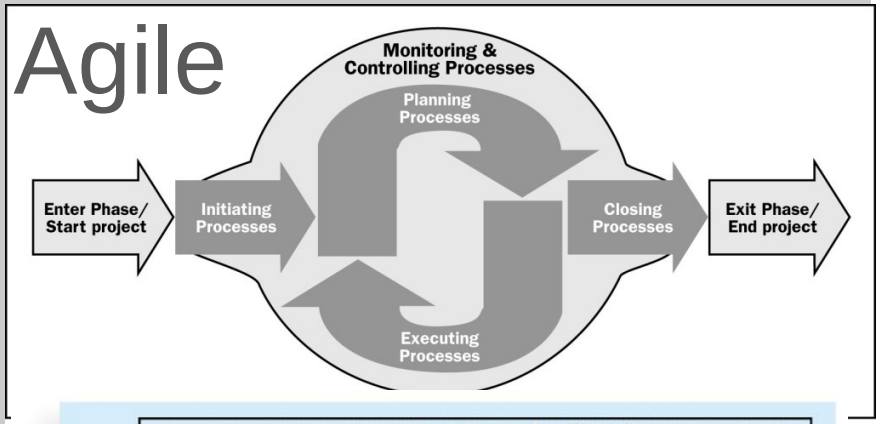
MONASH University

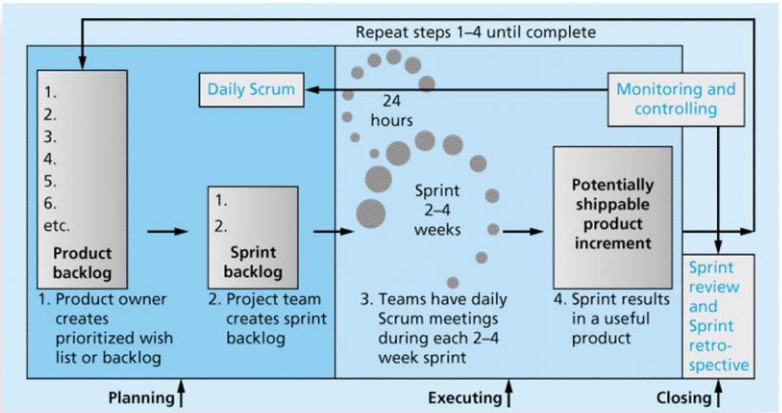
GROUP OF EIGHT AUSTRALIA

Information Technology

FIT2002 Week 11 Seminar

Project Management Process Group and Agile





Recap from Video 1:

- Project management involves a number of interlinked processes.
- The five project management process groups are initiating, planning, executing, monitoring and controlling, and closing.
- Normally the executing processes require the most resources and time, followed by the planning processes.
- Mapping the main activities of each project management process group into the 10 project management knowledge areas provides a big picture of what activities are involved in project management.
- Some organizations develop their own IT project management methodologies, often using the standards in the PMBOK® Guide as a foundation.
- It is important to tailor project management methodologies to meet the organization's particular needs. Popular methods like PRINCE2, Agile, RUP, and Six Sigma include project management processes.

Schwalbe, K.. (2015). Information Technology Project Management. (8e) Cengage Learning

Mapping Project Management Process Groups to Knowledge Areas*

Knowledge Areas	Project Management Process Group				
	Initiating	Planning	Executing	Monitoring & Controlling	Closing
Project Integration Management	1. Develop Project Charter	2. Develop Project Management Plan	3. Direct & manage project work 4. Manage Project Knowledge	5. Monitor & control project work	6. Close Project or Phaase
Project Scope Management		1. Plan Scope Management 2.. Collect requirements 3. Define Scope 4. Create WBS		5. Validate Scope; 6. Control Scope	
Project Schedule Management		1. Plan Schedule Management 2. Define Activities 3. Sequence Activities 4. Estimate Activity Durations 5. Develop Schedule		6. Control Schedule	
Project Cost Management		1. Plan Cost Management 2. Estimate Costs 3. Determine Budget		4. Control Costs	

Source: PMBOK® Guide, Sixth Edition, 2017.

Continued…

Knowledge Areas	Project Management Process Group				
	Initiating	Planning	Executing	Monitoring & Controlling	Closing
Project Quality Management		1. Plan Quality Management	2. Manage Quality	3. Control Quality	
Project Resource Management		1. Plan Resource Management 2. Estimate Activity Resources	3. Acquire Resources 4. Develop Team 5. Manage Team	6. Control Resources	
Project Communication Management		1. Plan Communications Management	2. Manage Communications	3. Monitor Communications	
Project Risk Management		1. Plan Risk Management 2. Identify Risks 3. Perform Qualitative Risk Analysis 4. Perform Quantitative Risk Analysis 5. Plan Risk Responses	6. Implement Risk Responses	7. Monitor Risks	
Project Procurement Management		1. Plan Procurement Management	2. Conduct Procurements	3. Control Procurements	
Project Stakeholder Management	1. Identify Stakeholders	2. Plan Stakeholder Management	3. Manage Stakeholder Engagement	4. Monitor Stakeholder Engagement	

Source: PMBOK® Guide, Sixth Edition, 2017.

Process Group Interact in a Phase

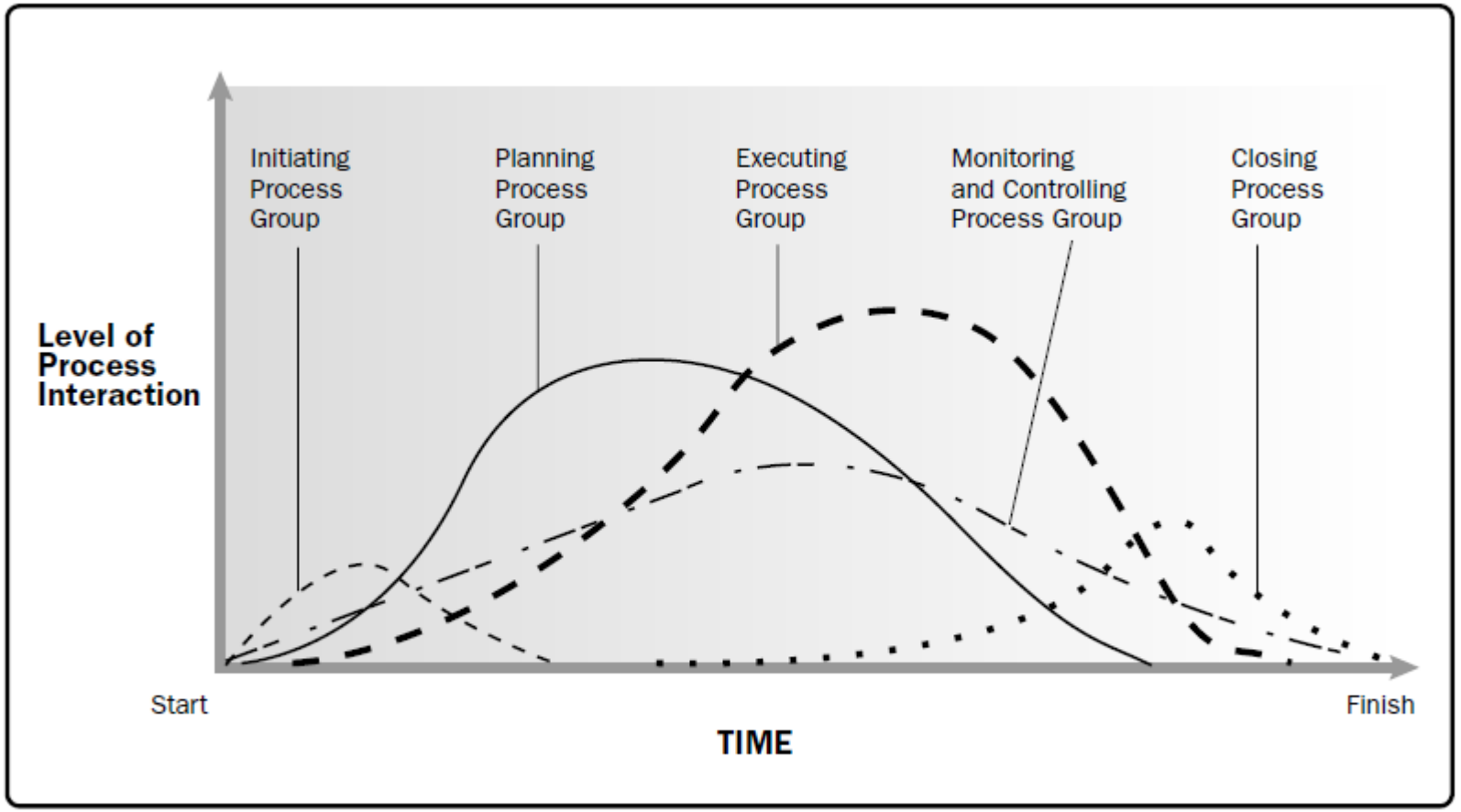
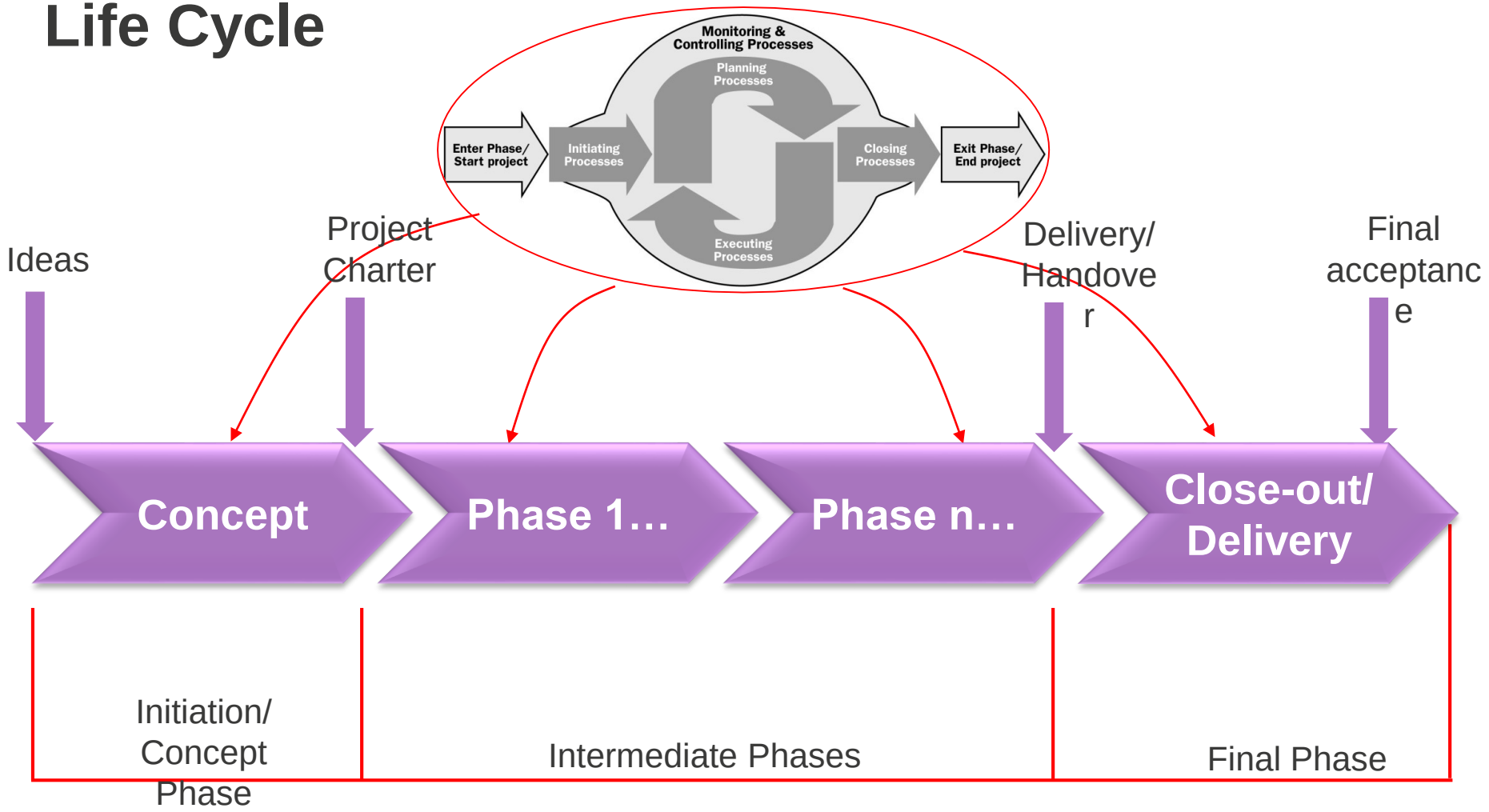


Figure 3-2. Process Groups Interact in a Phase or Project

*Source: PMBOK® Guide, Fifth Edition, 2013.

Process Groups Repeating Along the Project Life Cycle



Recap from Video 2:

- The JWD Consulting case study demonstrates how one organization managed an IT project from start to finish.
- The case study provides several samples of outputs produced for initiating, planning, executing, monitoring and controlling, and closing:
  - Business case
  - Stakeholder register
  - Stakeholder management strategy
  - Project charter
  - Kick-off meeting agenda
  - Team contract
  - Work breakdown structure
  - Gantt chart
  - List of prioritized risks
  - Milestone report
  - Progress report
  - Lessons-learned report
  - Final project report

Recap from Video 3 & 4:

- The second version of the same case study illustrates how to use **Scrum**, the leading agile method, to manage the project.
- Instead of releasing the new intranet software just once near the end of the project, the team could release three iterations of the software.
- This version of the case study introduced some new tools, including a product backlog, sprint backlog, and burndown chart.

Schwalbe, K.. (2015). Information Technology Project Management. (8e) Cengage Learning

Types of Life cycle

- **Predictive life cycle**: A more traditional approach, with the bulk of planning occurring upfront, then executing in a single pass; a sequential process
- **Iterative life cycle**: An approach that allows feedback for unfinished work to improve and modify that work.
- **Incremental life cycle**: An approach that provides finished deliverables that the customer may be able to use immediately
- **Agile life cycle**: An approach that is both iterative and incremental to refine work items and deliver frequently.

Life Cycles Characteristics

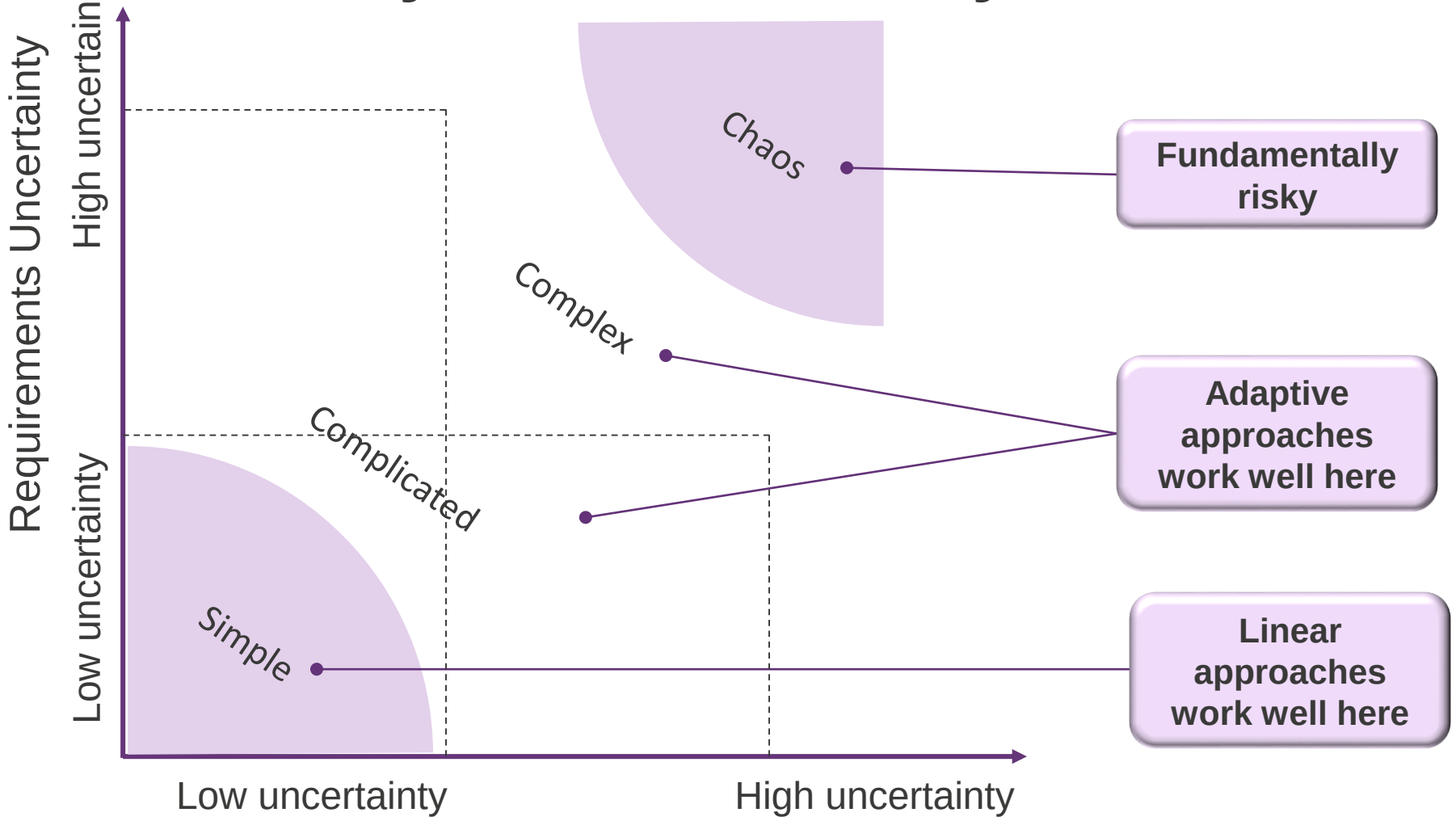
Table 3-1. Characteristics of Four Categories of Life Cycles

Characteristics				
Approach	**Requirements**	**Activities**	**Delivery**	**Goal**
Predictive	Fixed	Performed once for the entire project	Single delivery	Manage cost
Iterative	Dynamic	Repeated until correct	Single delivery	Correctness of solution
Incremental	Dynamic	Performed once for a given increment	Frequent smaller deliveries	Speed
Agile	Dynamic	Repeated until correct	Frequent small deliveries	Customer value via frequent deliveries and feedback

Definable Work vs High Uncertainty Work

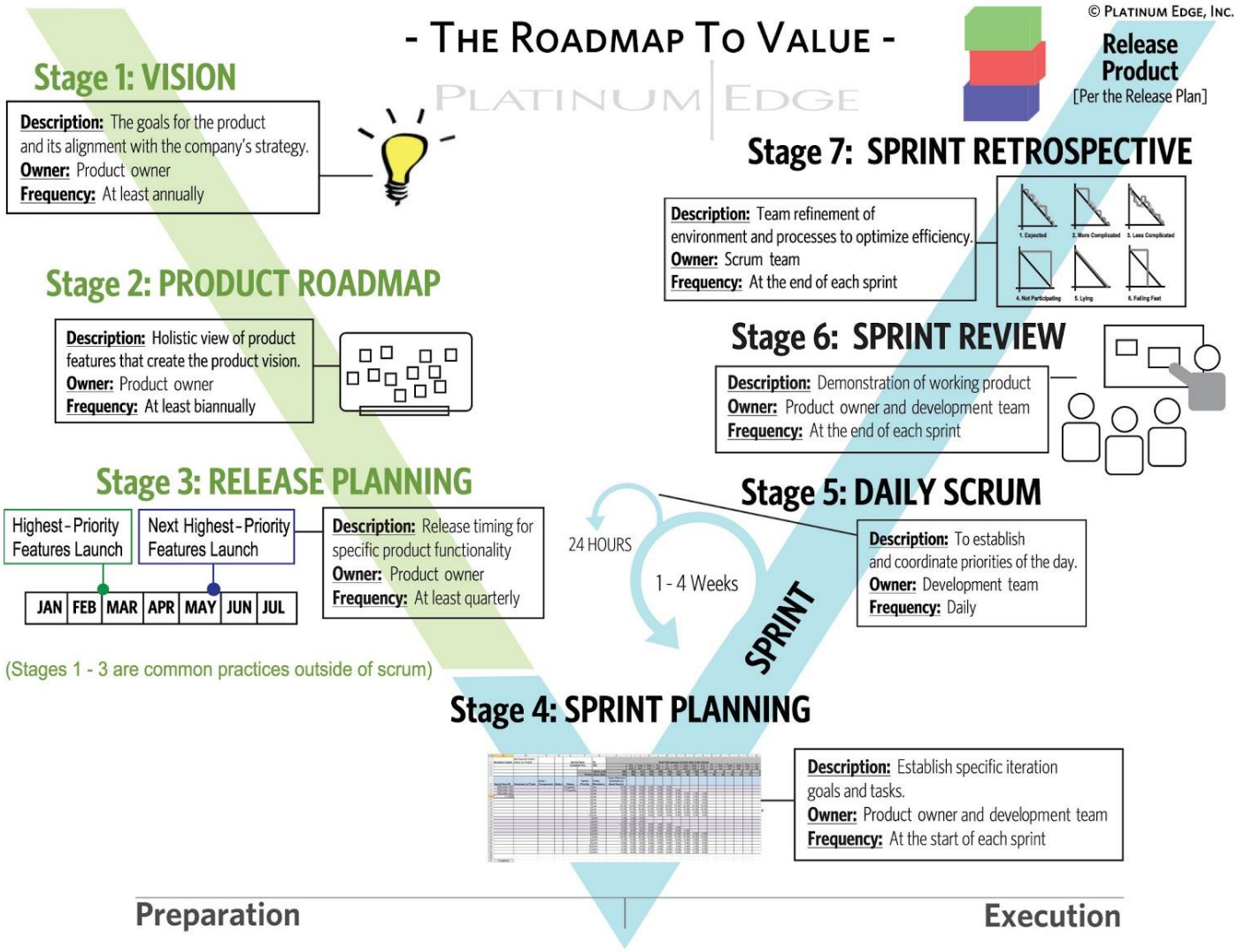
- Definable work projects:
  - characterised by clear procedures that have been proven successful on similar projects in the past
  - Low levels of execution uncertainty and risk
- High uncertainty projects:
  - New design, problem solving and not-done-before work is exploratory
  - High rates of change, complexity and risk
  - May pose a problem for traditional predictive approaches

Uncertainty, Risk and Life Cycle Selection

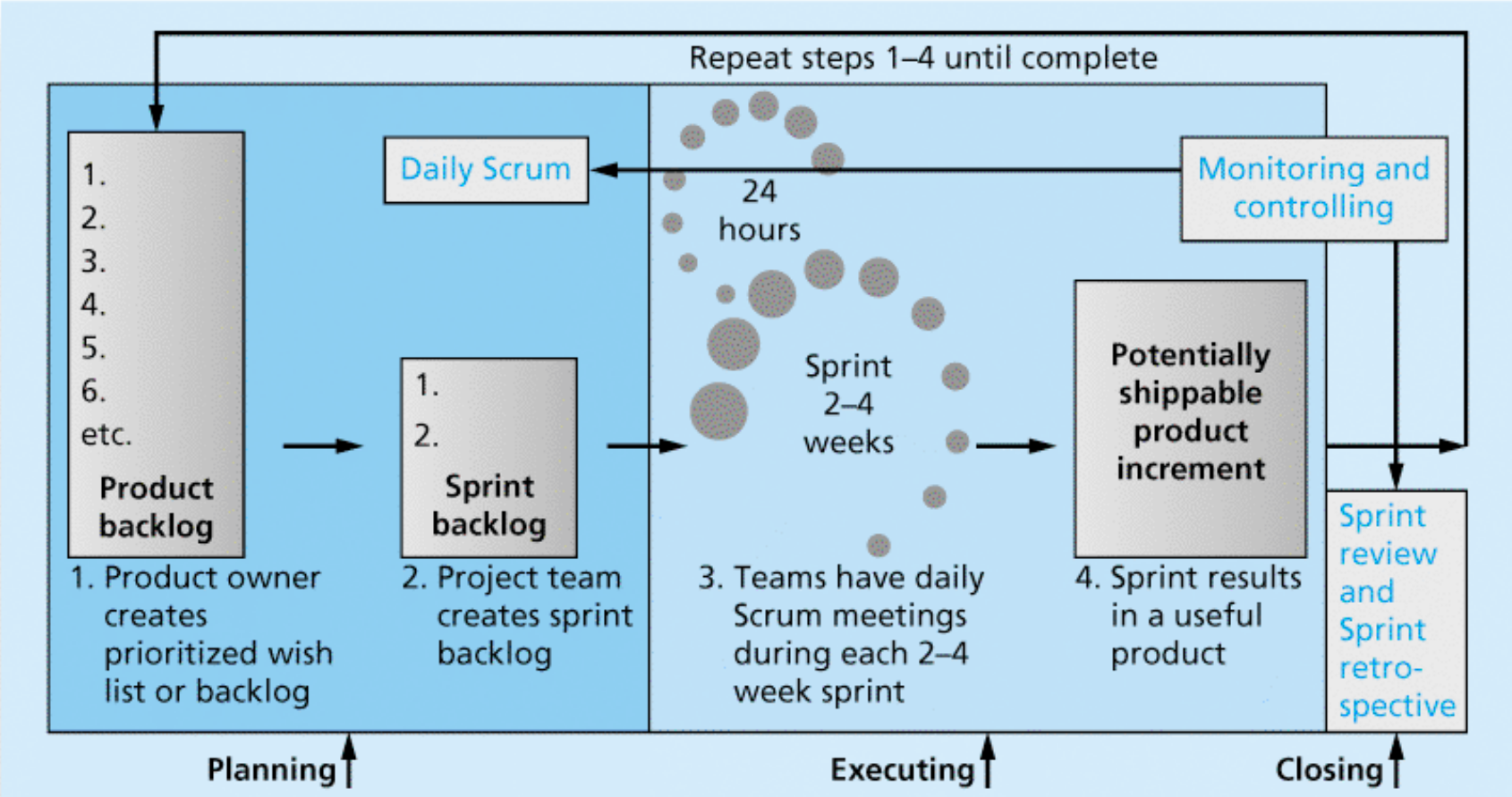


PMBOK Guide/Agile Practice Guide (2017), Project Management Institute Inc.

An Agile Roadmap



Scrum Framework and the Process Groups



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