

# AGILE METHODS

- ◆ eXtreme Programming, SCRUM, Crystal Methods, Adaptive S/W Development, Dynamic System Development Methods , Rapid Application Development RAD
- ◆ Perspective opposite to CMM
- ◆ Aims for flexibility since: requirements, infrastructure, technology, competitors are all changing at 10% a month



# The Agile Manifesto

- ◆ Individuals and Interactions are more important than CMM, ISO, SPICE etc
- ◆ Working software is better than documentation
- ◆ Customer collaboration is better than contract negotiation
- ◆ Responding to change is better than following a plan

# Manifesto continued

- ◆ Aim to satisfy the customer by delivering early software
- ◆ We welcome changing requirements even late in the project
- ◆ We deliver working software frequently eg every 2 weeks or every 2 months
- ◆ Business people and developers must work together daily
- ◆ We build projects around motivated individuals

# Manifesto continued

- ◆ Face to face conversation is the best way to convey information
- ◆ Working software is the primary measure of progress
- ◆ Agile processes promote sustainable development, staff do not burn out
- ◆ Aim for technical excellence
- ◆ Simplicity : YAGTNI ‘you aren’t going to need it’



# Manifesto continued



- ◆ Best architectures, requirements and designs emerge from self organising teams
- ◆ At regular intervals team reflects on how to become more effective

# eXtreme Programming

- ◆ Take known good practices and push them to the extreme
- ◆ Code reviews are continuous, coder and navigator work together on a workstation
- ◆ Test all the time
- ◆ Design all the time
- ◆ Avoid superfluity
- ◆ Redefine architecture every day, ‘refactoring’ in OO devt.

# eXtreme programming continued

- ◆ New versions are very frequent
- ◆ Keep customers around all the time
- ◆ 40 hour week
- ◆ Coding standards make up for lack of documentation
- ◆ Collective ownership
- ◆ Continuous re-integration , keep doing regression tests