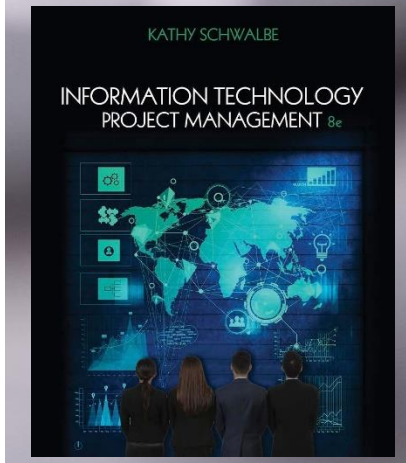
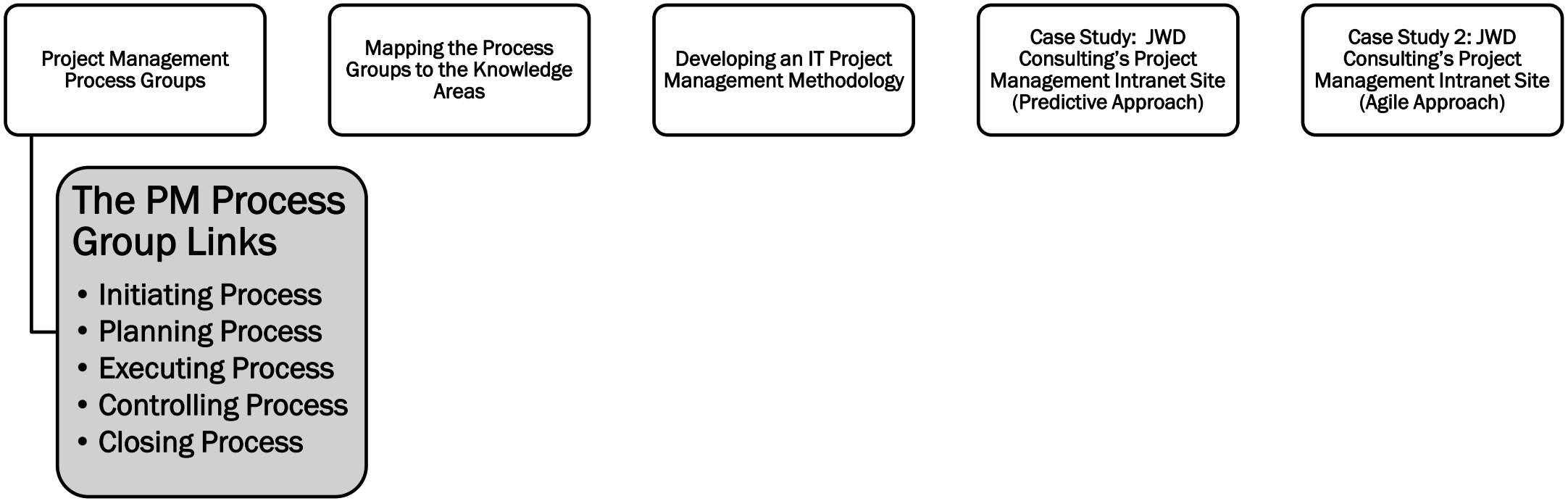
IT PROJECT MANAGEMENT

WEEK 3 : PROJECT MANAGEMENT PROCESS GROUP



Note:
Adapted from slide of the textbook: Schwalbe, Kathy. Managing Information Technology Project – Eight Edition. Boston, MA: Thomson Course Technology, 2016.
See the text itself for full citations.

MIND MAP


Project Management Process Groups
Mapping the Process Groups to the Knowledge Areas
Developing an IT Project Management Methodology
Case Study: JWD Consulting's Project Management Intranet Site (Predictive Approach)
Case Study 2: JWD Consulting's Project Management Intranet Site (Agile Approach)
The PM Process Group Links
• Initiating Process
• Planning Process
• Executing Process
• Controlling Process
• Closing Process

LEARNING OBJECTIVES

PART 1 -> Available in Video Material

a) Describe the **five project management process groups**, the typical level of activity for each, and the interactions among them

b) Understand how the project management **process groups relate to the project management knowledge areas**

c) Discuss how organizations **develop information technology (IT) project management methodologies** to meet their needs

PART 2

a) Review a case study of an organization applying the **project management process groups to manage an IT project**, describe outputs of each process group, and understand the contribution that effective initiating, planning, executing, monitoring and controlling, and closing make to project success

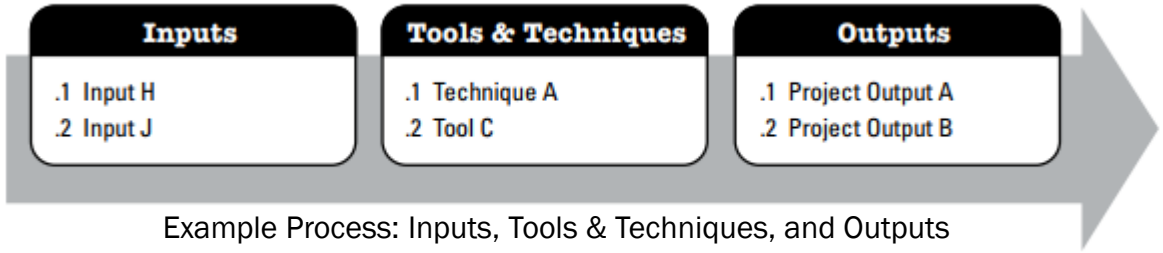
b) Review the same case study of a project managed with an **agile focus** to illustrate the key differences in approaches

c) Describe **several templates** for creating documents for each process group

PART 1.A: PROJECT MANAGEMENT PROCESS GROUP

PROJECT MANAGEMENT PROCESS GROUPS

- A **process** is a series of actions directed toward a particular result
- Project management can be viewed as a number of interlinked processes
- Every project management process produces one or more outputs from one or more inputs by using appropriate project management tools and techniques
- A project can have different combinations of phases. But all projects and all project phases need to include all five process groups
  - One project might have concept, development, implementation, and close-out phases, and another might have initial, intermediate, and final phases



Example Process: Inputs, Tools & Techniques, and Outputs

PM PROCESS GROUPS AND OUTCOME (1/2)

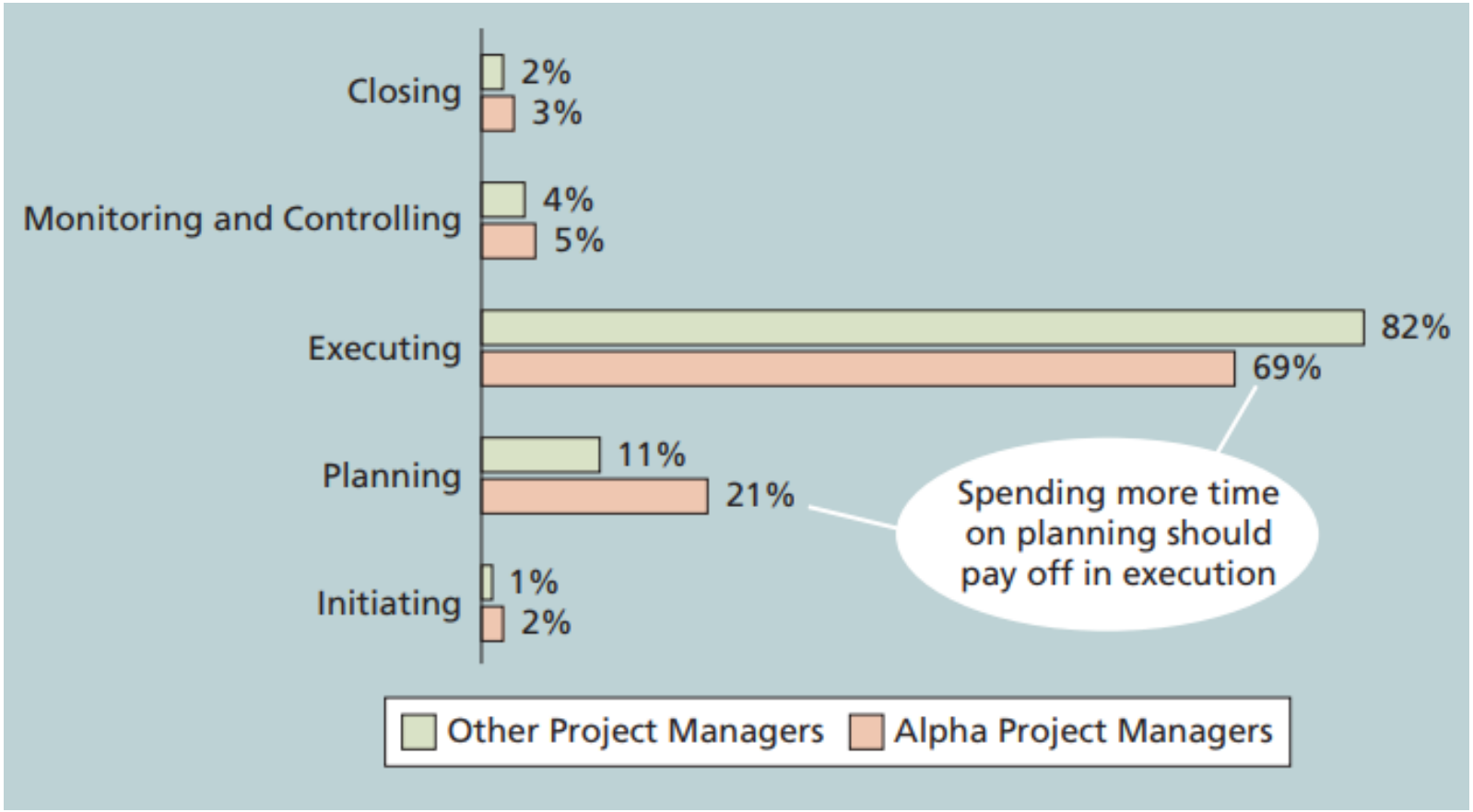
The project management process groups include

1. **initiating** processes - **defining** and **authorizing** a project or project phase
   - Outcome : The organization recognizes that a new project exists – completion of a **business case** and **project charter**
2. **planning** processes - devising and maintaining a **workable scheme** to ensure that the project addresses the organization's needs
   - Outcome : Completing the WBS and scope statement, project schedule and cost estimate

PM PROCESS GROUPS AND OUTCOME (2/2)

3. **executing** processes - **coordinating people** and other resources to **carry out** the various plans and create the products, services, or results of the project or phase
   - Outcome : Performing actions necessary to complete the work described in the planning activities
4. **monitoring and controlling** processes - regularly **measuring** and **monitoring** progress to ensure that the project team meets the project objectives
   - Outcome : Measuring progress toward the project objectives, monitoring deviation from the plan and taking corrective action to match progress with the plan
5. **closing** processes - **formalizing acceptance** of the project or project phase and ending it efficiently
   - Outcome : Formal acceptance of the work and creation of closing documents

PERCENTAGE OF TIME SPENT ON EACH PROCESS GROUP



INITIATING PROCESS

Defining and **authorizing** a project or project phase

- Inputs
  - Product Description
  - Strategic plan
  - Project Selection Criteria
  - Historical Information
- Outputs
  - Project charter
  - Project Manager assigned
  - Key stakeholders identified
  - Business case completed

PLANNING PROCESS

Devising and maintaining a workable scheme to accomplish the business need that the project was undertaken to address

- Scope Planning
- Scope Definition
- Activity Definition
- Activity Sequencing
- Activity Duration Estimating
- Resource Planning
- Cost Estimating
- Cost Budgeting
- Risk Planning
- Schedule Development
- Quality Planning
- Communications Planning
- Organization Planning
- Staff Acquisition
- Procurement Planning
- Project Plan Development

EXECUTING PROCESS

Coordinating people and other resources to carry out the plan

- Project Plan Execution
- Scope Verification
- Quality Assurance
- Team Development
- Information Distribution
- Solicitation
- Source Selection
- Contract Administration

CONTROLLING PROCESS

Ensuring that project objectives are met by monitoring and measuring progress and taking corrective measures when necessary

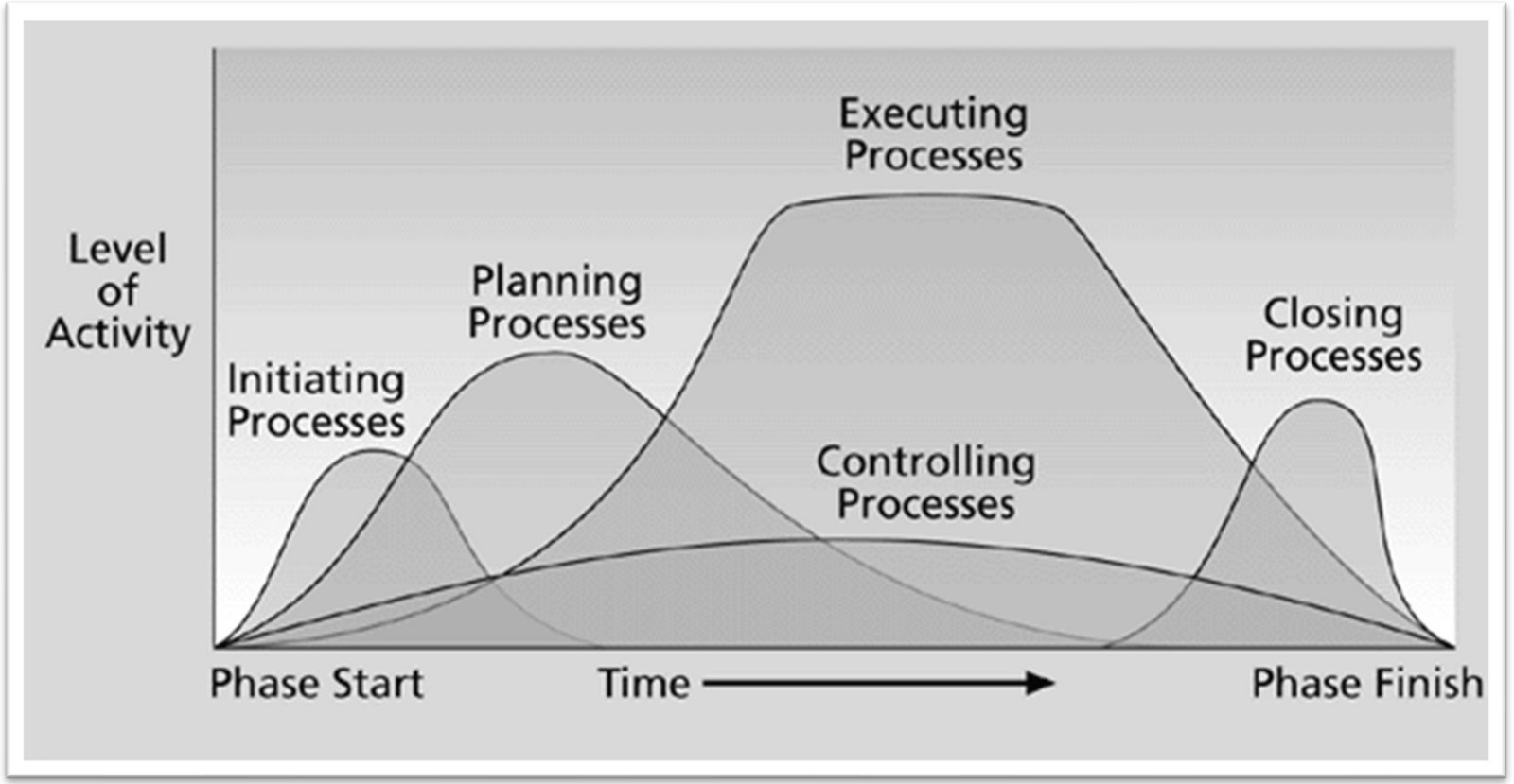
- Overall Change Control
- Scope Change Control
- Schedule Control
- Cost Control
- Quality Control
- Performance Reporting
- Risk Response Control

CLOSING PROCESS

Formalizing acceptance of the project or phase and bringing it to an orderly end

- Administrative Closure
- Contract Close-out

OVERLAP OF PROCESS GROUPS IN A PHASE (PMBOK® GUIDE)



PART 1.B: MAPPING THE PROCESS GROUPS TO THE KNOWLEDGE AREAS

MAPPING PROJECT MANAGEMENT PROCESS GROUPS TO KNOWLEDGE AREAS (1/2)

Note that there are activities from **each** knowledge area under the planning process groups

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
4. Project Integration Management	4.1 Develop Project Charter	4.2 Develop Project Management Plan	4.3 Direct and Manage Project Work 4.4 Manage Project Knowledge	4.5 Monitor and Control Project Work 4.6 Perform Integrated Change Control	4.7 Close Project or Phase
5. Project Scope Management		5.1 Plan Scope Management 5.2 Collect Requirements 5.3 Define Scope 5.4 Create WBS		5.5 Validate Scope 5.6 Control Scope	
6. Project Schedule Management		6.1 Plan Schedule Management 6.2 Define Activities 6.3 Sequence Activities 6.4 Estimate Activity Durations 6.5 Develop Schedule		6.6 Control Schedule	
7. Project Cost Management		7.1 Plan Cost Management 7.2 Estimate Costs 7.3 Determine Budget		7.4 Control Costs	

*Source: PMBOK® Guide, Sixth Edition, 2017.

MAPPING PROJECT MANAGEMENT PROCESS GROUPS TO KNOWLEDGE AREAS (2/2)

Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
8. Project Quality Management		8.1 Plan Quality Management	8.2 Manage Quality	8.3 Control Quality	
9. Project Resource Management		9.1 Plan Resource Management 9.2 Estimate Activity Resources	9.3 Acquire Resources 9.4 Develop Team 9.5 Manage Team	9.6 Control Resources	
10. Project Communications Management		10.1 Plan Communications Management	10.2 Manage Communications	10.3 Monitor Communications	
11. Project Risk Management		11.1 Plan Risk Management 11.2 Identify Risks 11.3 Perform Qualitative Risk Analysis 11.4 Perform Quantitative Risk Analysis 11.5 Plan Risk Responses	11.6 Implement Risk Responses	11.7 Monitor Risks	
12. Project Procurement Management		12.1 Plan Procurement Management	12.2 Conduct Procurements	12.3 Control Procurements	
13. Project Stakeholder Management	13.1 Identify Stakeholders	13.2 Plan Stakeholder Engagement	13.3 Manage Stakeholder Engagement	13.4 Monitor Stakeholder Engagement	

*Source: PMBOK® Guide, Sixth Edition, 2017.

PART 1.C: DEVELOPING AN IT PROJECT MANAGEMENT METHODOLOGY

DEVELOPING AN IT PROJECT MANAGEMENT METHODOLOGY

- Just as projects are unique, so are approaches to project management.
- Many organizations develop their own project management methodologies, especially for IT projects
  - Some organizations spend a great deal of time and money on training efforts for general project management skills, but after the training, project managers may still not know how to tailor their project management skills to the organization's particular needs.
- A standard describes best practices for what should be done to manage a project; e.g the PMBOK Guide
- A **methodology** describes *how* things should be done, and different organizations often have different ways of doing things
- Some project management methodology :
  1. PRINCE2
  2. Agile
  3. RUP
  4. Six Sigma

PART 2
CASE STUDY : JWD CONSULTING

FOCUS GROUP DISCUSSION

JWD CONSULTING'S PROJECT MANAGEMENT INTRANET SITE PROJECT

Erica Bell is in charge of the Project Management Office (PMO) for her consulting firm, JWD Consulting, which has grown to include more than 200 full-time consultants and even more part-time consultants. JWD Consulting provides a variety of consulting services to assist organizations in selecting and managing IT projects. The firm focuses on finding and managing high-payoff projects and developing strong metrics to measure project performance and benefits to the organization after the project is implemented. The firm's emphasis on metrics and working collaboratively with its customers gives it an edge over many competitors.

Joe Fleming, the CEO, wanted his company to continue to grow and become a world-class consulting organization. Because the core of the business is helping other organizations with project management, he felt it was crucial for JWD Consulting to have an exemplary process for managing its own projects. He asked Erica to work with her team and other consultants in the firm to develop several intranet site applications that would allow them to share their project management knowledge. He also thought that the firm should make some of the information available to the firm's clients. For example, the firm could provide project management templates, tools, articles, links to other sites, and an Ask the Expert feature to help build relationships with current and future clients. Because JWD Consulting emphasizes the importance of high-payoff projects, Joe also wanted to see a business case for this project before proceeding.

DISCUSSION

- Consider that JWD will be implementing the project with two different approach, predictive approach (topic A) and agile approach (topic B)

FOCUS GROUP : 40 minutes

- You will be divided into focus group that will each discuss the process group in each approach. Each group will consist of 5-6 students. There will be 5 group of topic A (predictive approach) , 5 group of topic B (agile approach)
  - **What are the activities involved in each process groups and the output of the process? Present the document/template for each outputs.**
  - **Present your discussion in power point presentation**
  - **Use the references available in the course page**

HOME GROUP : 30 minutes

- You will be regrouped into a group that previously discussed topic A and topic B. Each group will consist of 5-6 students.
  - **What are the differences in the activities on the two approaches?**
  - **Present your work in power point presentation**

CHAPTER SUMMARY

- The five project management process groups are initiating, planning, executing, monitoring and controlling, and closing
- You can map the main activities of each process group to the nine knowledge areas
- Some organizations develop their own information technology project management methodologies
- The JWD Consulting case study provides an example of using the process groups and shows several important project documents
- The second version of the same case study illustrates differences using agile (Scrum). The biggest difference is providing three releases of useable software versus just one