



# AGILE PROJECT MANAGEMENT

# 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.

# A BERIFE COMPARISION

## Traditional

Design up front

Fixed scope

Deliverables

Freeze design as early as possible

Low uncertainty

Avoid change

Low customer interaction

Conventional project teams

## Agile

Continuous design

Flexible

Features/requirements

Freeze design as late as possible

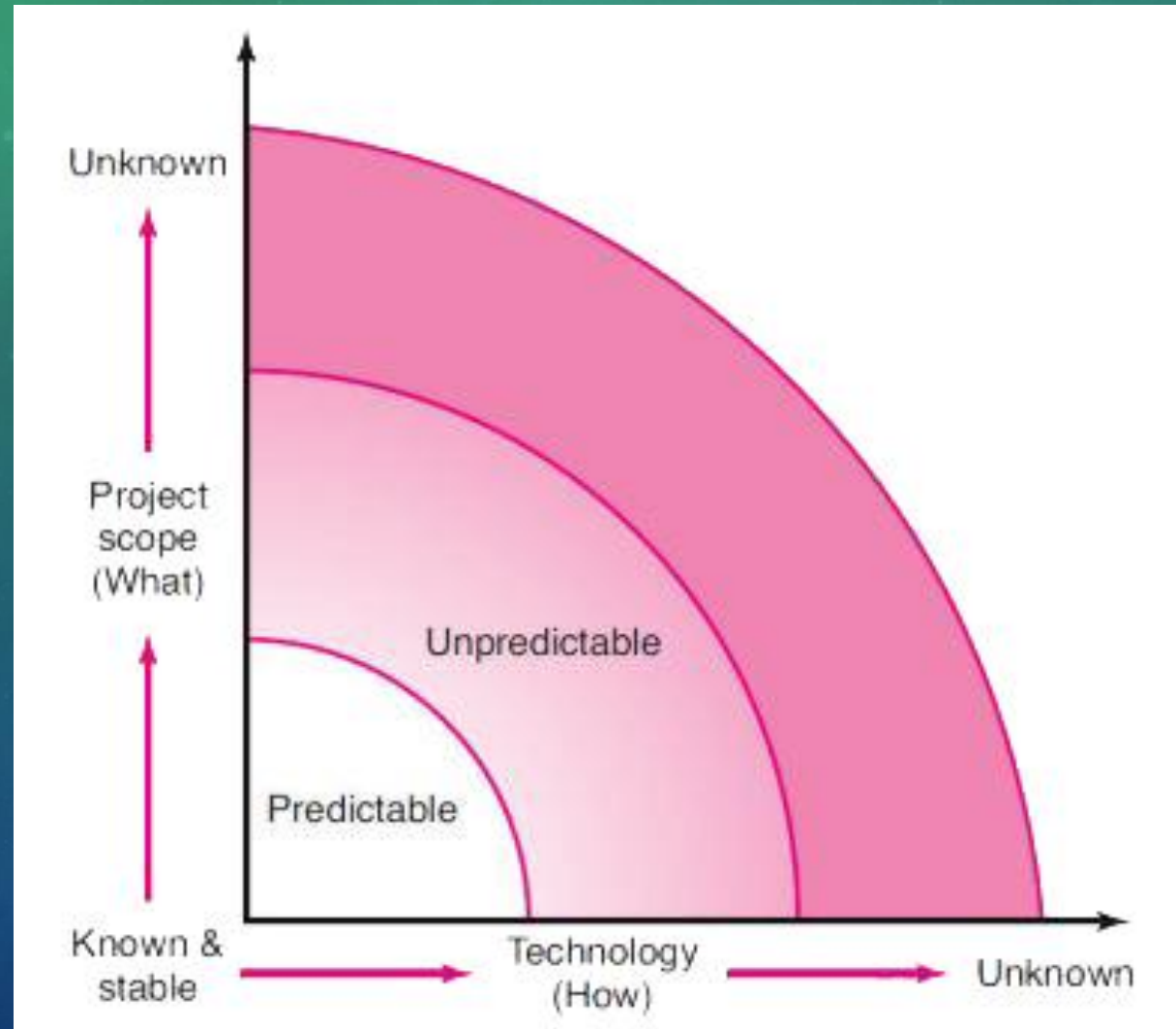
High uncertainty

Embrace change

High customer interaction

Self-organized project teams

# PROJECT UNCERTAINTY

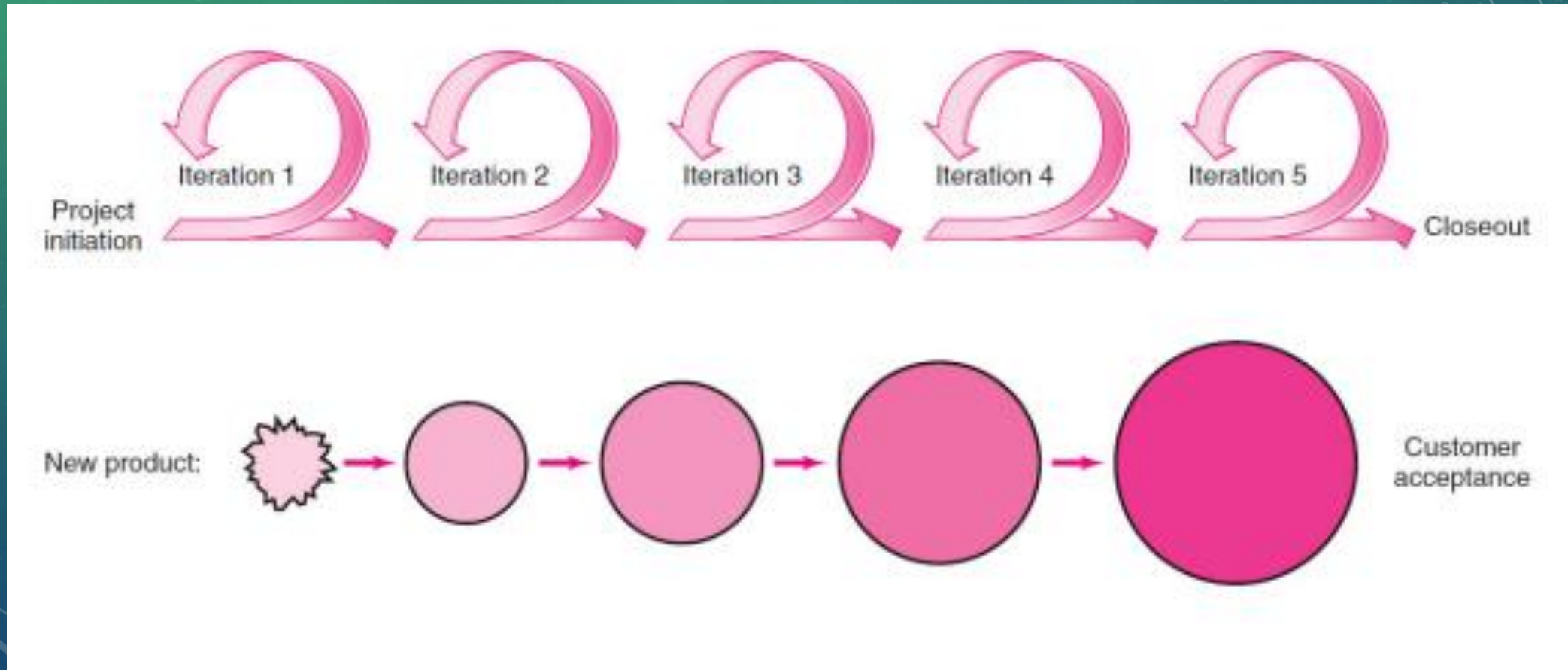




# AGILE PROJECT MANAGEMENT

- Agile PM –
- Is related to the rolling wave planning and scheduling project methodology.
- Uses iterations (“time boxes”) to develop a workable product that satisfies the customer and other key stakeholders.
- Stakeholders and customers review progress and re-evaluate priorities to ensure alignment with customer needs and company goals.
- Adjustments are made and a different iterative cycle begins that subsumes the work of the previous iterations and adds new capabilities to the evolving product

# ITERATIVE, INCREMENTAL PRODUCT DEVELOPMENT





## • ADVANTAGES OF AGILE PM:

- Useful in developing critical breakthrough technology or defining essential features
- Continuous integration, verification, and validation of the evolving product.
- Frequent demonstration of progress to increase the likelihood that the end product will satisfy customer needs.
- Early detection of defects and problems.

# AGILE PM PRINCIPLES

Focus on customer value

Iterative and incremental delivery

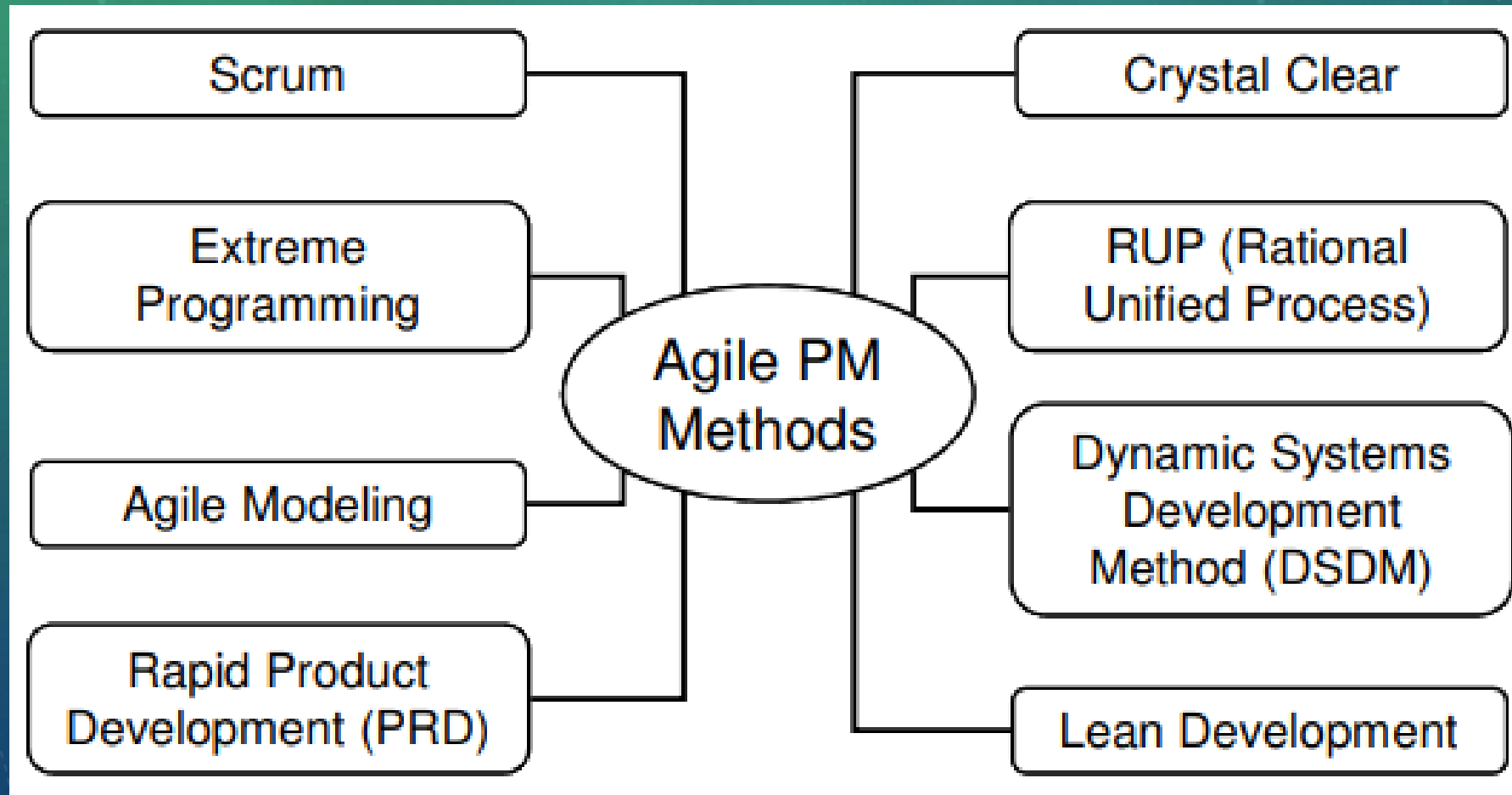
Experimentation and adaptation

Self-organization

Continuous improvement



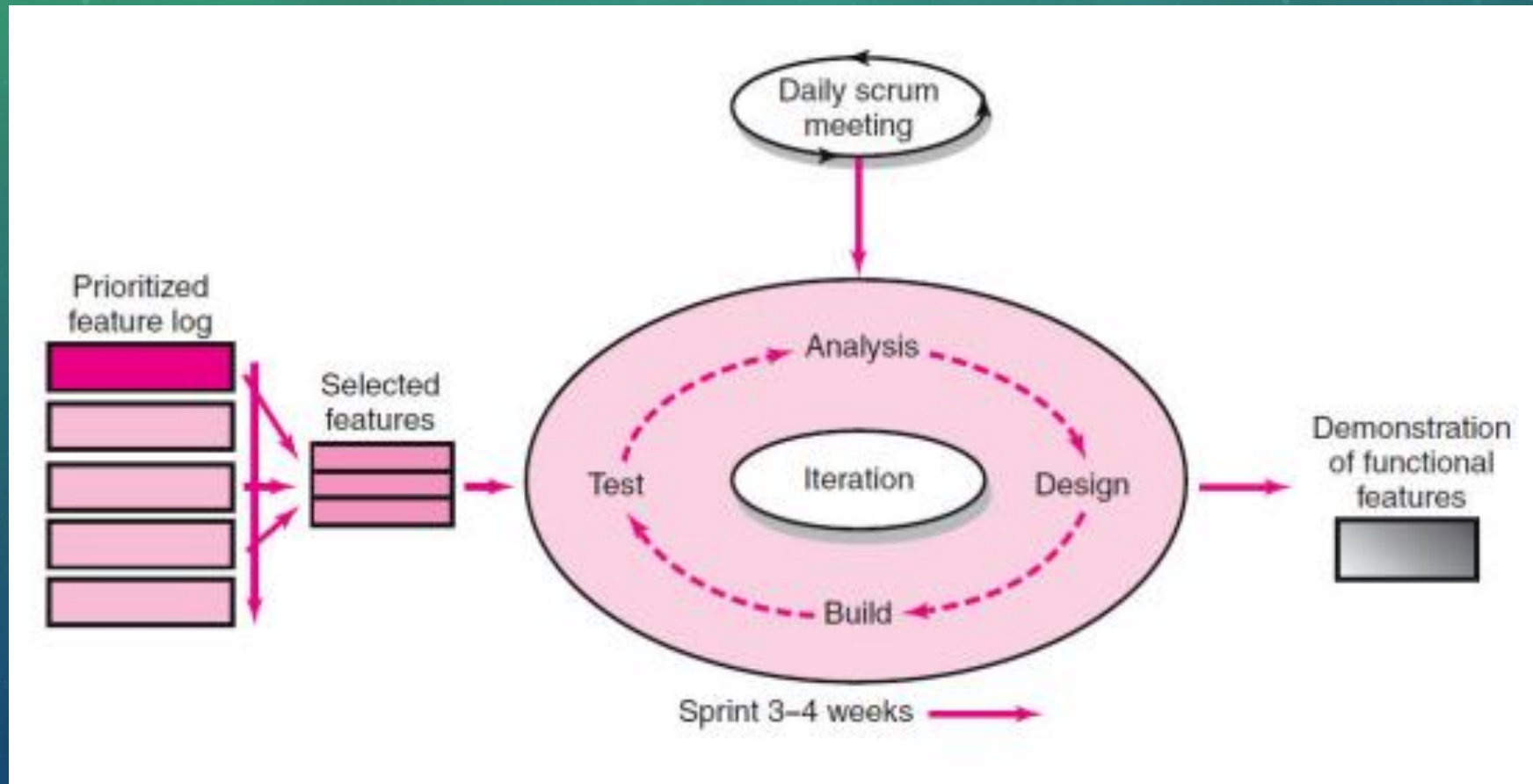
# POPULAR AGILE PM METHODS



# AGILE PM IN ACTION: SCRUM

- –Is a holistic approach for use by a cross-functional team collaborating to develop a new product.
- –Defines product features as deliverables and prioritizes them by their perceived highest value to the customer.
- –Re-evaluates priorities after each iteration (sprint) to produce fully functional features.
- –Has four phases: analysis, design, build, test

# SCRUM DEVELOPMENT PROCESS

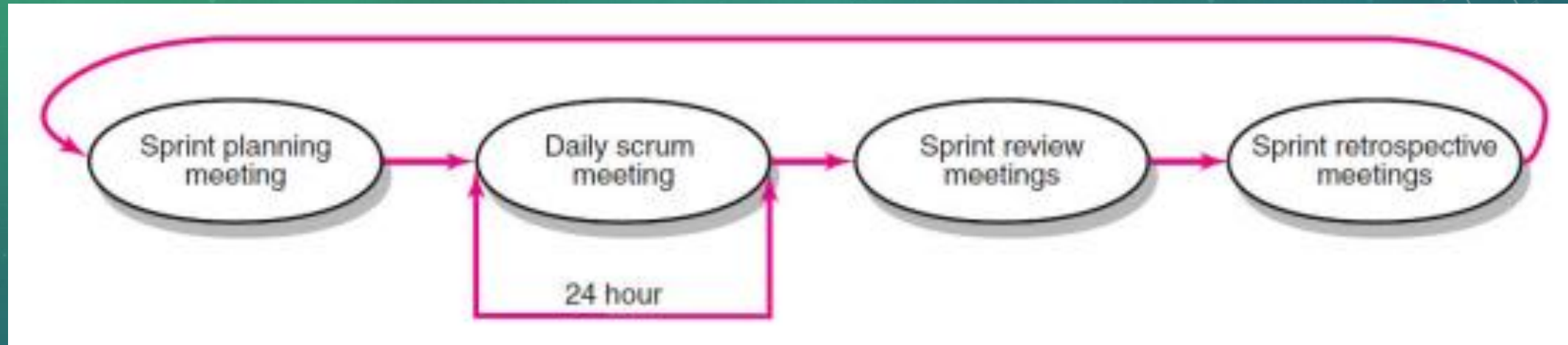


# KEY ROLES AND RESPONSIBILITIES IN THE SCRUM PROCESS

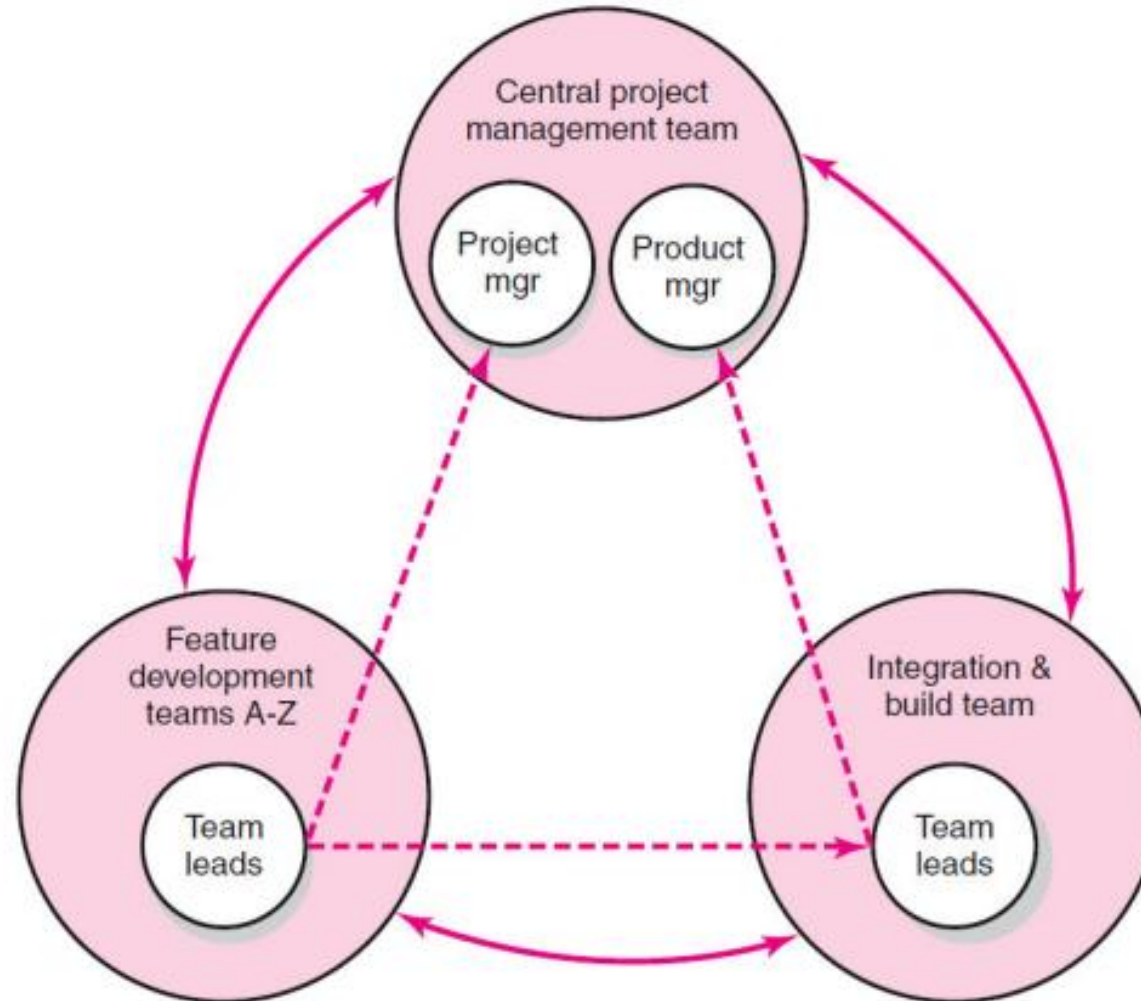
- • Product Owner –Acts on behalf of customers to represent their interests.
- • Development Team –Is a team of five-nine people with cross-functional skill sets is responsible for delivering the product.
- • Scrum Master (aka Project Manager) –Facilitates scrum process and resolves impediments at the team and organization level by acting as a buffer between the team and outside interference.



# SCRUM MEETINGS



# Hub Project Management Structure



# LIMITATIONS AND CONCERNS OF AGILE PM

- It does not satisfy top management's need for budget, scope, and schedule control.
- Its principles of self-organization and close collaboration can be incompatible with corporate cultures.
- Its methods appear to work best on small projects that require only five-nine dedicated team members to complete the work.
- It requires active customer involvement and cooperation.