

PROJECT MANAGEMENT

CERTIFIED PROCUREMENT AND SUPPLY PROFESSIONAL OF KENYA

CPSP-K

2019

SAMPLE WORK

PART 4

CHAPTER 1: OVERVIEW OF PROJECT MANAGEMENT.....	1
CHAPTER 2: PROJECT LIFE CYCLE.....	13
CHAPTER 3: PROJECT FORMULATION	18
CHAPTER 4: PROJECT INITIATION.....	25
CHAPTER 5: PROJECT PLANNING AND SCHEDULLING.....	41
CHAPTER 6: PROJECT RESOURCES AND COSTING.....	54
CHAPTER 7: PROJECT IMPLEMENTATION AND ORGANIZATION STRUCTURES	64
CHAPTER 8: QUALITY IN PROJECT MANAGEMENT.....	81
CHAPTER 9: PROJECT PROCUREMENT MANAGEMENT.....	95
CHAPTER 10: PROJECT MONITORING AND EVALUATION.....	110
CHAPTER 11: PROJECT TERMINATION	128
CHAPTER 12: PROJECT RETURNS ON INVESTMENT	137
CHAPTER 13: EMERGING ISSUES AND TRENDS IN PROJECT MANAGEMENT	142

SAMPLE WORK

CHAPTER 1

OVERVIEW OF PROJECT MANAGEMENT

Definitions of terms used in project Management

A **project** is a set of activities which should be undertaken in a logical sequence for the purpose of attaining some specified objectives within a given time period, budget and at a given quality specification

A **project** is an interrelated set of activities that has a definite starting and ending point and results in the accomplishment of a unique, often major outcome.

A **project** is a means of moving from a problem to a solution via a series of planned activities. It has project a definite beginning and end.

Examples of typical projects are for example:

- **Personal projects** (obtain a degree, diploma, write a report, plan a wedding, plant a garden, build a house extension)
- **Industrial projects** (construct a building, provide a gas supply to an industrial estate, build a motorway, design a new car)
- **Business projects** (develop a new course, develop a new course, develop a computer system, introduce a new product, and prepare an annual report, set up a new office)

Project management is the application of knowledge, Skills, tools and techniques to project activities in order to meet or exceed stakeholder needs and expectations from a project. Project management is the discipline of planning, organizing, securing and managing resources to bring about the successful completion of specific project goals.

Project management is an approach to management of work within the constraints of time, cost, and performance requirements.

Project management" is, therefore, the planning and control of events that, together, comprise the **project**.

Project management aims to ensure the effective use of resources and delivery of the project objectives on time and within cost constraints.

An **activity** or task is the smallest unit of work effort within the **project** and consumes resources which are both financial and non-financial and which are under the control of the project manager

Project Manager- A project manager is a professional in the field of project management. Project managers have the responsibility of the planning, execution, and completion of any project with Limited time and other resources. A project manager should possess solid technical knowledge (to be able to take usage of models and instruments for planning, scheduling and control), experience in human resources sphere (to be able to manage persons form different field) and professional background in situation of stress, limited time and resources
Project Team- Project team refer to a number of people who work close together to achieve shared common goals.

Critical Path Analysis CPA (Network Analysis)-It is a project management tool that:

- Sets out all the individual activities that make up a larger project.
- Shows the order in which activities have to be undertaken.
- Shows which activities can only be taken place once other activities have been completed.
- Shows which activities can be undertaken simultaneously, thereby reducing the overall time taken to complete the whole project.
- Shows when certain resources will be needed – for example, a crane to be hired for a building site.

Project Management Knowledge areas:

- **Project Integration Management-**Describes the processes required to ensure that the various elements of the project are properly coordinated. It consists of project plan development, project plan execution and overall change control.

- **Project scope Management.-**Describes the processes required to ensure that the project includes all the work required and only authorized work is executed.

It consist of initiation, scope planning, scope definition, scope verification and scope change control

- **Project time Management-**Describes the processes required to ensure timely completion of the project. It consists of activity definition, activity sequencing, activity duration estimation, schedule development and schedule control.

SAMPLE WORK

- **Project cost Management** .Describes the processes required to ensure that the project is completed within the approved budget. It consists of resource planning, cost estimation, cost budgeting and cost control.
- **Project Quality Management**-Describes the processes required to ensure that the project will satisfy the needs for which it was undertaken. It consists of quality planning, quality assurance and quality control.
- **Project human resource Management**-Describes the processes required to make the most effective use of people involved with the project. It consists of organizational planning, staff acquisition and team development.
- **Project communications Management**-Describes the processes required to ensure timely and appropriate generation, collection, dissemination, storage and disposition of project information. It consists of communication planning, information distribution, performance reporting and administrative closure.
- **Project Risk Management** -Describes the processes concerned with the identifying, analysing and responding to project risk. It consists of risk identification, risk quantification, risk response and risk response control.
- **Project procurement Management** -Describes the processes required to procurement planning, solicitation planning, solicitation, source selection, contract administration and contract close out.

SAMPLE WORK

Importance of Project Management in Organization

Project management is a growing field used increasingly by businesses of all sizes. As entrepreneurs and company executives' deal with the daily responsibilities of managing an organization, it is important to use dedicated project managers to oversee projects from conception to completion. Understanding effective project management techniques helps organizations carry out large-scale projects on time, on budget and with minimal disruption to the rest of the business.

a) Organizing Chaos

Projects are naturally chaotic. The primary business function of project management is organizing & planning projects to tame this chaos. It's hard to think of any complex business endeavour that was ever achieved without organization & planning.

Project management is the organization, planning and control of projects.

b) Managing Risk

Any good project has plenty of risk. After all, the nature of business is taking risks. Risk is a fundamental part of business strategy. However, risk needs to be managed. Risk is that chance of a negative event or loss. Uncontrolled risk taking ends in asset destruction and compliance issues. Project management identifies, manages and controls risk.

c) Managing Quality

Quality is the value of what you produce. There's not much sense producing something that has no value. Leaving quality to chance is analogous to producing something of random value.

Project management identifies, manages and controls quality.

d) Managing Integration

Projects don't happen in a vacuum. They need to be integrated with business processes, systems and organizations. You can't build a sales system that doesn't integrate with your sales process and sales organization. It wouldn't add much value. Integration is often key to project value. Project management identifies and manages integration.

e) Managing Change

Projects always happen in an environment in which nothing is constant except change. Projects are always a moving target. Managing change is a complex and daunting task. It's not optional. Unless you can put your business universe on pause, change happens whether you manage it or not. Project management manages change.

f) Learning From Failure

Projects fail. When they do, it's important to learn from the process. Learning from failure is key to business innovation and quality improvement. Project management ensures that lessons are learned from project success and failure.

Others include;

a. Temporary and Unique Venture

While a business is a continuous and on-going operation, a project is a temporary venture aimed at producing a unique product, service or process. In many cases, this uniqueness means there aren't any blueprints or steps in place to develop the end product. Project managers have expertise and experience in creating plans to deliver these items. In addition, they seamlessly integrate resources across a company's departments and utilize communication, planning and budgeting skills to bring projects to completion.

b. Project Management Skills

Many business projects involve large-scale planning that affects every department or aspect of a business. Implementing the project may mean dealing with human resources, budgetary and supply constraints. Accredited project managers are skilled in project management techniques specific to dealing with one-time projects. They can create plans to manage interdependence and address resource conflict. Organizations that use project management to monitor and control processes and schedules can more effectively complete their projects on time and on budget.

SAMPLE WORK

c. Timeline

Creating a project timeline requires coordinating project activities in conjunction with the on-going business activities. A project manager will identify and detail activities required in each phase of a project and lead teams with members of your staff to carry out each phase. Working within the parameters of a project management plan, a schedule sets out target dates for completion of tasks within each phase. The time line is directly correlated to the scope of a project.

d. Scope

Project management is imperative for organizations implementing wide-ranging or comprehensive projects. Scope refers to the breadth of a project, or how much of the business will be affected, and the bigger the project, the more details and planning are required to successfully bring it to fruition. Carrying out a wide-scale business endeavour requires careful coordination to ensure minimal impact on on-going sales and production.

e. Budget

Project management helps keep projects on budget. A good project management plan identifies anticipated costs early on to develop a realistic budget. Using resource conflict solutions, project managers can minimize the effect of funding a new project on operating capital by optimizing the allocation of workers. Coordinating tasks and clearly identifying goals or deliverables within phases reduces inefficiencies in time management that can result in being over-budget.

SAMPLE WORK

Characteristics of a project

1. Specific Objectives: The three generic objectives of a project are

- a) Time-determined by the schedule of activities
- b) Cost-determined by the budget
- c) Quality-determined by the specification of customers

Projects should meet the requirements/specifications of the stakeholders. Stakeholders include:-beneficiaries, financiers, implementers, victims of the project. (For example Titanium in Kwale- if mining activities has to displace some people)

2. Limited Life Span i.e. it is temporal

3. Single Entity i.e. it is a stand-alone. It comes up to specific product.

4. Relies on Teamwork: Implemented by teams

5. Follows a Specific Life Cycle

6. Unique i.e. no two projects are the same. Even when undertaking a similar project, the achieve project provides a template.

7. Keep Changing i.e. projects keep changing depending on circumstances. Thus they must be adaptable.

8. Projects Are Made To Order: Unlike operations where one produces and then look 4 customers.

9. Have High Level of Risk and Uncertainty

SAMPLE WORK

Project stakeholders

According to the Project Management Institute (PMI), the term **project stakeholder** refers to, ‘an individual, group, or organization, who may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project’ (Project Management Institute, 2013).

Project stakeholders are entities that have an interest in a given project. These stakeholders may be inside or outside an organization which:

1. sponsor a project, or
2. have an interest or a gain upon a successful completion of a project;
3. May have a positive or negative influence in the project completion.

The following are examples of project stakeholders:

- ✓ Project leader
- ✓ Project team members
- ✓ Senior management
- ✓ Project customer
- ✓ Resource Managers
- ✓ Line Managers
- ✓ Product user group
- ✓ Project testers
- ✓ Any group impacted by the project as it progresses
- ✓ Any group impacted by the project when it is completed
- ✓ Subcontractors to the project
- ✓ Consultants to the project

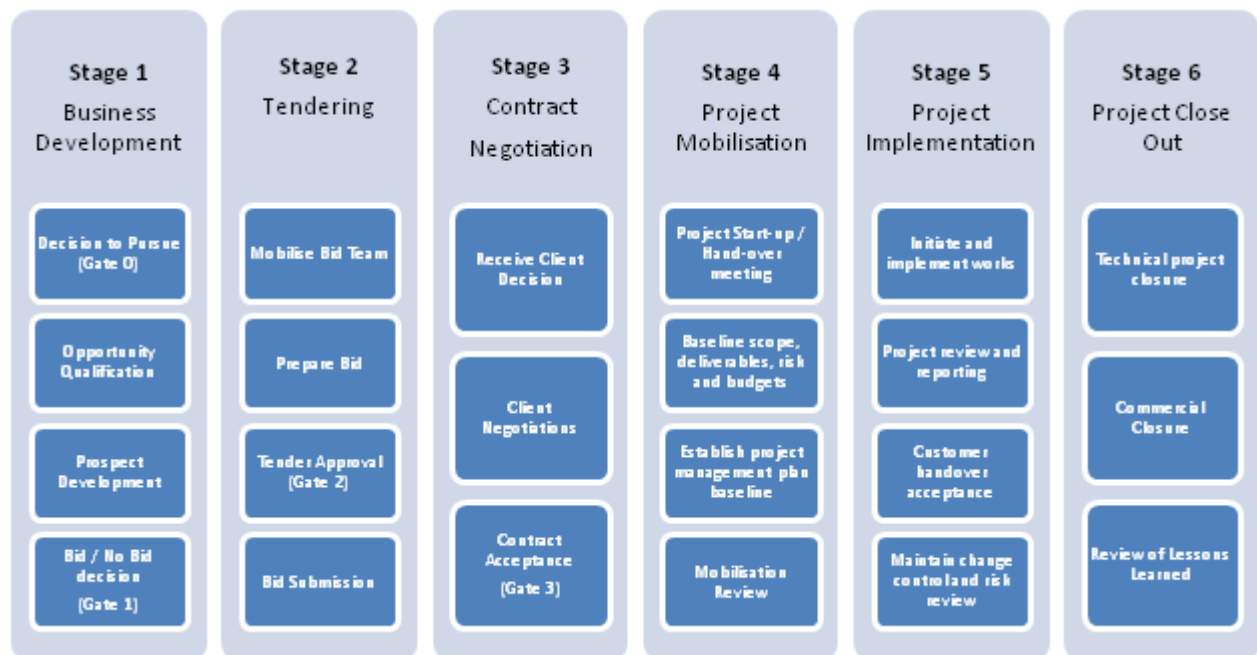
SAMPLE WORK

Project Management Framework

A project Management Framework consists of three parts a project lifecycle, a project control cycle and tool and templates to facilitate the execution of the project

a. Project Lifecycle

The project lifecycle, as shown below, provides guidance on the common stages and steps which apply to all projects. The aim is to establish a common framework for the management of projects. They vary in detail from organisation to organisations but critical to the success is the freedom given to those projects managers and senior managers to adapt the stages to suit the size and complexity of the project they are managing. This is because not all stages and steps will be relevant to every project, for example those awarded under a framework contract.

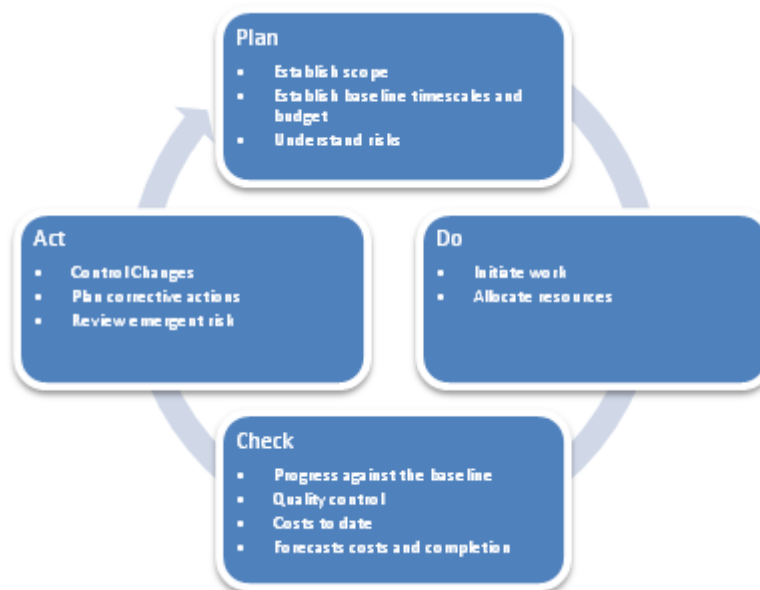


Guidance notes are provided to support each stage in the project lifecycle; typically these include references to key templates and management tools.

SAMPLE WORK

b. Project Control Cycle

The project lifecycle describes what needs to be done at each stage and the project control cycle describes how each stage is planned and managed. Based on a simple plan, do, check, act process the control cycle ensures that each stage has the appropriate plan, controls and corrective actions in place.



The project control cycle acts as a navigation system for the project through the roadmap defined by the lifecycle.

c. Template and Tools

Simple tools and templates support the implementation of project management within an organisation. Making these relevant to the size, risk and scope of the project is essential to ensure they are effective in supporting the project managers. Using standardised templates can support a common language and processes.

SAMPLE WORK

Checkpoint Report *Insert Project Name* Date: 12 October 2010

Checkpoint Report

Project Plan *Insert Project Name* Date: 12 October 2010

Project Plan

3 Purpose
 [The Project Plan is a mandatory plan that provides a statement of how and when a project's objectives are to be achieved, by showing the major products, activities and resources required on the project.]

It provides the Business Case with planned project costs and it identifies the management stages and other major control points

It is used by the Project Board as a baseline against which to monitor project progress and cost, stage by stage]

4 Plan Description
 [A brief description of what the plan covers]

5 Prerequisites
 [Describe any fundamental aspects which must be in place at the start of the project and which must remain in place for the project to succeed]

RISK LOG

Programme:				Project:		FORM [029]	
RISK IDENTIFIER: [0001]				Description:		Risk Category: [e.g. commercial, legal, technical]	
Probability: [estimate of likelihood]		Impact: [effect on project/programme/organisation if risk were to occur]		Proximity: [how close in time is risk likely to occur]			
Countermeasures: [what actions have been taken/will be taken to counter this risk]							
Owner: [person appointed to monitor this risk]		Author: [who submitted this risk]	Date Identified:	Date of Last Update:	Current Status: [e.g. reducing, dead, increasing.]		
RISK IDENTIFIER: [0002]		Description:		Risk Category:			
Probability:		Impact:		Proximity:			
Countermeasures:							
Owner:		Author:	Date Identified:	Date of Last Update:	Current Status:		

Summary

A Project Management Framework supports the implementation of project management within an organisation because:

1. It supports the development and replication of accepted practice.
2. Helps communication within the team because of a common language.
3. Streamlines the use of tools and techniques for key project management processes.
4. Establishes a consistent approach which aid customers understand the project management processes.
5. Ensure that focus is maintained on the early stage of the project lifecycle.

Project Management Skills:

Many of the tools and techniques for managing projects are specific to project management. However, effective project management requires that the project management team acquire the following three dimensions of project management competencies:

- ✓ **Project Management Knowledge Competency:** This refers to what the project management team knows about project management.
- ✓ **Project Management Performance Competency:** This refers to what the project management team is able to do or accomplish while applying their project management knowledge.
- ✓ **Personal Competency:** This refers to how the project management team behaves when performing the project or activity.

Interpersonal Skills Management:

The management of interpersonal relationships includes:

- ✓ **Effective communication:** The exchange of information
- ✓ **Influencing the organization:** The ability to "get things done"
- ✓ **Leadership:** Developing a vision and strategy, and motivating people to achieve that vision and strategy
- ✓ **Motivation:** Energizing people to achieve high levels of performance and to overcome barriers to change
- ✓ **Negotiation and conflict management:** Conferring with others to come to terms with them or to reach an agreement
- ✓ **Decision Making:** Ability to take decision independently.
- ✓ **Political and cultural awareness:** Important to handle various personal and professional issues.
- ✓ **Team Building:** Ability to create a productive team.

SAMPLE WORK

CHAPTER 2

PROJECT LIFE CYCLE

This consists of sequential phases through which projects undergo. The phases are important in planning a project since they provide a framework for budgeting, manpower, resource allocation, scheduling project milestones, project reviews etc. All projects go through the following stages whether big or small

Stages of Project Life Cycle

i. Project idea /conception

An idea regarding intervention in a specific area to address and identify a problem is developed or formed. Sources of ideas include

- ✓ Market demand where one may be facing increasing demand thus becoming a problem
- ✓ Technological changes- this forces an organization to change in order to make use of the new technology e.g. utilization of internet, mobile telephony
- ✓ Natural calamities like fire, floods, landslides, drought etc.
- ✓ Resource availability- makes use of the available resources e.g. waste products in a manufacturing plant to generate by-products.
- ✓ Political considerations

Need to avail basic requirements or necessities to a community

b) Project Identification

After conception of ideas, Potential projects arising from the ideas crystallised above are identified. The information may be captured in the form of a proposal or proposals and submitted to an agent or agency for consideration and objective judgement to assess the potential and justification for the intervention before the idea goes to the next stage in the cycle.

SAMPLE WORK