Agile Models

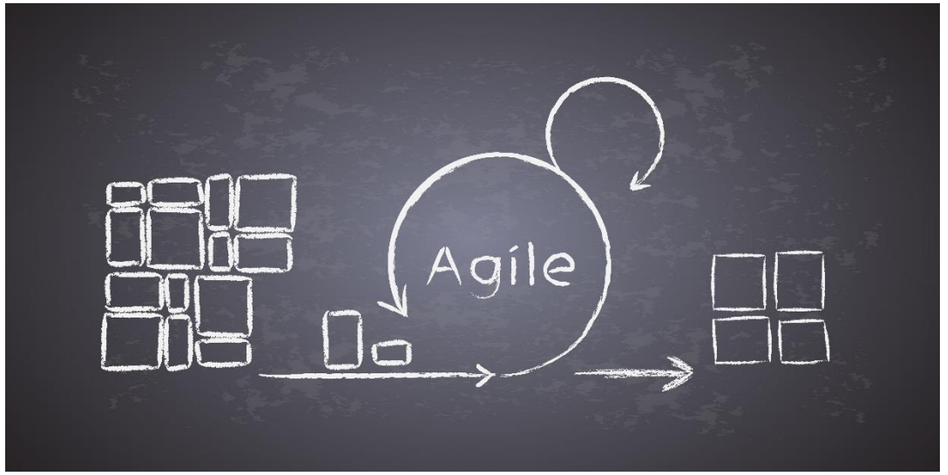
Introduction To **Agile Models**

AGILE MODELS > OBJECTIVES

- Explain Agile SDLC models
- List some agile methods
- List key principles of agile models
- Compare different SDLC models

AGILE MODELS > DESCRIPTION

- Agile means quick and light
- Also the ability to create and respond to change in order to succeed in an uncertain and turbulent environment
- Driven by customer descriptions of what is required (scenarios / user stories)
- Recognizes that plans are short-lived
- Develops software iteratively with a heavy emphasis on construction activities
- Delivers frequent, multiple ‘software increments’
- Adapts as the changes occur



AGILE MODELS > METHODS

Methods are focused on different aspects of the SDLC, some focus on the practices (XP), while others focus on managing the projects (E.g. Scrum).

Extreme Programming (XP)

- Advocates frequent "releases" in short development cycles
- Improves productivity and introduces checkpoints at which new customer requirements can be adopted

Scrum

- Organized small working teams
- The process produces frequent software increments

AGILE MODELS > AGILE MANIFESTO

Uncovering better ways of developing software by doing it and helping others do it

Individuals and interactions	over	processes and tools
Working software	over	comprehensive documentation
Customer collaboration	over	over contract negotiation
Responding to change	over	following a plan

While there is value in the items on the right, we value the items on the left, more.

Source: http://www.agilemanifesto.org/

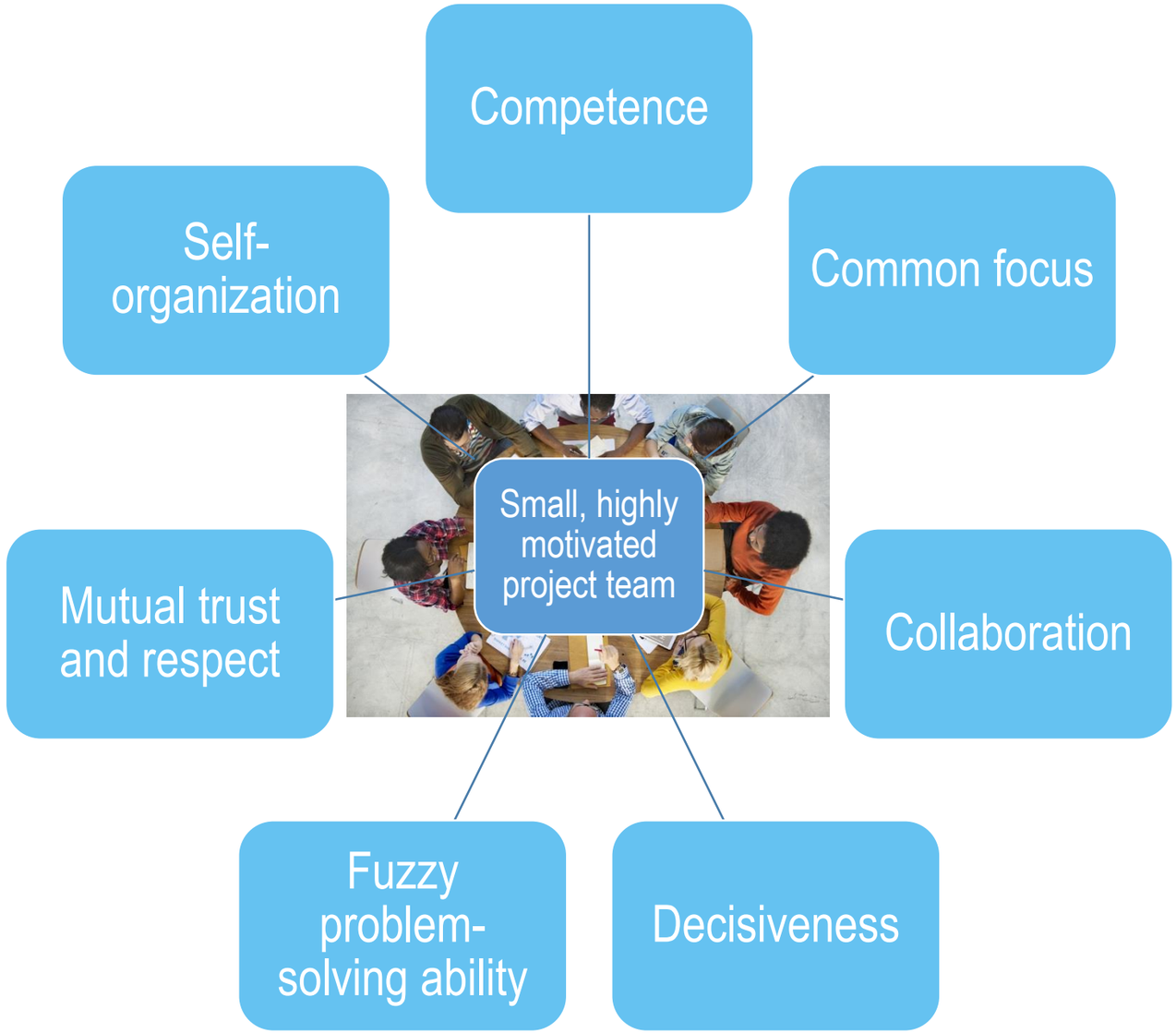
AGILE MODELS > KEY PRINCIPLES

- (Customer) Satisfaction and delivery – through continuous working software
- Welcoming change – even at the later stages of development
- Deliver frequently – weekly rather than monthly
- Communication is the key – between developers and business people
- Environment and trust – give necessary support & trust motivated individuals

AGILE MODELS > KEY PRINCIPLES

- Face-to-face communication – to ensure effective & efficient communication
- Software as measures of progress – working software is the primary measure of progress
- Attention to details – to technical excellence and good design
- Power of less – keeping it simple
- Self-organizing teams – to become effective in changing circumstances

AGILE MODELS > AGILE TEAM CHARACTERISTICS



AGILE MODELS > WHEN TO USE

- Need for frequent delivery of incremental software
- Need for good quality software modules in quick successions
- Requirements are changing frequently
- High level of customer involvement and satisfaction
- Communication among stakeholders is important

AGILE MODELS > COMPARISON OF SDLC MODELS