Agile Software Project Management

Agile?

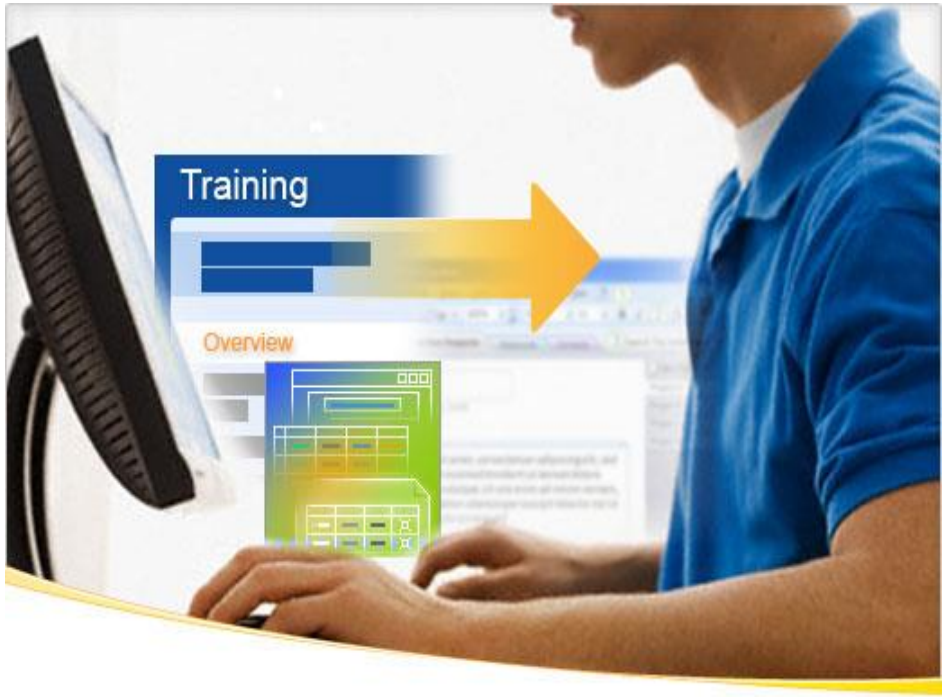
- Agile is used to denote the ability of ***Agile*** Methods to respond to changing requirement in a ***controlled*** but ***flexible*** manner
  - Agile methodologies can equip experienced Project Managers with new tools to manage projects that are set in environments of *constant change*.

APM- Why

- Increased Consumer Expectations:
  - **As consumers today** we want and expect innovative products: *faster*, *cheaper* and with *better quality* than those we've seen in the past.

APM- Why

- Increased Work Pressure:
  - **As knowledge workers**, our business tools have improved our *capability to be productive*, raising work expectations.



Why APM

- Traditional Project Management Practices *can* Lead to:
  - Chaos – Junior Project Managers tend to either:
    - allow too much uncontrolled changed to take place (to ensure customer satisfaction) or
    - are too strict in allowing for change (resulting in irate customers).
  - Dramatic Project Underperformance – According to the Standish Group's *Chaos Reports*, only 25 percent of IT projects are successful, the remainder are:
    - Late.
    - Over Budget.
    - Deliver only a fraction of original scope in order to meet budget restrictions.
    - Cancelled.

Traditional PM versus Agile Methods

- Traditional PM Approach
  - Concentrates on thorough, upfront planning of the entire project.
  - Requires a high degree of predictability to be effective.
- Agile Project Management (Agile PM)
  - Relies on incremental, iterative development cycles to complete less-predictable projects.
  - Is ideal for exploratory projects in which requirements need to be discovered and new technology tested.
  - Focuses on active collaboration between the project team and customer representatives.

Traditional PM versus Agile Methods

Traditional	Agile
Design up front	Continuous design
Fixed scope	Flexible
Deliverables	Features/requirements
Freeze design as early as possible	Freeze design as late as possible
Low uncertainty	High uncertainty
Avoid change	Embrace change
Low customer interaction	High customer interaction
Conventional project teams	Self-organized project teams

Change in focus

- Traditional PM focus on requirements to set the scope, and then concentrates on delivering those requirements
- In Agile we focus on delivering value and are constantly questioning the scope

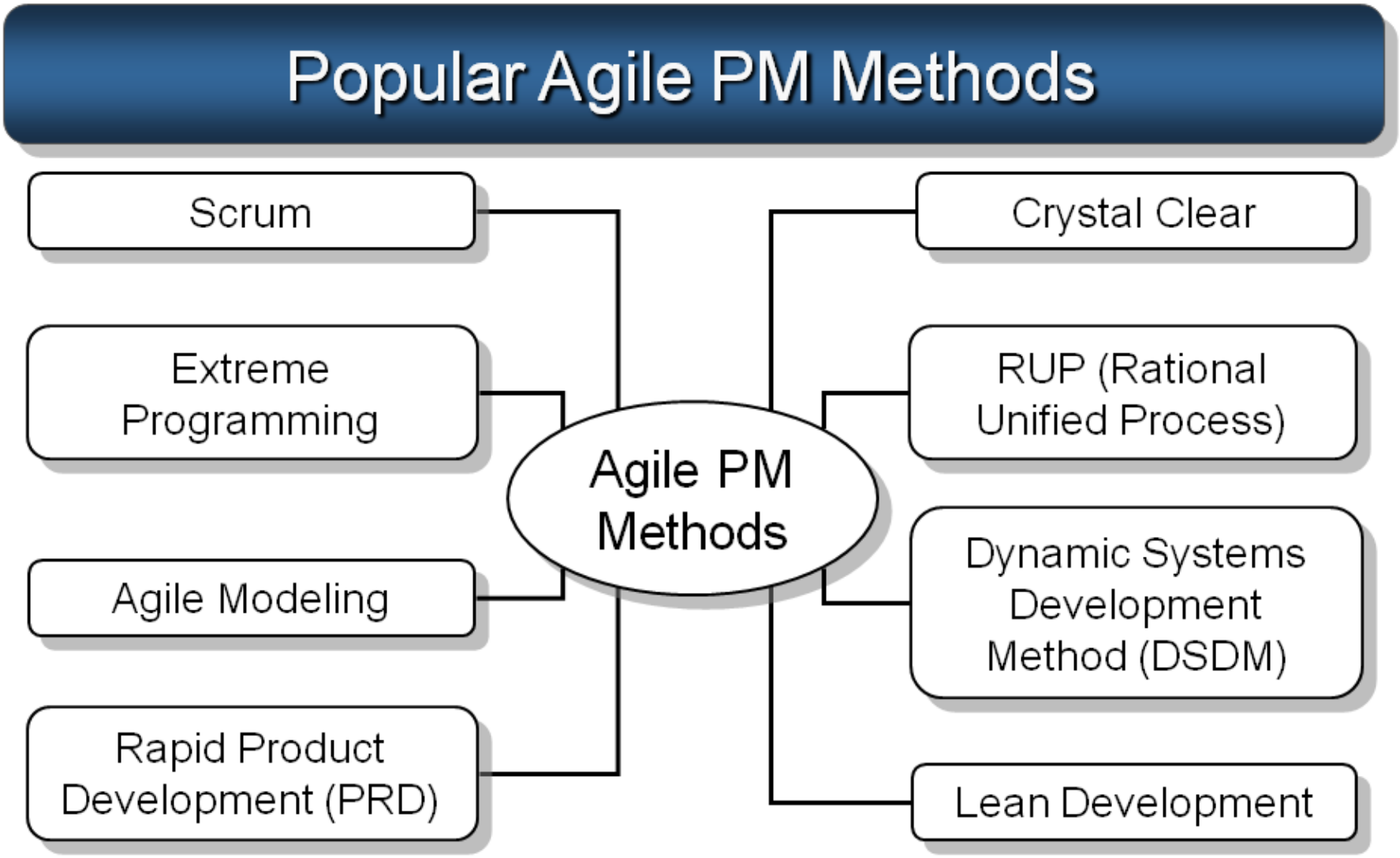
What is different about Agile Methods?

- Short iterations:
  - used to keep the feedback flowing (allowing for increased responsiveness to change and reducing the risk of building the wrong thing).
- Open, Flexible and Extensive:
  - design using open standards whenever possible
- Empowered Teams:
  - Experienced specialists are encouraged to work out the detail design on their own.
- Personal Communication:
  - Rather than relying on written documentation to communicate design decisions, technical approaches and other typically documented items, agile method suggest that the team work in the same physical space (co-location).
    - Use of white boards in the work area is encouraged rather than lengthy formal detail design documentation.

The Benefits of Being Agile

- **Reducing Risk** – The benefits from improved control and improved communication lead to reduced risks. Examples of risks include:
  - **Risk of building (or doing) the wrong thing.**
    - Did the sponsor get what they asked for but not what they actually wanted?
  - **Risk of building the right thing poorly.**
    - For example, was the product poorly crafted. Was it thoroughly tested as a part of each iteration? Is the final produce extensible?
  - **Risk of being placed into an endless cycle of design updates and reviews**
    - due to changing requirements or high levels of complexity

The Agile Landscape



The Agile Landscape

Agile PM Principles

- Focus on customer value
- Iterative and incremental delivery
- Experimentation and adaptation
- Self-organization
- Continuous improvement