → Focus on **individual process areas**

Maturity Levels → Reflect the **organization as a whole**

Capability Level in CMMI (0–5)

Capability Levels are used in the **Continuous Representation** of CMMI to assess **how well a specific process area** is implemented.

📊 **Levels of Capability (0 to 5):**

Level	Name	Description
0	Incomplete	Process is not performed or only partially done.
1	Performed	Process is executed and delivers basic work products.
2	Managed	Process is planned, tracked, and has basic project management.
3	Defined	Process is standardized and tailored from organizational standards.
4	Quantitatively Managed	Process is controlled using quantitative data.
5	Optimizing	Focus on continuous improvement using feedback and innovation.

Example: Manufacturing Company

A car manufacturing company noticed delays in its assembly line. To improve efficiency, the company formed a **process improvement team** that included:

- A project manager

- A Six Sigma expert

- An operations specialist

Step 1:
The team **analyzed the process**, identified waste, and redesigned the workflow to minimize waiting time.

Step 2:
Once the new process was finalized, the **line workers (employees)** were trained on:

- New work methods

- How to use monitoring tools

- Reporting quality issues directly

Result:

- Workers felt **more responsible** and **confident**

- Assembly line delays were reduced

- Productivity and quality both improved

This shows how **empowering employees** with the right tools and training sustains long-term process improvement.

THANK YOU