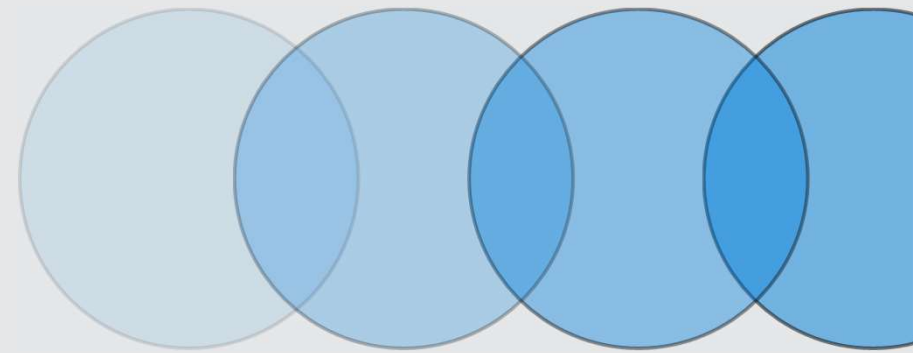


Workshop 5

Topics

- Project Management Process
- Groups
- Performance Domains
- Project Initiation
- Project Planning (Part 1)
- Project Scope Planning



MONASH
University

WEEK 4-5 CAN BE A TIME OF INCREASED STUDY STRESS & PRESSURE

GETTING HELP EARLY, CAN MAKE A DIFFERENCE.

There are services on campus to help you:

You can book an appointment at the **University Health Services (UHS)** for **free & confidential counselling** to help you work through problems or with **GP's (doctors)** for any health issues or concerns. Appointments are also available with a dentist, dietitian or nurse.



Student Academic Success (SAS) offers personalised support, workshops and online resources to help you develop the skills you need to succeed in your studies.

Talk to **Disability Support Services (DSS)**. If you have a disability, medical or mental health condition that impacts your studies, you can register for recommendations and adjustments.

Think about taking fewer classes (reducing your study load) before the census date on **March 31st**, which is the last day to make changes without affecting your grades or paying the fees (there are some exceptions). *Before deciding, it's a good idea to get advice from Monash Connect.*

WORKSHOP 5 LEARNING OBJECTIVES



Predictive Approach to Project Management

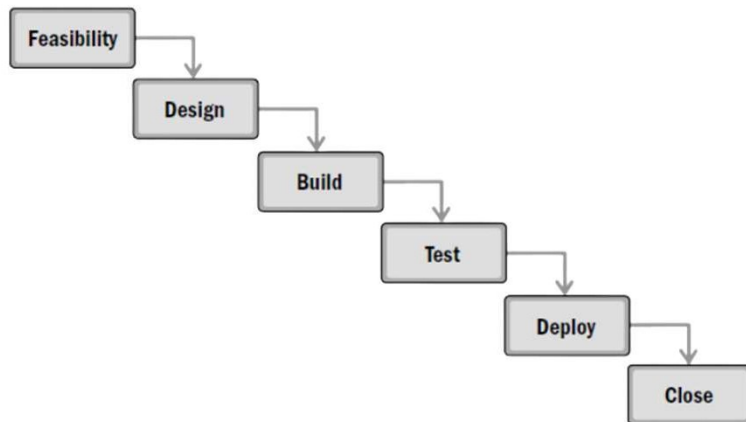


Predictive approach



A **predictive approach** to managing a project is useful when the project and product requirements can be defined, collected, and analyzed at the start of the project.

Sample Predictive Life Cycle



This may also be referred to as a **waterfall approach**.

The scope, schedule, cost, resource needs, and risks can be well defined in the early phases of the project life cycle, and they are relatively stable.



Examples of projects that would use the predictive approach:

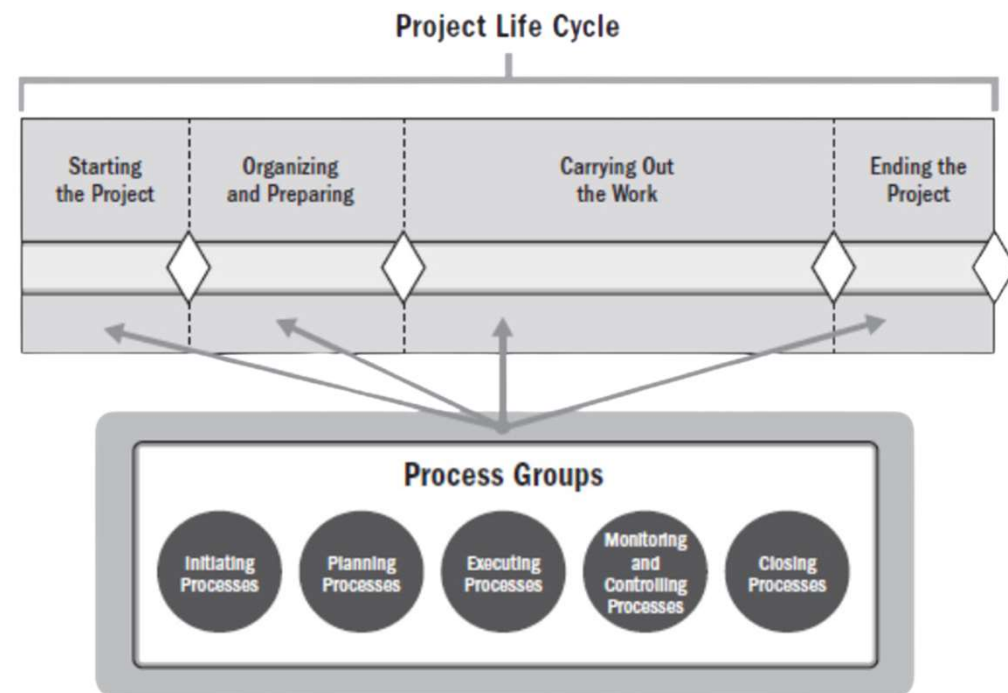
- Software projects where the scope is well defined,
- Construction projects, Manufacturing projects, Space exploration projects, Hardware installation



Project Life Cycle

A **project life cycle** is the series of phases that a project passes through from its start to its completion. It provides *the basic framework* for managing the project.

The phases may be sequential, iterative, or overlapping. Project life cycles can be **predictive or adaptive**. All projects can be mapped to the generic life cycle :



THE PROJECT PROCESS GROUPS



Project management processes can be organized into logical groupings of project management inputs, tools and techniques, and outputs that are tailored to meet the needs of the organization, stakeholders, and the project.



The five distinct Process Groups of project management interact at various points within a project life cycle. *They are not to be confused with project phases; rather, **they might all occur within one specific phase, repeat within a phase, or occur in each separate life cycle phase.***

01

Initiating

02

Planning

03

Executing

04

**Monitoring and
Controlling**

05

Closing

Project Life Cycle 5 Steps

01



Initiation

Those processes performed to define a new project or a new phase of an existing project by obtaining authorization to start the project or phase.

02



Planning

Those processes required to establish the scope of the project, refine the objectives, and define the course of action required to attain the objectives that the project was undertaken to achieve.

03



Execution

Those processes performed to complete the work defined in the project management plan to satisfy the project requirements.

04



Monitoring

Those processes required to track, review, and regulate the progress and performance of the project; identify any areas in which changes to the plan are required; and initiate the corresponding changes.

05



Closure

Those processes performed to formally complete or close a project, phase, or contract.

Activity 1: Quick Quiz (Individual)



1. A _____ is a series of actions directed towards a particular result.

- a) Goal
- b) Process
- c) Plan
- d) Project

2. _____ processes include coordinating people and other resources to carry out project plans and create the products, services, or results of the project or phase.

- a) Initiating
- b) Planning
- c) Executing
- d) Monitoring and controlling
- e) Closing

3. Many people use _____ to have a standard format for preparing various project management documents.

- a) Methodologies
- b) Templates
- c) Project management software
- d) Standards

Slide 9

- 1 @Sanaz.Nikfalazar1@monash.edu just checking answer guide is Process, executing, templates, A, C
Reassigned to Sanaz.Nikfalazar1@monash.edu
Roisin McNaney, 18/08/2024
- 2 do we want to do this as a Kahoot quiz?
Roisin McNaney, 18/08/2024
- 1 Yes the answers are correct. I also added a workshop guide to the drive:
<https://docs.google.com/document/d/1sJ1Gms6F7UaYoDqkhW0jLOXcUEc6kUj67zYd>
Sanaz Nikfalazar, 18/08/2024
- 2 We can do it through Kahoot but that has a limit if we want to use the free version. We thought just reviewing these in class is easier, and it is in the slides to everyone has them available
Sanaz Nikfalazar, 18/08/2024

Activity 1: Quick Quiz (Individual)



4. Which of the following is a typical reason that project teams would use an agile approach versus a predictive approach to managing a project?

- a) The project has unclear up-front requirements.
- b) The project team is inexperienced and dispersed.
- c) Large risks are involved
- d) The completion date is fairly rigid.

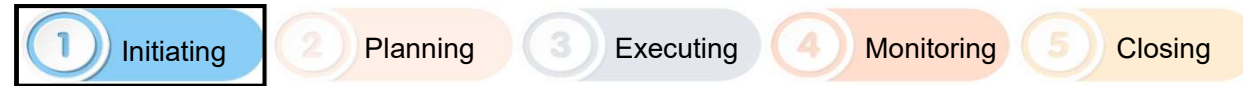


5. Which process group normally requires the most resources and time ?

- a) Initiating
- b) Planning
- c) Executing
- d) Monitoring and controlling
- e) Closing

Project Management Process Groups





1. Project Initiation

Process Group

The PMBOK defines the project initiation phase as “the process of formally recognizing that a new project exists or that an existing project should continue into its next phase.”



- 3 do we want to be clear that this isn't always required, and that feasibility can be identified from existing/ historical projects. I know this comes from the PMBOK but in practice feasibility studies are not always run

Roisin McNaney, 18/08/2024



Steps involved in Project Initiation

Business Case

A business case document provides the business justification and a projection of anticipated business value from a project. It includes:

- Business objectives
- Problem statement
- Critical assumptions and constraints
- Budget & schedule estimates
- Potential risks

Feasibility Study

A feasibility study aims to provide an independent assessment that examines all aspects of a proposed project, including technical, economic, financial, legal, and environmental considerations. This information then helps decision-makers determine whether or not to proceed with the project.

Project Charter

A project charter is a document that formally recognizes the existence of a project and provides direction on the project's objectives and management. It authorizes the project manager to use organizational resources to complete the project.



Steps involved in Project Initiation

Identify key stakeholders

Key stakeholders should be involved in the project initiation phase to ensure informed participation, alignment on project goals, and cohesive progress. Stakeholder identification and analysis are crucial, with a strategy for managing stakeholders being developed during project initiation.

Build a team and organize resources

One (an individual or a team) must take charge of overseeing the project. This person or group of people must be identified during the project initiation. One great example of project initiation documentation you may need for this step is the project charter, wherein various project elements and details are outlined. Using this, it'll be easier for you to pinpoint and appoint the right people to effectively carry out each aspect of the project based on their skills and expertise.

Make improvements or changes as needed

Before finalizing the project initiation document, changes or improvements may be done to further reinforce the need for the project to be executed and the resources needed for it to be successfully implemented.



Example Project Charter

Project Title: Project Management Intranet Site Project

Project Start Date: May 2

Projected Finish Date: November 4

Budget Information: The firm has allocated \$140,000 for this project. The majority of costs for this project will be internal labor. An initial estimate provides a total of 80 hours per week.

Project Manager: Erica Bell, (310) 555-5896, erica_bell@jwdconsulting.com

Project Objectives: Develop a new capability accessible on JWD Consulting's intranet site to help internal consultants and external customers manage projects more effectively. The intranet site will include several templates and tools that users can download, examples of completed templates and related project management documents used on real projects, important articles related to recent project management topics, an article retrieval service, links to other sites with useful information, and an Ask the Expert feature, where users can post questions about their projects and receive advice from experts in the field. Some parts of the intranet site will be accessible free to the public, other parts will only be accessible to current customers and internal consultants, and other parts will be accessible for a fee.

Main Project Success Criterion: The project should pay for itself within one year of completion.

Approach:

- Develop a survey to determine critical features of the new intranet site and solicit input from consultants and customers.
- Review internal and external templates and examples of project management documents.
- Research software to provide security, manage user inputs, and facilitate the article retrieval and Ask the Expert features.
- Develop the intranet site using an iterative approach, soliciting a great deal of user feedback.
- Develop a way to measure the value of the intranet site in terms of reduced costs and new revenues, both during the project and one year after project completion.

ROLES AND RESPONSIBILITIES (PARTIAL LIST)

Name	Role	Position	Contact Information
Joe Fleming	Sponsor	JWD Consulting, CEO	joe_fleming@jwdconsulting.com
Erica Bell	Project Manager	JWD Consulting, manager	erica_bell@jwdconsulting.com
Michael Chen	Team Member	JWD Consulting, senior consultant	michael_chen@jwdconsulting.com

Sign-Off: (Signatures of all the above stakeholders)

Comments: (Handwritten or typed comments from above stakeholders, if applicable)

Case Study: Project Charter

Many people are familiar with the television show called **Shark Tank** where entrepreneurs (sometimes called “treps”) present their business ideas **to a group of investors or sharks**. Several colleges, high schools, and even elementary schools throughout the world hold unique versions of a shark tank like event.

You believe that creating a non-profit organization with one central mobile-friendly website/application to assist groups in organizing these types of events would spark even more entrepreneurs throughout the world. You would plan to hold several shark tank like events during the term of the project and create a site and applications to help continue developing more global treps.



Case Study: Project Charter

This site/application would include the following capabilities:

- Provide guidelines and templates for running a shark tank type of event.
- Accept donations from potential investors targeted toward specific schools or organizations wishing to host an event
- Accept ideas for needed new products or services.
- Provide the ability for organizations to create their own custom site to solicit local participants and sharks, accept applications, and promote the winners as well as losers.
- Research ideas for a mechanism where a certain percentage of all donations and profits earned by contestants are donated back to the Global Treps organization.



4

Activity 2: Project Charter (Group activity)

Prepare a Project Charter for the Global Treps project. Assume that the project will take six months to complete, use many volunteer hours, and cost about \$130,000 for hardware, software, travel, and labor.

Use the template provided in the link

<https://shorturl.at/1yv4X>



- 4 are we adding the Youtube timer in?
Roisin McNaney, 18/08/2024

Project Management Process Groups





Project Planning Process Group

5 2A	Project Scope Planning	Week 05
2B	Project Schedule Planning	Week 06
2C	Project Cost Planning	Week 06
2D	Project Quality Planning	Week 07
2E	Project Resource Planning	Week 07
2F	Project Communications Planning	Week 07
2G	Project Risk Planning	Week 07
2H	Project Procurement Planning	Week 07
2I	Project Stakeholder Planning	Week 07

The Planning Process Group consists of those processes performed to establish the total scope of the effort, define and refine objectives, and develop the course of action required to attain those objectives."

– A Guide to the Project Management Body of Knowledge

- 5 what is the 'week' references here? are these the weeks that we will be covering the content in the unit?

Roisin McNaney, 18/08/2024



Project scope planning

Project Scope Management Process

Process	Project Group	Key Deliverables
Planning Scope Management	Planning	
Collecting Requirement	Planning	Required Documents
Defining the scope	Planning	Project Scope statement
Creating the WBS	Planning	WBS dictionary, directory and breakdown
Validating the Scope	Monitoring and controlling	Acceptance of deliverables
Controlling the scope	Monitoring and controlling	Change Request Documented

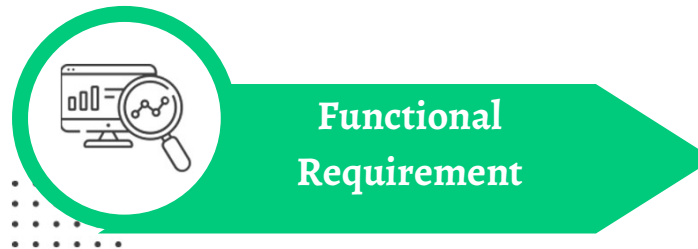
includes the processes required to ensure that the project includes all the work required, and only the work required, to complete the project successfully. It is primarily concerned with defining what is or is not included in the project, to meet the sponsors' and stakeholders' goals and objectives. It involves four main processes.



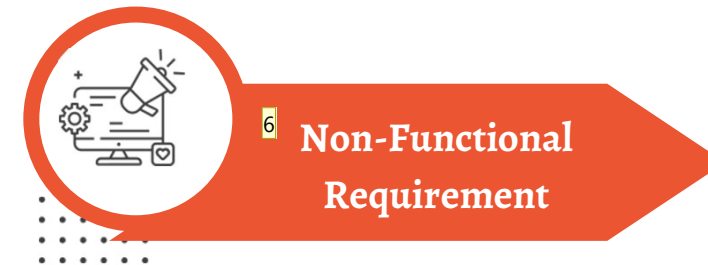
2A. Project Scope Planning - Definitions



A more granular component of the product scope, it usually has a child– parent relationship with a product feature.



This is an action that the product (system) must perform under specific conditions. Functional requirements are typically used in IT and software development to describe the product scope.



This is a property or quality describing such properties as look and feel, usability, security, and legal restrictions that the product (system) must have. Nonfunctional requirements are typically used in IT and software development to describe the product scope.

- 6 this website gives a really good description and examples of NFRs if it could be added as a resource to the slides <https://www.perforce.com/blog/alm/what-are-non-functional-requirements-ex>
Roisin McNaney, 18/08/2024



2A. Project Scope Planning – Collecting Requirements

Collect Requirements is the process of determining, documenting, and managing stakeholder needs and requirements to meet objectives. The key benefit of this process is that it provides the basis for defining the product scope and project scope.

There are several ways of collecting requirements:

- Interviews
- Questionnaires or Surveys
- User Observation
- Document Analysis
- Workshops
- Brainstorming
- Role-Play
- Use Cases and Scenarios
- Focus Groups
- Prototyping





Req No.	Name	Category	Source	Status
R01	Laptop memory	Hardware	Project charter and corporate laptop specifications	Complete. Laptops ordered meet memory requirements.
R02	Mobile compatibility	Software	User requirements documents	In planning stage.
R03	Backup system	System	Corporate security specs.	Implemented.
R04	Multi-language	Software	Global requirements	To be specified.

2A. Project Scope Planning - RTM

In addition to preparing requirements documentation as an output of collecting requirements, project teams often create a Requirements Traceability Matrix (RTM); this is a table that lists requirements, their various attributes, and the status of the requirements to ensure that all are addressed.

- 7 I don't love this example, it's probably from the Schwalbe text but the requirements don't feel like they are really framed as requirements and there are no 'attributes'
- Roisin McNaney, 18/08/2024

Activity 3 (Optional) Collecting Requirements (Group activity)

You are working on a project to develop a system to help university students to find jobs.

The system must be tailored to the student population and be easy to use.

1. How would you collect requirements for the system ?
2. Identify 3 main requirements



Requirements

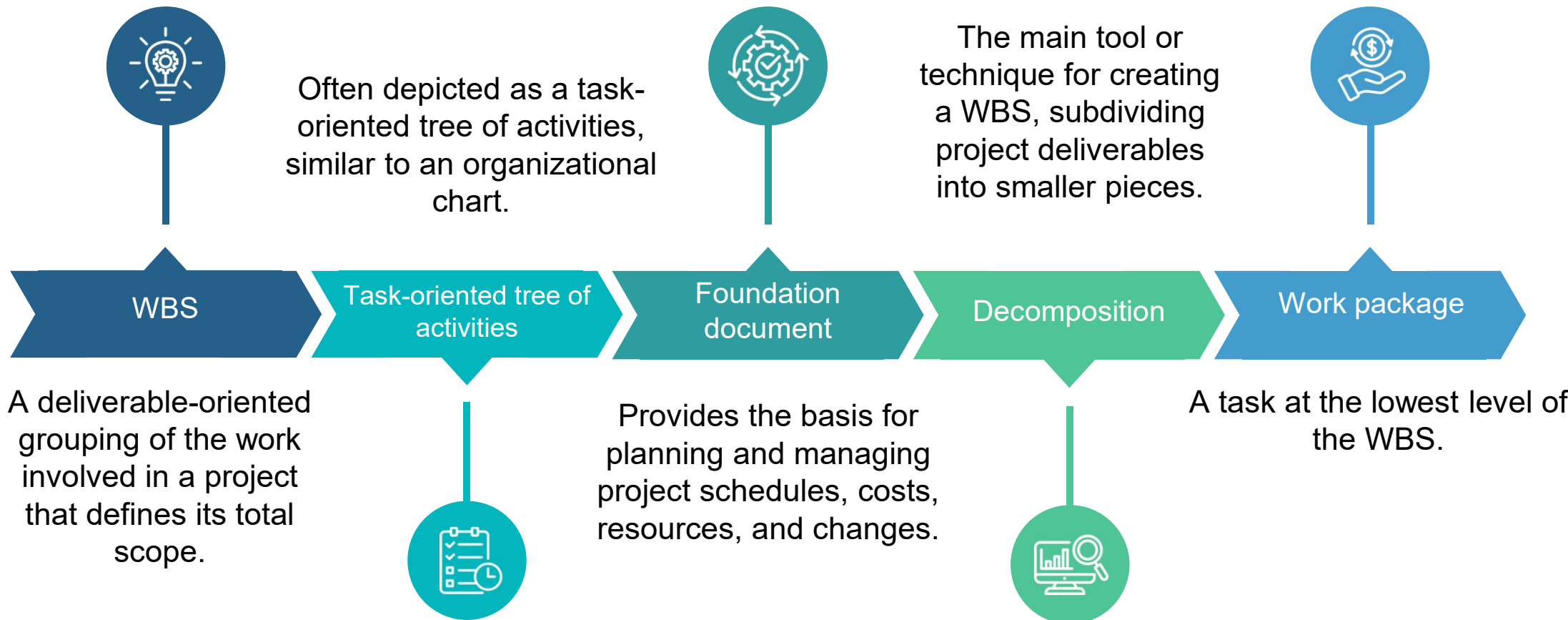
2A. Project Scope Planning – Defining the Scope

According to the Project Management Institute, a strong Project Scope Statement has several key characteristics. It should:

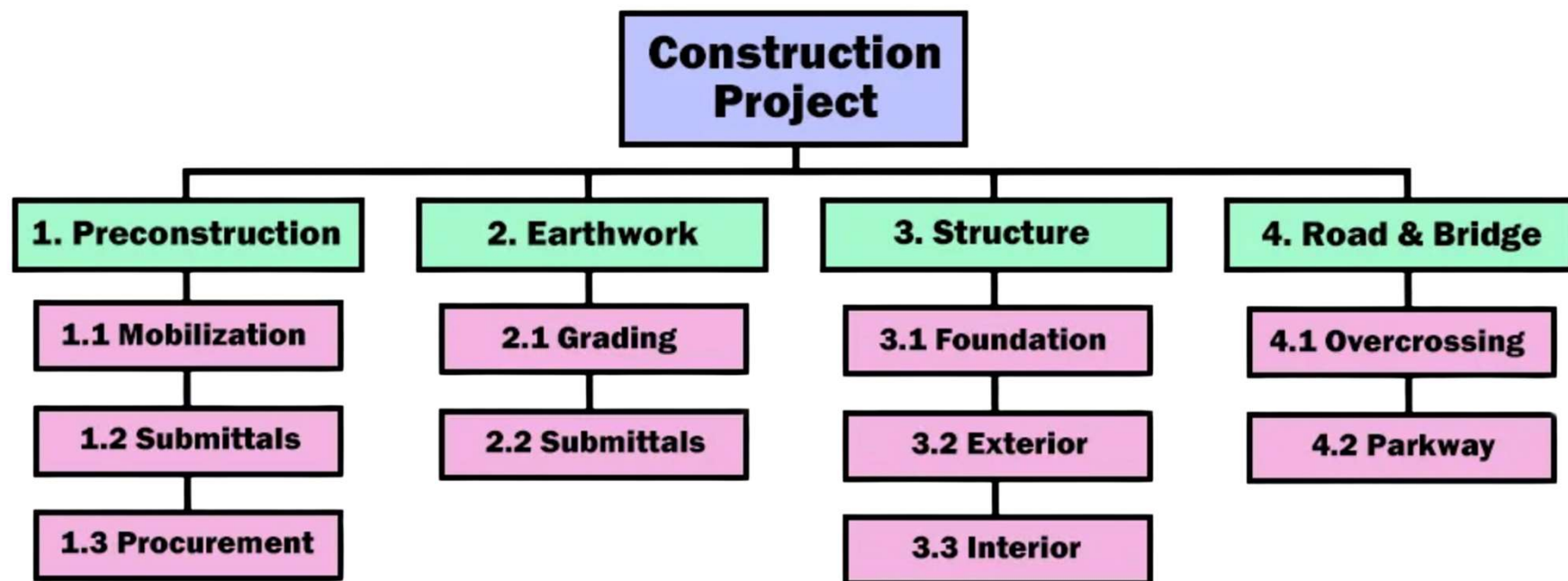
- Define the boundaries of the project.
- Define the business need and the expected outcome of the project.
- Identify constraints that limit a project team's options for developing a solution.
- List assumptions regarding decisions outside the project team's control.
- Identify business processes impacted by the project.
- Identify internal and external entities with which the project team will interface.

Project Scope Statement					
Title	Timesheet Reporting Tool		Date	June 08, 2017	
Project Manager	Nicole Hansen				
Project Justification	The Timesheet Reporting tool will be the creation of a user-friendly web-based application. The application will automate the process of tracking the daily time entries made by employees				
Project Scope Description	The timesheet reporting tool will be used as a tracking tool to review the time entries by the Information Technology employees globally				
Project Objective	To create a tool to track the timesheet entries for all the Information Technology employees				
High Level Requirements	<ul style="list-style-type: none">• User access for the tool granted to all employees.• Admin access to support team• Report generation access to project managers• Enable users to remotely access the tool.• Standard templates for all reports				
In Scope	<ul style="list-style-type: none">• Multi – level approvals for timesheets• Timesheet tasks additions to the tool by Admin access users• 'Copy Previous Week' timesheets feature.• Access tool via Desktop				
Out of Scope	<ul style="list-style-type: none">• New project/task addition to the tool by managers• Connectivity with HRMS to update employee leaves automatically.• Role based task list template.• Access tool via mobile and tablet				
Cost Estimate	Cost Item	Estimated Project Cost	Actual Spend	Cost until completion	Variance
	Software	\$2300	\$900	\$1400	NA
	Hardware	\$5000	\$1500	\$3500	+/- 1000
	Other	\$750	\$0	\$750	+/- \$100
	Total	\$8050	\$2400	\$5650	

2A. Project Scope Planning – Creating the Work Breakdown Structure



2A. Project Scope Planning – Example WBS Organized by product deliverables



2A. Project Scope Planning – Example WBS Organized by phase

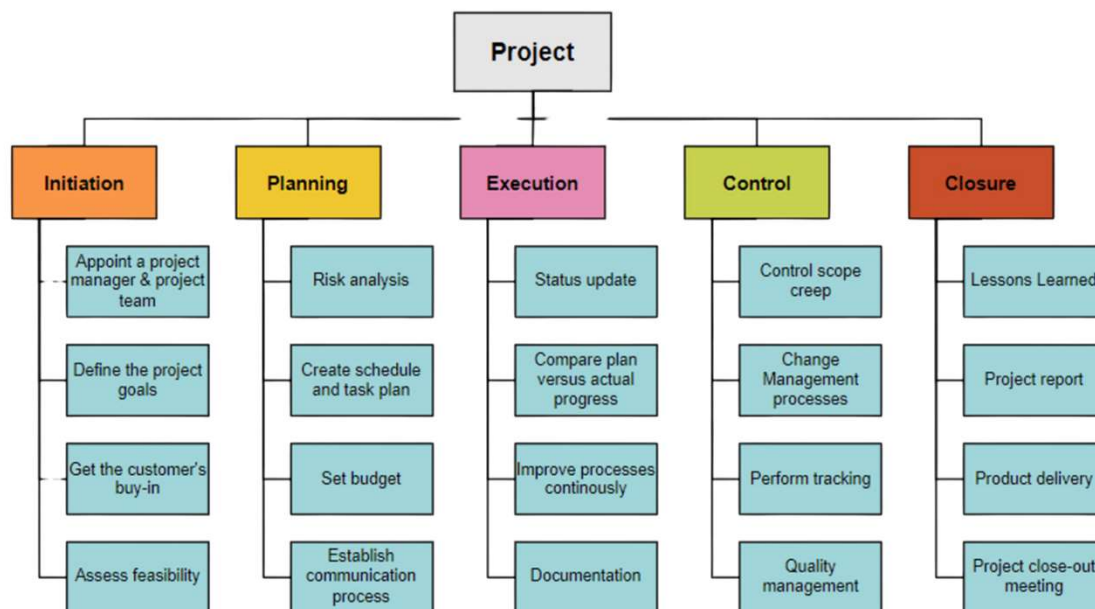


Chart Form

1.0	Software Product Release 5.0
1.1	Project Management
1.1.1	Planning
1.1.2	Meetings
1.1.3	Administration
1.2	Product Requirements
1.2.1	Software
1.2.2	User Documentation
1.2.3	Training Program Materials
1.3	Detail Design
1.3.1	Software
1.3.2	User Documentation
1.3.3	Training Program Materials
1.4	Construct
1.4.1	Software
1.4.2	User Documentation
1.4.3	Training Program Materials
1.5	Integration and Test
1.5.1	Software
1.5.2	User Documentation
1.5.3	Training Program Materials

Tabular Form

2A. Project Scope Planning – Approaches to developing the WBS



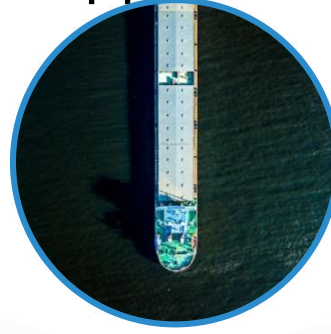
USING GUIDELINES

some organizations, like the U.S. Department of Defense (DOD), provide guidelines for preparing WBS's



ANALOGY APPROACH

review WBSs of similar projects and tailor to your project



TOP-DOWN APPROACH

start with the largest items of the project and break them down



BOTTOM-UP APPROACH

start with the specific tasks



MIND MAPPING

uses branches radiating out from a core idea to structure thoughts and ideas



2A. Project Scope Planning – WBS Dictionary

- **According to the PMBOK Guide**, WBS Dictionary is “A document that provides detailed deliverable, activity, and scheduling information about each component in the work breakdown structure.”
- **WBS Dictionary provides** detailed information on each element of WBS, including deliverables, milestones, deliverables, scope, duration, start and end dates, required resources, costs, quality, assigned team members, etc.

Project: Online Checkout System

Work Package ID: 1.2.3.4

Work Package Name: Design Checkout Funnel

Work Package Description: Design the complete checkout panel, including payment screens, order confirmation page, etc.

Assigned Team Member: Rob Breton

Assigned Date: 10/22/2021

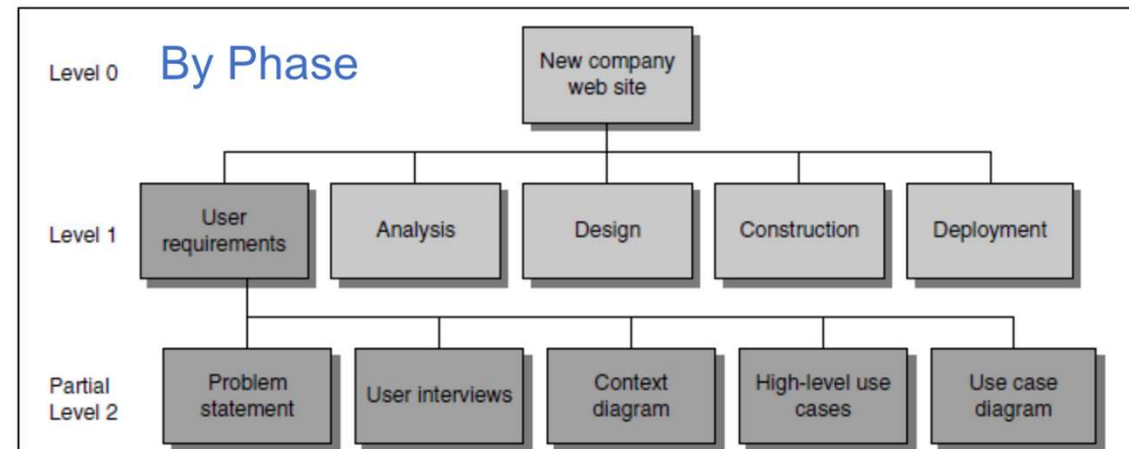
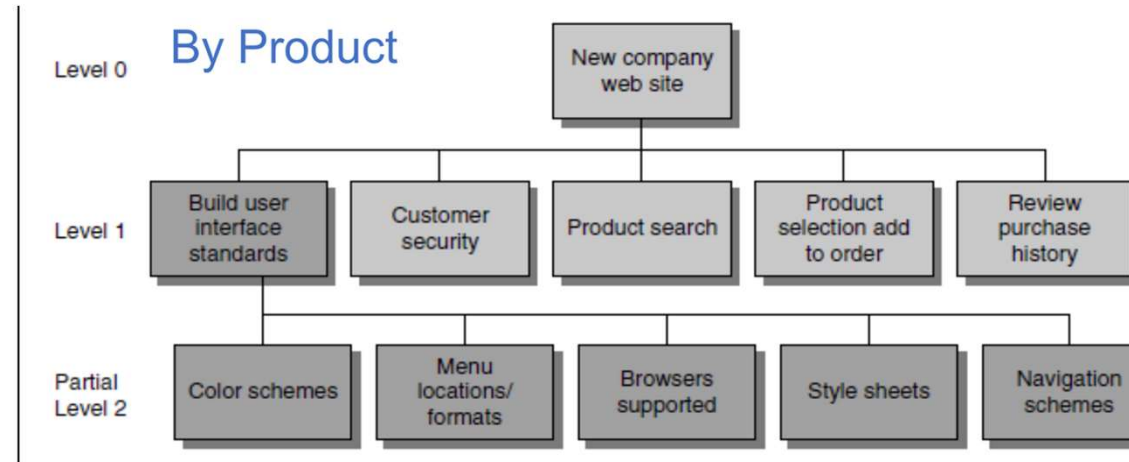
Date Due: 10/30/2021

Budget: 1,000 USD

Accounting Code : XYZ- 0450

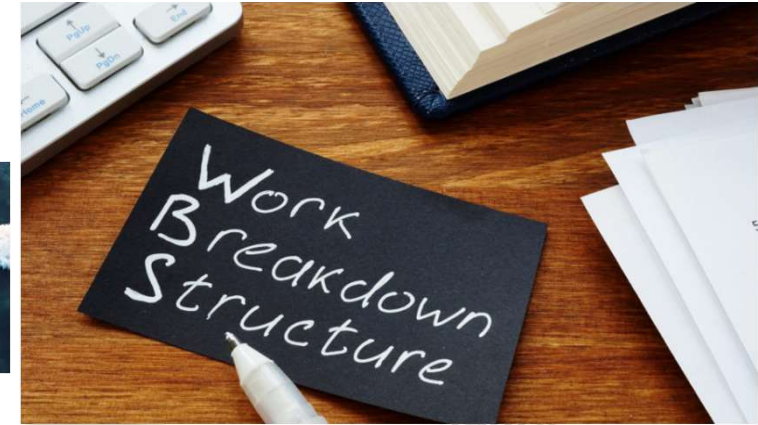
2A. Project Scope Planning – Another WBS Example

- 0 New company web site
 - 1.0 Build user interface standards
 - 1.1 Color schemes
 - 1.2 Menu locations/formats
 - 1.3 Browsers supported
 - 1.4 Style sheets
 - 1.5 Navigation schemes
 - 2.0 Customer security
 - 3.0 Product search
 - 4.0 Product selection : add to order
 - 5.0 Review purchase history



Activity 4: WBS (Group activity)

- Develop a work breakdown structure, in tabular form for the Global Treps project.
- Break down the work to Level 3 or Level 4, as appropriate. Use the template provided and previous examples as guides.
- Be sure the WBS is based on the project charter and other relevant information.





Reference

Brewer, Jeffrey L., and Kevin C. Dittman. Methods of IT Project Management : Third Edition, Purdue University Press, 2018.

Schwalbe, Kathy. Information Technology Project Management, Cengage, 2018

A Guide to the Project Management Body of Knowledge (PMBOK guide) , 7th Edition

Process Groups : A Practice Guide, 2023, Project Management Institute