Shoubra faculty of Engineering

Projects Management (PM)
إدارة المشروعات

Lecture 3
PM knowledge areas
Scope Management

Dr. Yaser Abdalla

Sept. 2020/2021

Quiz 1

1) What are the quadruple constraints of project management?

2) **Complete Sentences:**

a) Several related application development projects done for the same functional group might best be managed as part of a ………………

b) ………………process group involves measuring progress toward project objectives and taking corrective actions.

3) **Choose the Correct Answer:**

I. In which type of organization does the PM has maximum authority?
   a. Balanced matrix.
   b. Strong Matrix.
   c. Functional.
   d. Projectized.

II. Which of these is not a valid process group as per PMI?
   a. Initializing.
   b. Visualizing.
   c. Planning.
   d. Closing.

1) What are the quadruple constraints of project management?

The project can be considered as *Successful* if it achieves its intended *objectives* according to the required, *Time*, *Cost*, *Scope*, and *Quality*.

2) <u>**Complete Sentences:**</u>

a) Several related application development projects done for the same functional group might best be managed as part of a Program

b) Monitoring and controlling process group involves measuring progress toward project objectives and taking corrective actions.

3) <u>**Choose the Correct Answer:**</u>

I. In which type of organization does the PM has maximum authority?
   a. Balanced matrix.
   b. Strong Matrix.
   c. Functional.
   d. Projectized.

▪ **projectized** - an **organizational structure** in which the project manager has <u>full authority</u> to assign priorities, apply resources, and direct the work of persons assigned to the project.

II. Which of these *is not* a valid process group as per *PMI*?
   a. Initializing.
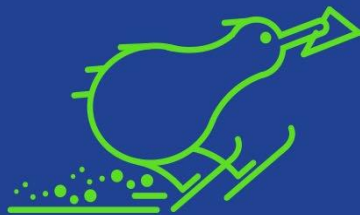   b. Visualizing.
   c. Planning.
   d. Closing.

10 Project Management Knowledge Areas

PM PROCESS

- Project Initiation
- Project Planning
- Project Execution
- Monitoring & Controlling
- Project Closing

PM KNOWLEDGE AREAS

- Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resources Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management
- Project Stakeholder Management

PROJECTMANAGER

www.projectmanager.com

Mention five of the most relevant PM process?
1. Project Initiation
2. Project Planning
3. Project Execution
4. Monitoring & Controlling
5. Project Closing

Denote the 10 most relevant knowledge areas in PM?
1. Project Integration Management
2. Project Scope Management
3. Project Time Management
4. Project Cost Management
5. Project Quality Management
6. Project Human Resources Management
7. Project Communications Management
8. Project Risk Management
9. Project Procurement Management
10. Project Stakeholder Management
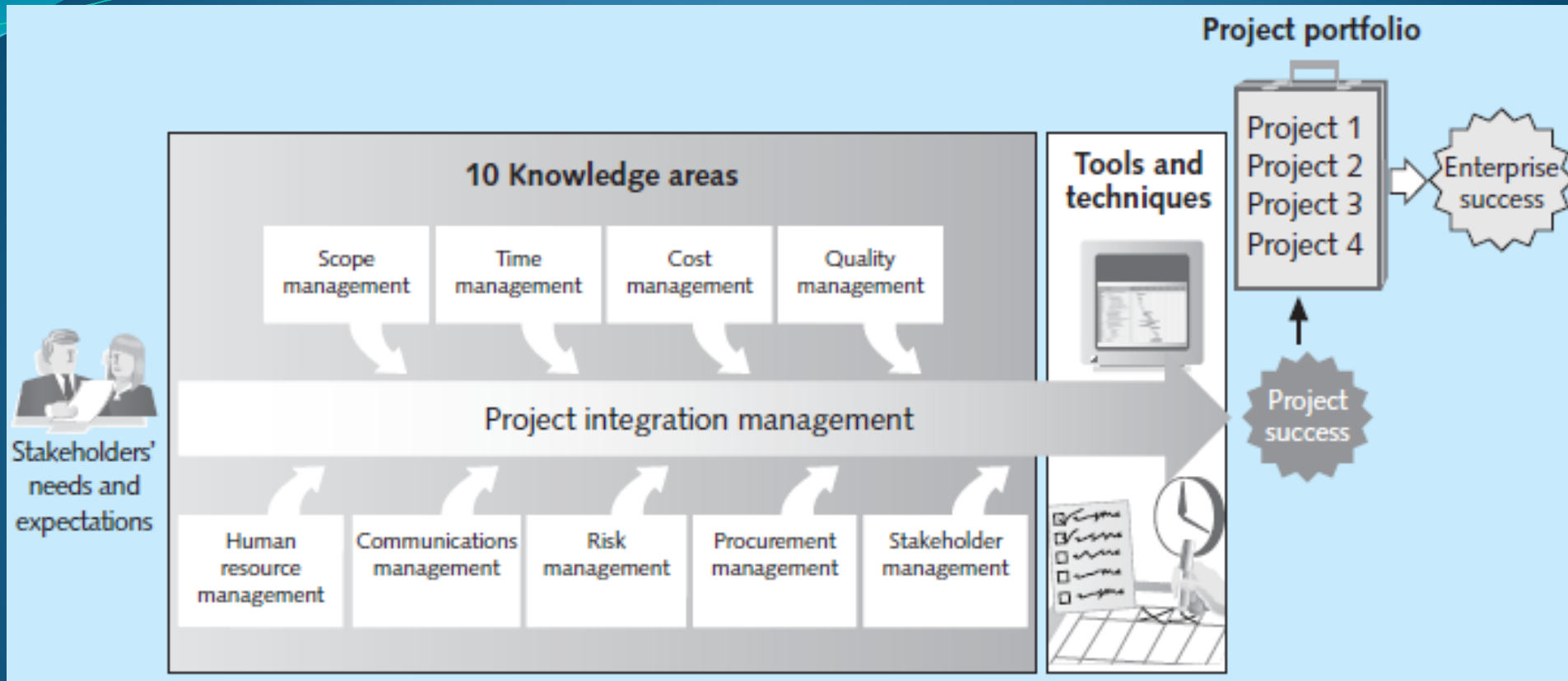
Project Management Knowledge Areas

Fig. Project Management Framework clarifying knowledge areas

➤ There are **10** knowledge areas ***in PM***.

➤ PM Knowledge Areas represent a complete set of concepts, terms, and activities that make up the PM field.

PM Knowledge Areas (cont'd)

Scope Management

➢ Defining and managing all the work required to complete the project successfully

Time Management

➢ Estimating (time) how long it will take to complete the work, developing project schedule, and ensuring timely completion of the project

Cost Management

➢ Preparing and managing the budget for the project

PM Knowledge Areas (cont'd)

Quality Management

➤ Ensures that the project will satisfy the stated or implied needs

Human Resource (HR) Management

➤ Concerned with making effective use of the people involved in the project

Communication Management

➤ Generating, collecting, and storing project information

Risk Management

➤ Identifying, analyzing, and responding to risks related to the project

PM Knowledge Areas (cont'd)

Procurement Management إدارة المشتريات

➤ Acquiring goods and services for a project from outside the performing organization

Stakeholders Management

➤ Identifying and analyzing stakeholder needs while managing and controlling their engagement throughout the life of the project

Integration Management

➤ Overarching الشامل function *that affects and is affected by* all of the other knowledge areas

Scope Management

Scope Management

➤ Many factors of project success, e.g., user involvements, optimized scope, and clear business objectives are *elements of project scope* management.

User involvements is the key concept in the development of useful and usable systems
optimized scope in accordance with profit, time, cost, quality and risk criteria
A business objective is a higher-level goal that a company sets out to accomplish

➤ *Defining the scope*, enables the project manager to *ensure that only the required work will be done* - no less, no more

➤ It is important that the required work will be agreed upon and approved by *stakeholders and sponsors*

➤ **Project scope management** *includes the processes* **involved in defining and controlling** what **work** *is or is not* **included in a project.**

Scope Management (cont'd)

6 main processes are involved in **_scope_** _management_:

1) Planning scope management
2) Collecting Requirements
3) Defining Scope
4) Creating the Work Breakdown Structure (**_WBS_**)هيكل تنظيم العمل
5) Validating Scope
6) Controlling Scope

Mapping between scope management and PM process groups

	Initiating	Planning	Executing	Monitoring and control	Closing
Scope Management		- Plan Scope Management - Collect Requirements - Define Scope - Create WBS		- Validate Scope - Control Scope	

1) Planning Scope Management

An increase in user or team knowledge or sophistication *is* primary factor leading to
1. Scope
2. Scope change
3. Strategy
4. Innovation

 Problem of changing scope or performance, expected of a project is a major
1. Drawback
2. Issue
3. Downfall
4. Success

Despite of how carefully a project is planned, it is almost certain to be changed before
1. Execution
2. Planning
3. Completion
4. Assigning resources

Cause of change that cannot be managed by PM is
1. Technological Uncertainty
2. Innovation
3. Change in environment
4. Increased client knowledge

1) Planning Scope Management

Developing a technology is an example of

1- Process
2- Project
3- Scope
4- All of the above

Following are the phases of Project Management Life Cycle. Arrange them in correct order

1. Design, 2. Marketing, 3. Analysis and evaluation, 4. Inspection, testing and delivery

1-   3-2-1-4
2-   1-2-3-4
3-   2-3-1-4
4-   4-3-2-1

Which project management plan guides the creation of the detailed project scope statement?

A. Charter
B. Project management plan
C. Project scope plan
D. Project scope management plan

1) Planning Scope Management

1. Henry is the project manager for his organization, and management has asked him to *create a project management plan to define the scope statement*. Which project management plan guides the creation of the detailed project scope statement?
A. The charter
B. The project management plan
C. The project scope plan
D. The project scope management plan

Marty is the project manager of the Highway 41 Bridge Project and he's working with his project team members to create the WBS. Marty shows the team how to break down the project scope into the *WBS components*, but the team doesn't understand how far down the breakdown should occur. Marty should call the lowest-level item in a WBS what?
A. A deliverable
B. A work package
C. An activity
D. A leaf object

1) Planning Scope Management

You'll use the scope management plan to define the project scope statement. You'll also use this plan to build the scope baseline. Which two items are parts of the scope baseline for the project?

A. The project scope management plan and project charter
B. The project scope management plan and the WBS
C. The WBS and WBS dictionary
D. Time and cost baselines

1) Planning Scope Management

Next Lecture