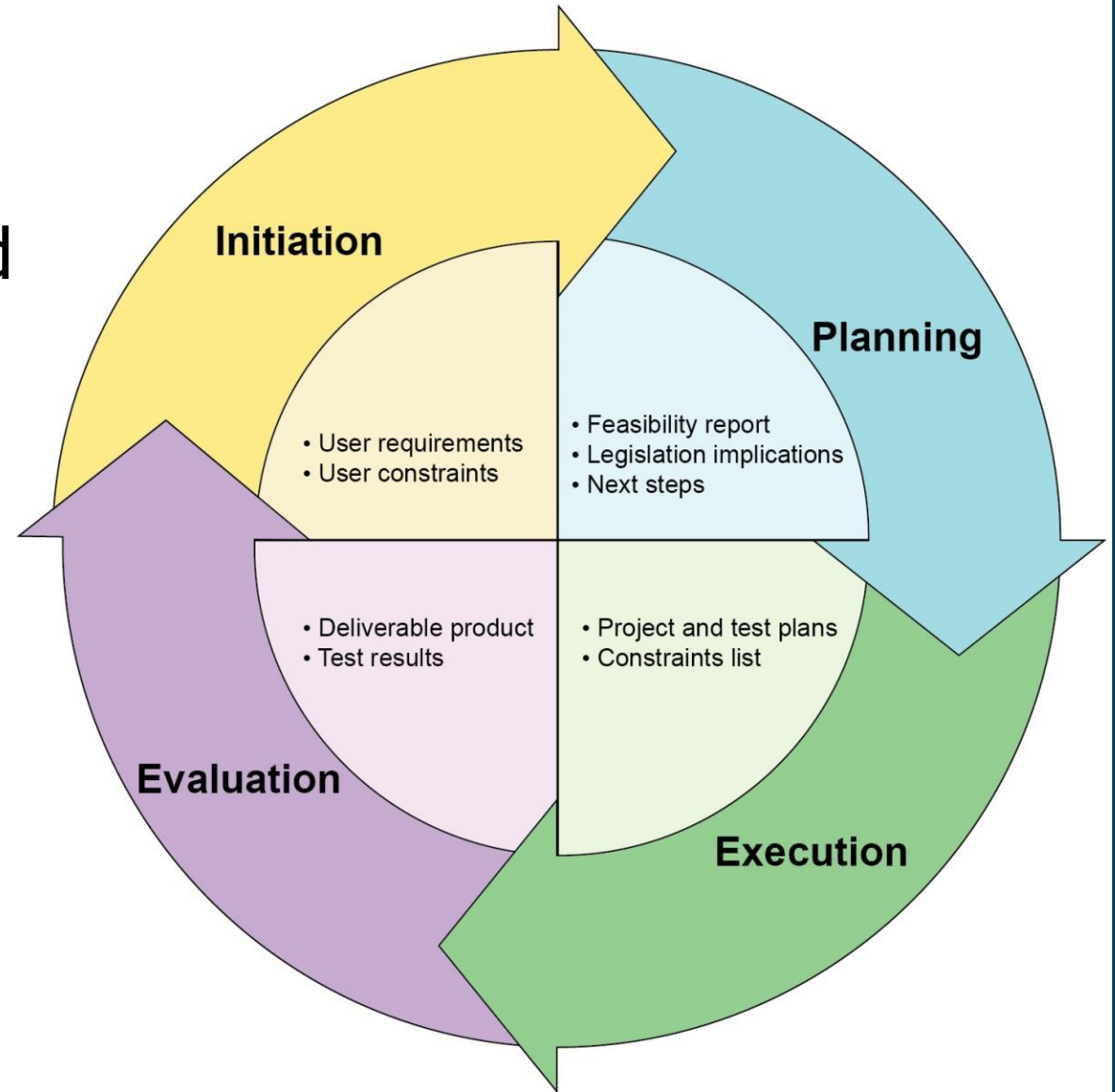


The Project Life Cycle

Unit R012 - Understanding tools, techniques, methods and processes for technological solutions

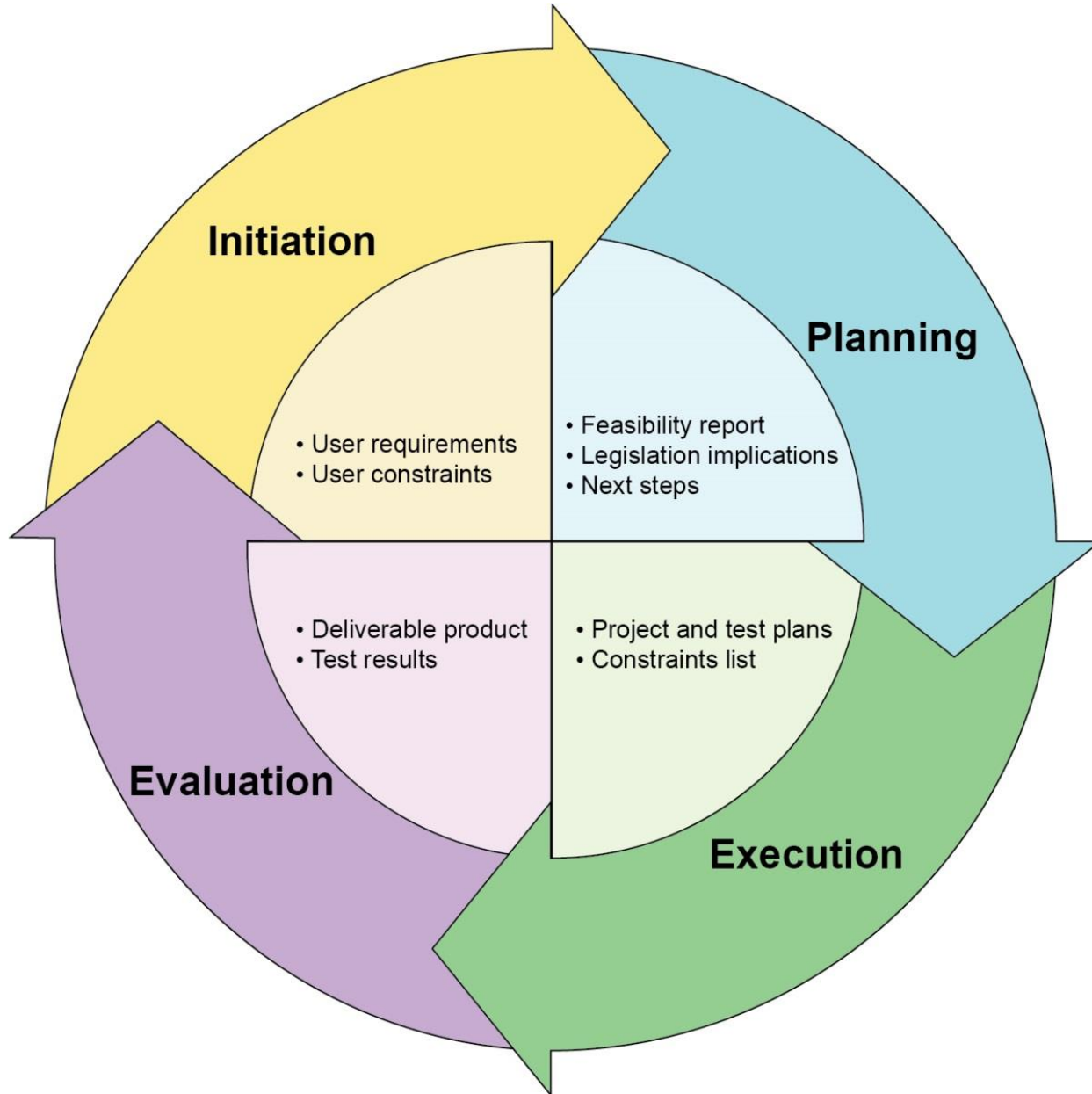
Introduction

- All projects should follow a defined set of **phases**.
- There are many different types of project life cycle but you will cover:
 - 1. Initiation**
 - 2. Planning**
 - 3. Execution**
 - 4. Evaluation**



Introduction

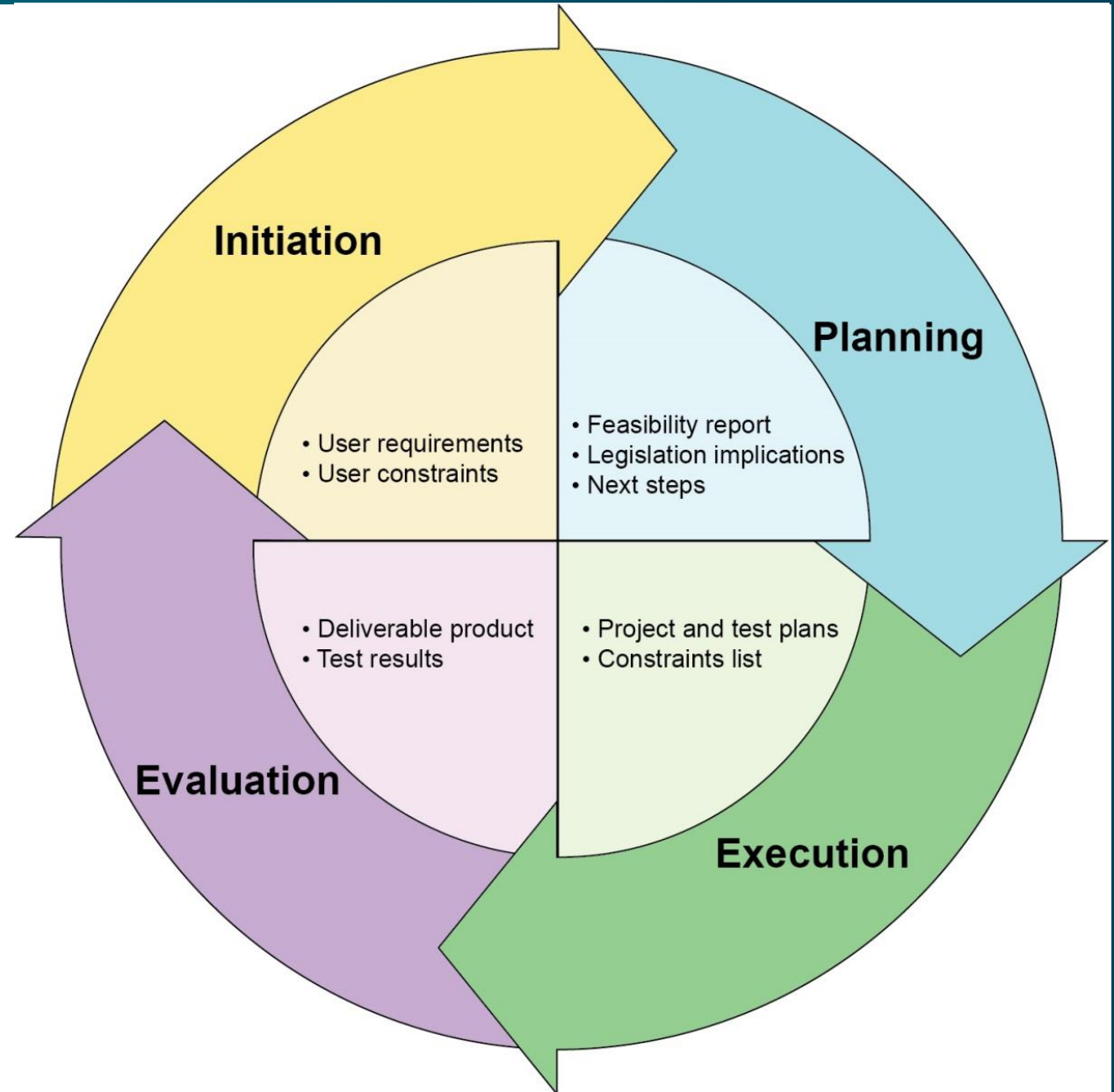
Input tasks for each phase in centre



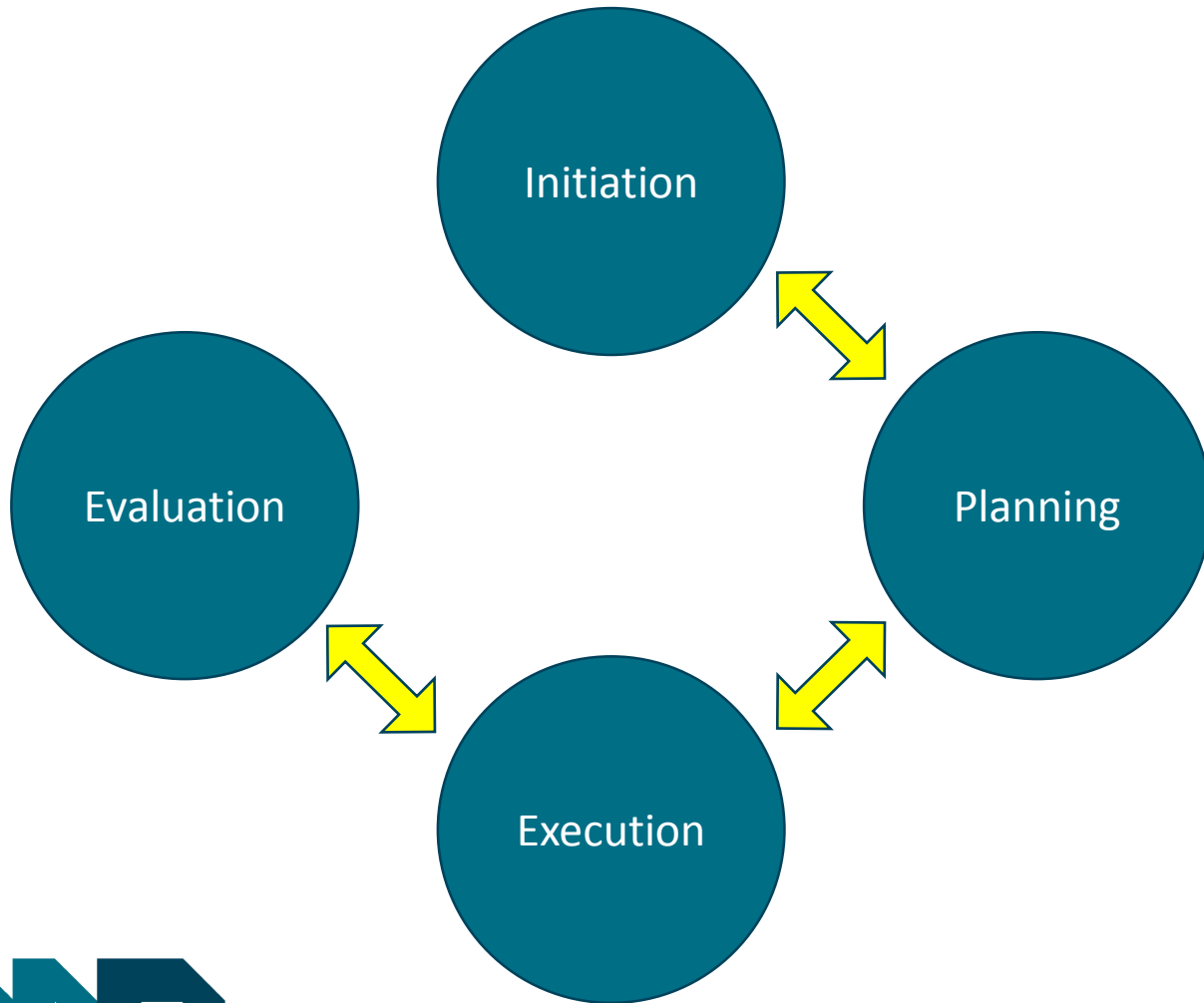
Introduction

What do you think possible constraints for any project could be?

ANSWER:
Time, Resources, Regulations,
Security/Risk Management,
Mitigation Of Risks

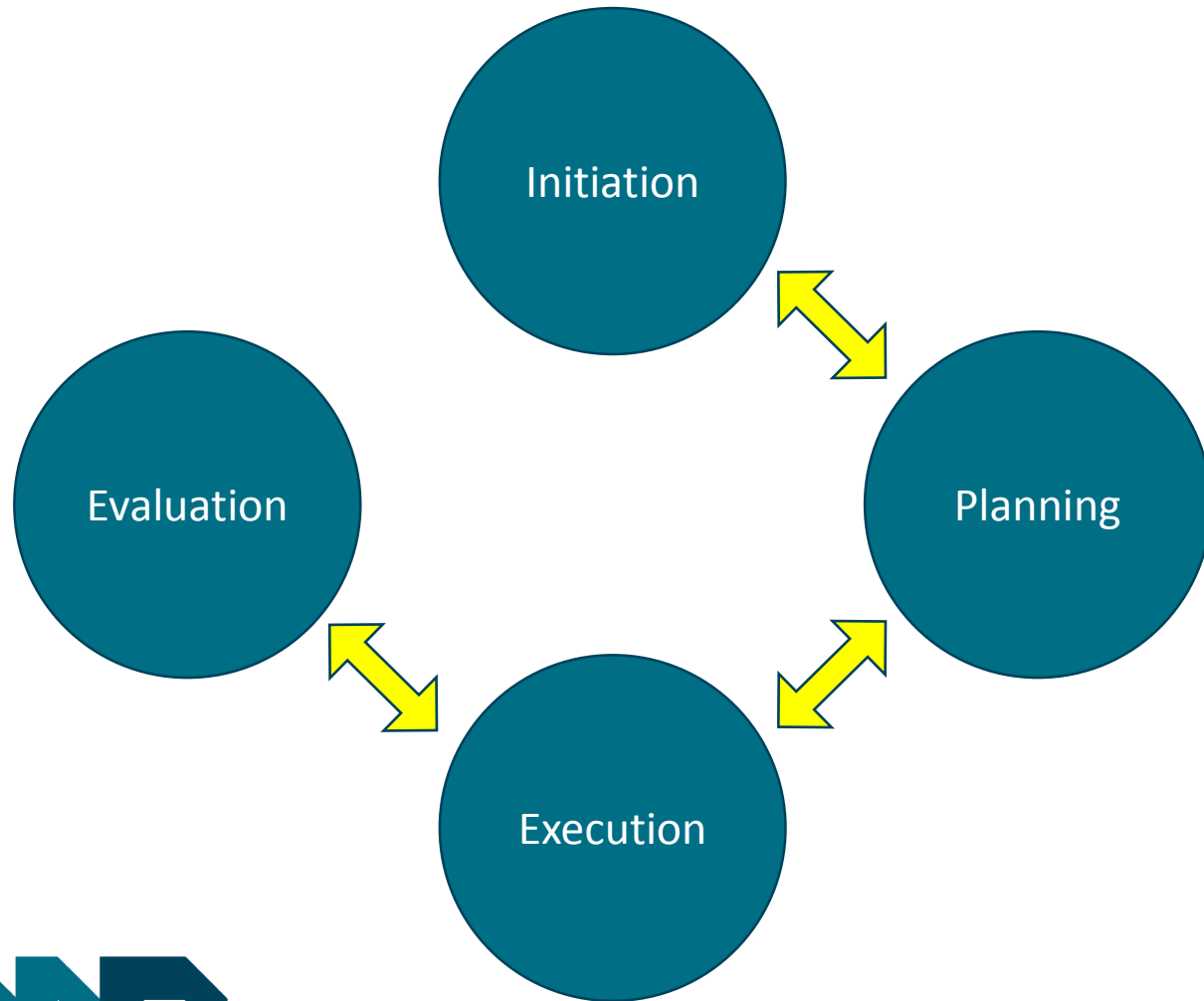


Interaction and Iteration



- **Phases interact** with each other.
- The **outputs** of one **phase** become the **inputs** of another
 - E.g. Project plan
- If **detail** is **missing** from one phase then you must **return** to it to **complete** it.
 - This is **Iteration** between phases.

Interaction and Iteration



Phase	Interaction with	Iteration with
Initiation	Planning	N/A
Planning	Initiation Execution	Initiation
Execution	Planning Evaluation	Planning
Evaluation	Execution	Execution

Initiation Phase

- This phase is the **starting point** for any project where the **need** for the project is considered.
- In this phase, answers to specific **questions** about the project, need to be **discussed** between the **client** and the **project manager**, to see if the project is **feasible**.
 - What is the end product?
 - Who is for?
 - Which people are needed to complete the project?
 - What resources are required to complete the project?
 - What is the timescale for the project?

Initiation Phase

Requirements

- The **client** should provide a list of **requirements** for the project such as:
 - Include company logo
 - Maintain company house style
 - Targeted age group
 - The format of the output from the final product

Constraints

- The **client** may also provide a list of **constraints** that the product should not include, such as:
 - The timescale for the completion
 - The project budget
 - The hardware/software that should develop the product
 - The hardware/software that the final product should be compatible with.

Initiation Phase

- When all the questions are answered a **feasibility report** should be created by the project manager and will **recommend** a way forward.
- **Legal** issues will also need to be considered and how laws such as the **Data Protection Act**, need to be met.
- At the end of this phase a **phase review** is carried out. This will check if the **questions** have been **answered**, the **constraints** have been **defined** and will make a **decision** if the **project** should go ahead.

Planning Phase

- During this stage the **requirements**, the **constraints** and the **legal** issues **identified** in the Initiation stage are **used** to **create** a **detailed** plan.
- This **plan** will be used to **monitor** the project **progress**
- If **plans** are not **detailed** enough the client **requirements**, **budgets** and **deadlines** might **not** be met.

Planning Phase

- During this stage the **project manager** must **define** the:
 - **Tasks** needed to complete the project
 - **Time** needed to complete the project
 - **Workflow**
 - What needs to be completed before another task can start.
 - **Contingency** time
 - Plan in time needed to still hit the final deadline
 - **Milestones** and end point
 - Key deadlines for tasks to be started/finished by.
 - **Resources** needed to complete each task.

Planning Phase

- At the **end** of this stage a **phase review** is carried out again.
- This will make sure that the plan is **complete** and can be delivered **on time**.
- A **decision** is made about whether to carry on with the project and if it is then the execution phase will begin.

Execution Phase

- This is usually the **longest** phase in the project life cycle and this is where the product is **created** and **tested**.
- The **plan** created in the planning phase is used by the project manager to **identify** and **monitor** the **tasks** that need to be completed.
- The **plan** is also used to **mitigate** other risks such as **security**, **ethical**, **moral** and **legal** issues.

Execution Phase

- If some of user **requirements** or **risks** may **change** and this could have a **negative** impact on whether the project is delivered on **time** and meets user **requirements**.
- At the **end** of this stage a phase **review** is carried out to confirm the project is complete before the evaluation phase begins.



Evaluation Phase

- This is the final phase in the project life cycle and is where the product is **released** to the client and the **user documentation created**.
- This will include an **installation guide** which allows the user to reinstall the product in case of any hardware upgrades
- A **user guide** is also created for the client to use alongside the product and if any problems occur, they can rectify them.

Evaluation Phase

- There is a final **review** during this stage which focusses on:
 - The **success** of the project
 - Measured against the success criteria and user requirements.
 - Any **deviations** from the original plan
 - The **effect** of **processes** and resources on creating the product
 - **Maintainability**
 - Including any future developments to the product

Advantages of the Project Life Cycle

Advantages of the Project Life Cycle

Provides a **structured** approach

Clearly defined **tasks** to be completed in each phase

Clearly defined **inputs** and **outputs** for each phase

Clearly defined **roles** and **responsibilities** of each member of the project team

Resources can be **allocated** in advance so that issues can be dealt with in advance

Project Managers can **monitor progress** of the project and ensure **timely** completion

End of **phase reviews** are used to ensure that the project is **meeting success criteria** and objectives