

# Improve Control of Software Development with the CMM<sup>®</sup>

- Higher quality software
- Improved control of changing requirements
- Improved predictability of budgets and schedules
- Ability to meet project milestones
- Fewer errors
- Less Re-work
- More effective communication
- Improved traceability of project deliverables



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## What is the Capability Maturity Model®

The Capability Maturity Model (CMM®), developed by the Software Engineering Institute in the U.S. provides a 5-layer model for software process improvement. Each layer represents a different stage of maturity of an organisation's software process. Since its introduction in 1991, the CMM® has provided benefits to thousands of organisations worldwide. Most organisations are operating at levels 1 and 2, with a small number of organisations operating at the higher levels. An integrated model, the CMMI<sup>SM</sup> has been developed combining an updated version of the software CMM® with the other CMM® models.

CMM® is registered in the U.S. Patent & Trademark office  
CMMI<sup>SM</sup> is a service mark of Carnegie Mellon University

## Using the CMM® to meet your Business Need

The needs of each organisation will vary depending on their business requirements, size and culture. Some organisations may have a business requirement to be formally assessed at a particular CMM® Level. However, many organisations may use the CMM® Model for internal process improvement without ever going for formal assessment. We focus on helping organisations to implement the CMM® to meet their individual business needs.

### Optimising Level (5)

The focus is on continuous improvement, defect prevention and process optimisation.

### Managed Level (4)

A comprehensive measurement programme is introduced and used to manage the software process. Performance is measured and controlled within defined limits. Measurable goals are established for software product quality

### Defined Level (3)

An organisation wide process is introduced. Procedures are introduced for all Software Engineering activities. A high emphasis is placed on peer reviews for the early identification of errors.

### Repeatable Level (2)

Organisations learn from previous experiences of carrying out similar work. Effective controls are introduced in the areas of Project Planning and Tracking, Requirements Management, Configuration Management, Software Quality Assurance and Subcontract Management

### Initial Level (1)

Organisations are struggling with basic management issues. Software is developed on an ad-hoc basis with few formal controls in place. Success is dependent on key individuals or "Heroes".

## CMM® Maturity Levels

We provide a wide range of services to assist organisations in the implementation of the CMM® Model.

### Training

Effective training is central to the implementation of a successful software process improvement programme. Our comprehensive training programme covers a variety of topics relevant to the CMM and the CMMI<sup>SM</sup>.



### Consultancy

Each organisation's business needs are unique. The needs of a small organisation will vary greatly from the needs of a larger organisation. We carry out individual consultancy assignments to assist organisations in the implementation of CMM® based process improvements based on their individual business needs.



### Software Process Assessments

Our assessment service covers both informal mini assessments and formal assessments (carried out in conjunction with an SEI accredited organisation). All our CMM® consultants are trained CMM® assessors.



## CMM® Training

Our comprehensive training programme covers a wide range of topics, assisting organisations in the development of a complete skillset to effectively implement the CMM® Model. This includes:

<b>General CMM® Training</b>	Software Process Improvement Approaches Implementing the CMM® to suit your business needs
<b>CMM® Level 2</b>	Requirements Management Project Management Fundamentals Project Management Frameworks Risk Management Software Estimation Configuration Management
<b>CMM® Level 3</b>	Tmap – A structured approach to Software Testing Software Inspections Individual coaching

All our training courses are interactive and workshop based, with a high emphasis on practical exercises to encourage delegates to apply the concepts learned in class to their individual business needs. Our courses are available both as part of our public schedule of events and also on an in-house basis.

## Consultancy

We have worked actively with organisations in a variety of sectors including telecommunications, software development and in-house IT departments. Examples of the type of support we have provided include:

- Helping organisations to kick-start the process improvement programme, facilitating workshops on software process improvement etc.
- Carrying out a mini assessment to identify the organisations strengths and weaknesses
- Helping organisations to plan and implement process improvements
- Helping organisations to understand how to translate the key practices of the CMM® into effective improvements that are suitable to the organisations size and culture and that meet the organisations business needs.

## Cluster programme

Small Company Action Training and Enabling (Scate) is a training and mentoring programme specifically designed to help small organisations improve their management of software development.

Using a 'cluster based' approach, Scate provides a forum for organisations with a common goal to meet on a regular basis allowing them to share experiences and to keep up the momentum for process improvement.

Scate is comprised of 3 essential elements to ensure that each participating organisation implements a software process improvement programme that really works:

- Training: to provide the champion with the skills necessary to implement a successful SPI programme
- Project Implementation: to apply the concepts learned in class to meet the business needs of the organisation
- Mentoring: to provide support and assistance in the implementation of the SPI programme.

The training will be supplemented by individual mentoring support to assist delegates in the implementation of an SPI programme that meets their business goals.

## For More Information

If you would like to know more about any of our services please contact us at:

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