CONTRUCTION MANAGMENT

Submitted by:

Osama Habib

ID: 7703

Section : C

Submitted to:

Dr. Engr Muhammad Zeeshan Ahad

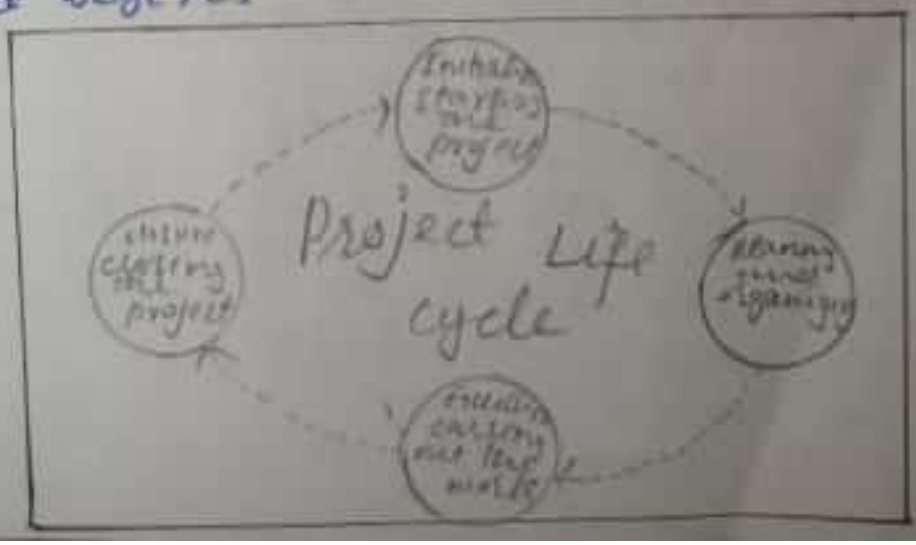
IQRA NATIONAL UNIVERSITY PESHAWAR

Problem 1

Project life Cycles

A project life cycle is the sequence of phases that a project goes through from its initiation to it's closure.

The number and sequence of the cycle are determined by the management and various other factors like need of the organization involved in the project and nature of the project and its area of application. The phases have a definite start, end and control point are constrained by time. The project life cycle can be defined and modified as per the need and aspects of the organization. Even though every project has a definite start and end, the particular objectives, deliverables and activities may widely. The lifecycle provides the basic foundations of the actions that has to be performed in the project, irrespective of the specific work involved. project life cycle can ranges from predictive or plan driven approaches. In a predictive lifecycle, the specific are defined at the start of the project and any alteration to scope are carefully addressed. In an adaptive lifecycle the product is developed over multiple interations and detail scope is defined for interation only as the interations begins.



Different Phases Of Project Lifecycle Are;

- Initiation (Starting the project)
- Planning, organising and preparing
- Executing (carry out the work)
- Closure (closing the project)

Phase #1

The Conceptulization Phase

This can also be referred to as the Initiation phase and is the starting point of any project & idea.
For conceptulization phase to begin, a strategic need for the project or service must be recognized by upper management
The conceptualization phase typically include.

- Creation of the Statement Work
- Proceeding the business case
- Creation of a business Contract.

Phase #2

The Planning Phase

The second phase of the project management life cycle is reffered to as the planning phase once management has given the ok to launch a project, a more formal set of plans - outlinning initial goals is established.
The planning phase typically involve.

- Determining resource availability
- Creating a project budget
- Beginning to allocate tasks to certain resources.

Phaze #3

The Executing Phase

The third phase is labelled execution. This is when actual work of the project is performed. Required material, tools and recources are transformed to reach the project goals. During this phase, performance is continuously measured to ensure the project is successful. The execution phase typically involves:

- Strategic planning
- Implementation planning

Phase #4

The Termination Phase

The fourth and final phase is called termination phase also referred to as project closure. This phase begins once the project has been completed.
The termination phase typically includes

- The disbandment of the project team
- personal and tools are reassigned to new duties
- Resources released back to parent organization
- project transferred to intended users.

Problem No 2

Major Types Of Construction Projects

There are four major types of constructions each with it's own requirement and characteristics
The four major types of construction includes
Residental building
Institutional and comertial building
Specialized industrial construction
Infrastructure and heavy construction.

Residental Building

The first type of construction is residental housing construction which inuslues building, repairing and remodeling of structures for the purpose of housing people, supplies of equipment
It includes apartments, town homes, condominiums homes, dormitories etc
Also garges outbuilding like utility sheds are considered as residental constructions. As mentioned above residental construction also includes repair and installation of utilities like water or electrici tie around the structure
The design of residental housing projects is usually done by engineer and architects and construction itself is executed by construction companies who hire subcontractors companies to do the mechanical, structural and electrical work of the companies project
But for single family houses, builders usually do all of the phases, both the design and construction.

Institution and Commercial Building

This type of construction encompasses projects, schools, sports arenas, shopping centres, hospitals, stadiums, retail stores and skyscrapers. Like the residential housing construction, institutional and commercial building involves both putting up of new structures and repair and maintances of existing structures. Typically a project like a retail store is usually commissioned by a company or private owner. Other projects such as stadiums, schools and medical facilities are often paid for and managed by both local and national government

Specialized Industrial Construction.

The third type of construction is specialized industrial construction which entails building structures that require a high level of specialization as well as technical skills in planning construction and design. Typically this type of construction is carried out by - for profit or industrial corporations. For example a chemical industry can build oil refineries and power generation can build structures. Nuclear power plants and hydroelectric power plants, which are examples of specialized industrial construction.

Infrastructure And Heavy Constructions

The last type of construction project is infrastructure and heavy construction which encompasses building and upgrading of railways, communications and roads to the surroundings of a city or existing building construction usually done due to public interest and so often executed by government agencies and large private operations.

Some other projects that fall under this type of construction include tunnels, bridges, airways,