

Project LifeCycles



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SCHOOL OF BUSINESS
ADMINISTRATION IN KARVINA

Project Management

How the lecture will be conducted?



1. The lecture is divided into **three blocks**, where each block introduces an issue (1. What is a project and project management, Who is project manager and their role 2. Project management evolution 3. The main elements of a project, types of projects)
 2. After each block there is a quiz for feedback on whether you have understood everything.
 3. We use **MS Teams**, a shared whiteboard for your engagement and reactions. Also we are working with MS Project.
 4. The class is supplemented with **quizzes in vevox**, the link is always in the presentation.
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1. **PART** (20 min.)

- Project lifecycle definition and phases

2. **PART** (30 min.)

- The types of project lifecycles

3. **PART** (30 min.)

- Significance of the project lifecycle
 - Limitations of project lifecycle
-

Learning objectives



On the end of this lecture you should be able to understand and explain:

- What is project lifecycle and its phases
 - The types of project lifecycles
 - Why project lifecycles are important for project management
 - What are the limitations of project lifecycles
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Key readings



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You can find support in the following sources:

Chapter 2. Project Management Growth: Concepts and Definitions

Kerzner, H. (2017). Project Management: A Systems Approach to Planning, Scheduling, and Controlling. Hoboken, New Jersey: John Wiley & Sons, Inc. ISBN 978-1-119-16535-4.

Chapter 1

Grit, R. (2021). Project management : A practical approach. Taylor & Francis Group.

PART 1

What is project lifecycle

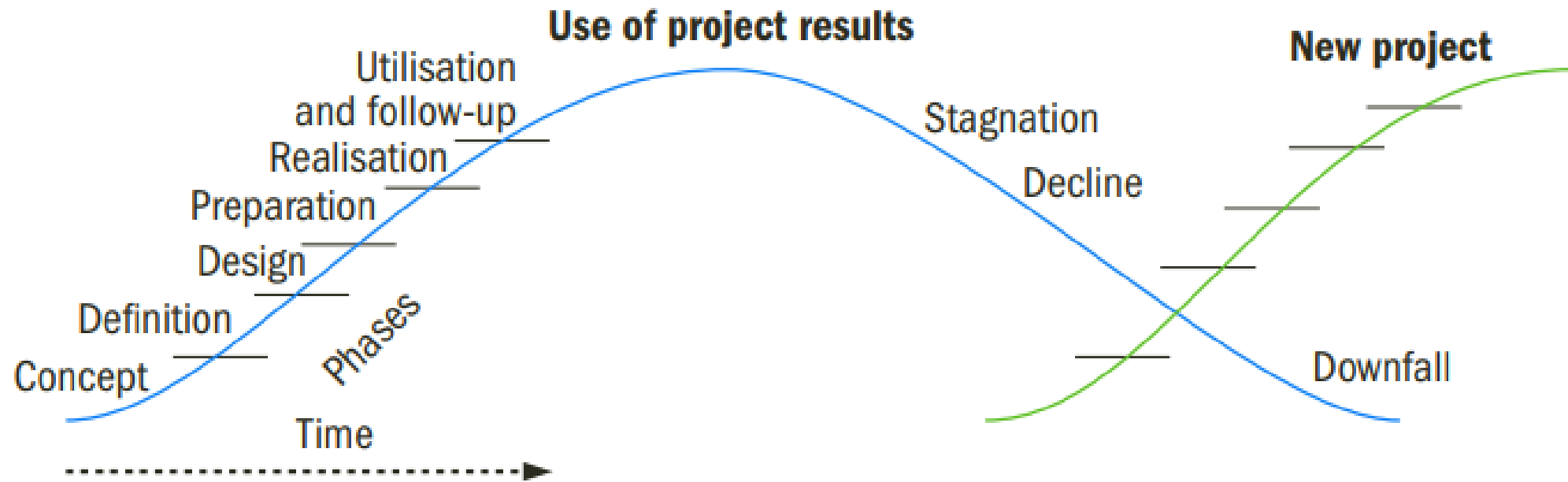
- Every program, project, or product has certain phases of development known as life-cycle phases. A clear understanding of these phases permits managers and executives to better control resources to achieve goals.
- The goal of a project is to achieve a specific goal.
- However, the end result is often only temporary.

Example: The results of reorganising a car factory or manufacturing a new car model, will lose their value in the long term. After a number of years, the car factory will start up a new project in order to manufacture an even newer car model.

The entire process from start to finish of a project is called the ‘project lifecycle’.



Project lifecycle phases





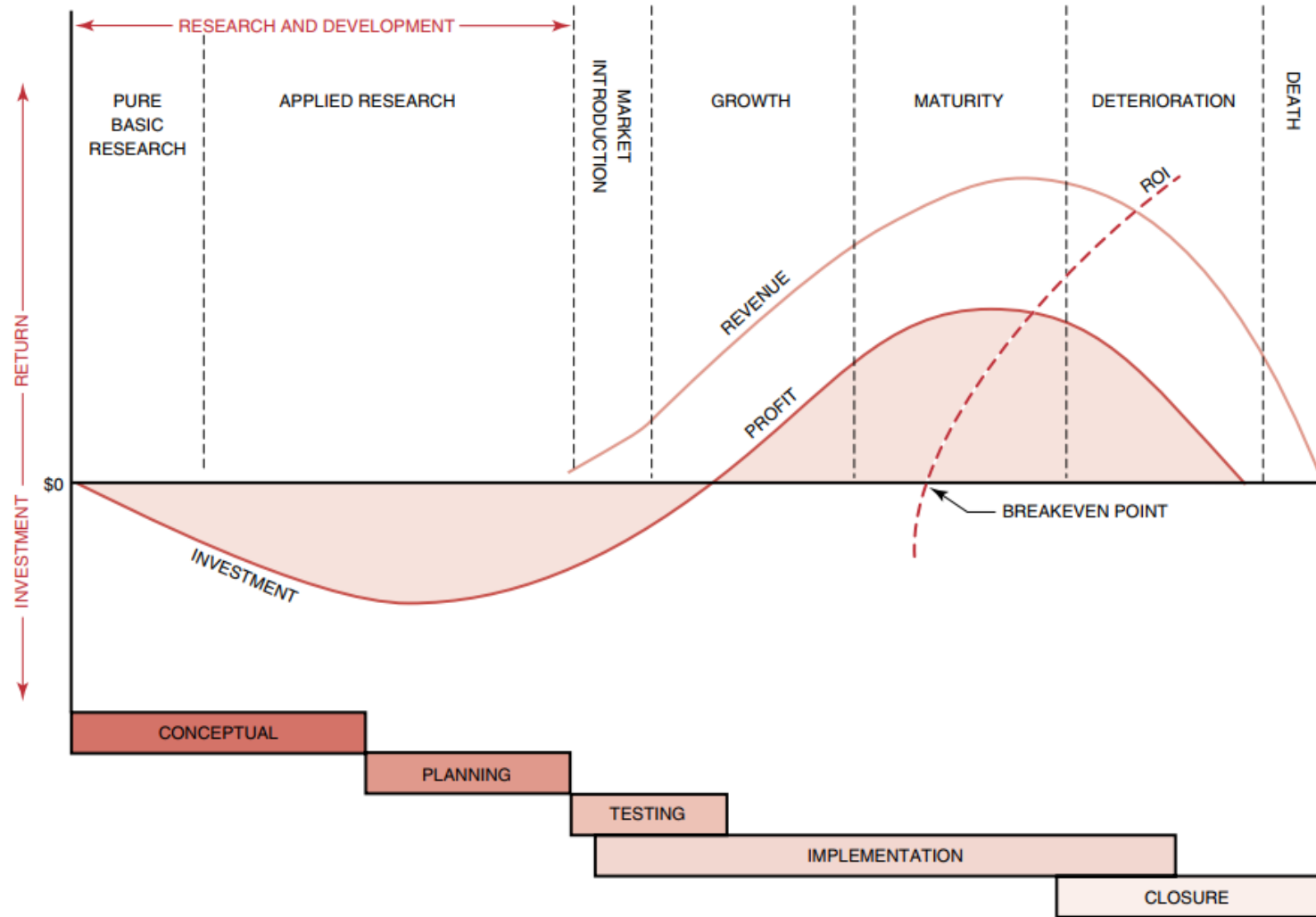
- At the start of the project - the phases of concept, definition, preliminary design, detailed design and production.
 - At the end of the production phase, the end result is accomplished and subsequently used – this is also called ‘utilisation’ phase.
 - During the utilisation phase, follow-up and maintenance are required to maintain the results and keep them up to date.
 - After some time, follow-up might be insufficient, and stagnation will occur.
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Example for car factory:


- sales of the model start slowing down, or the factory becomes obsolete from a technical perspective.
 - A decline then follows, and the project result is no longer useful.
 - In the meantime, a new project might be started up to manufacture an even newer model or build a new factory, and the lifecycle of a new project begins.
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System/product lifecycles






Vevox questions

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Join at:
vevox.app

ID:
116-136-678



The session has not started

START SESSION

RE-OPEN

WHAT IS PROJECT LIFECYCLE? 1/2

PART 2

Types of Project Life Cycle

A project can have one of the following life cycles:

Predictive Life Cycle

Adaptive Life Cycle

Iterative Life Cycle

Incremental Life Cycle

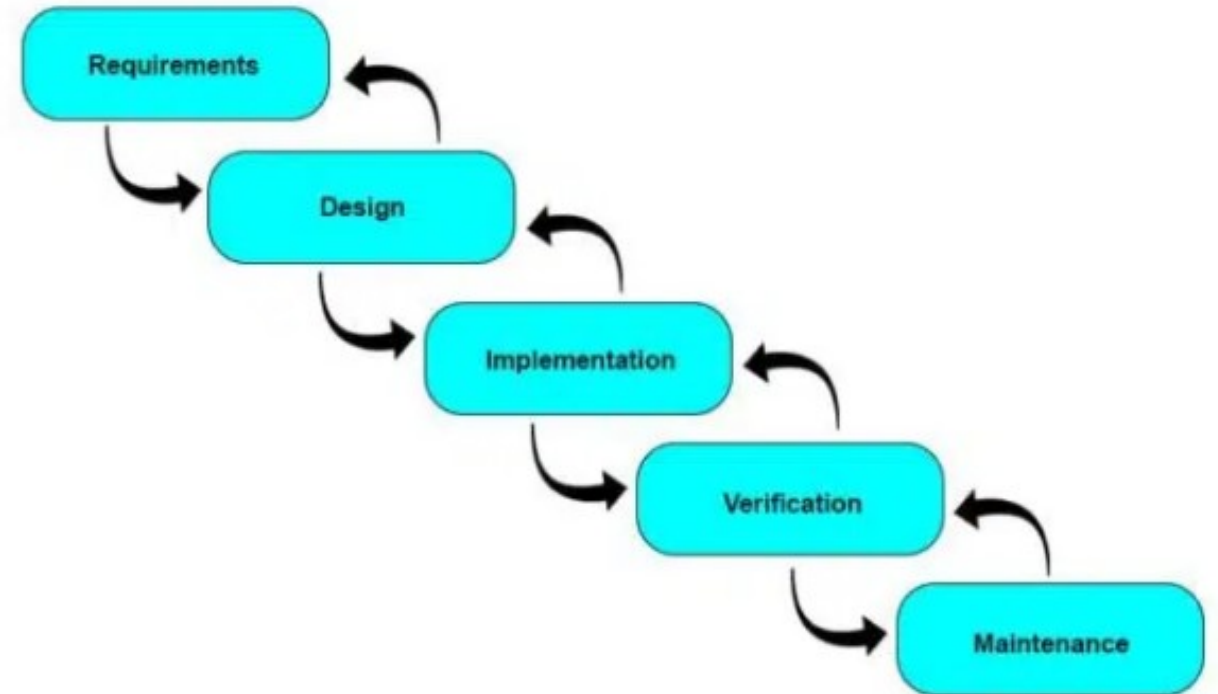
Hybrid Life Cycle



Predictive Life Cycle



- Also known as the waterfall life cycle.
- Traditional form of project management
- Project manager develops the complete project management plan at the beginning and then follows it until the project completes.
- You plan the work and then work the plan.
- The scope of work is fixed.
- The chances of changes are low.

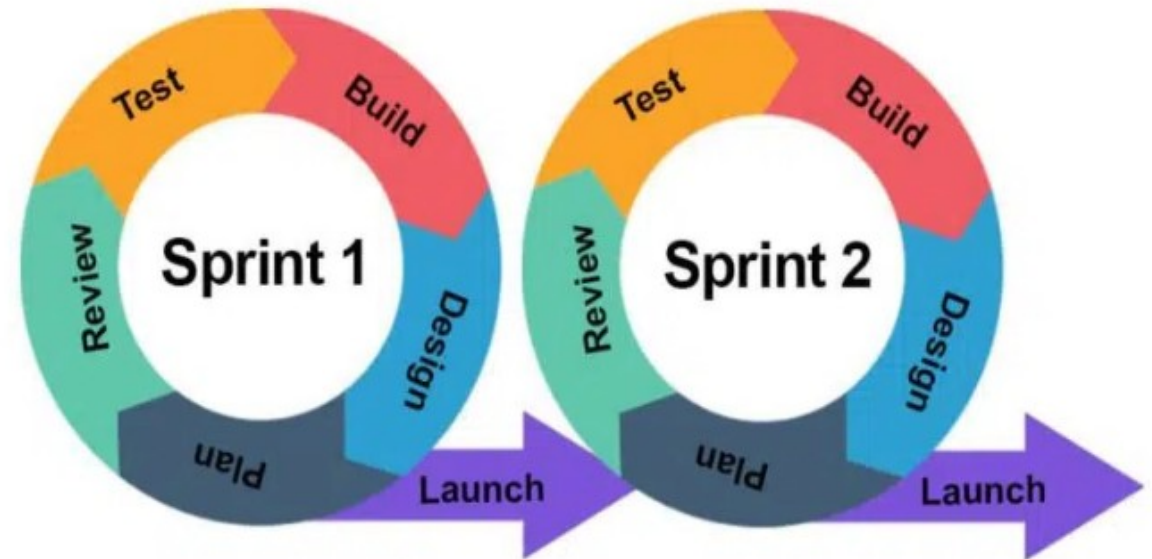


Predictive Life Cycle

Adaptive Life Cycle



- Also known as a change-driven life cycle.
- This life cycle welcomes changes.
- The project is divided into increments, and deliverables are delivered and refined until the client is satisfied.
- All activities are performed multiple times.
- It is easy to make changes to the deliverable and incorporate clients' feedback.

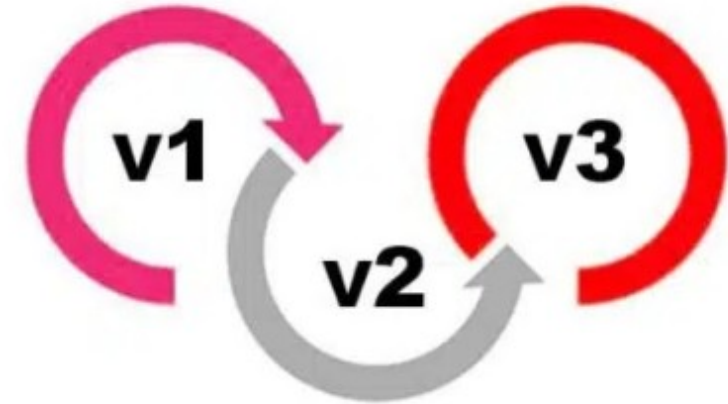


Adaptive Life Cycle

Iterative Life Cycle



- The iterative and predictive life cycles are comparable.
- The project management team creates the plan in advance and iterates it to account for adjustments.
- The first iteration aims to create a basic product with minimal viability, and the following iteration enhances it further.

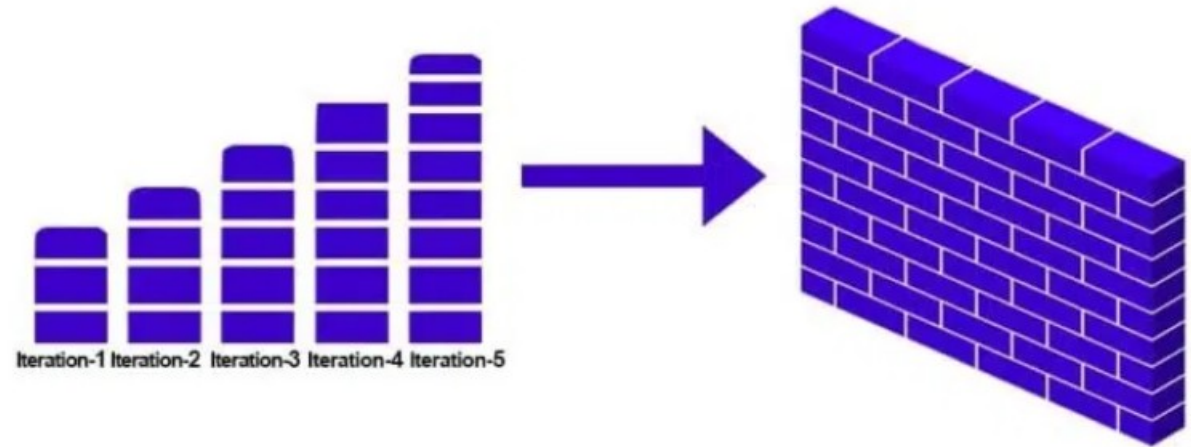


Iterative Life Cycle

Incremental Life Cycle



- Is similar to the adaptive life cycle.
- The project manager delivers small, usable pieces of deliverables to the client, and based on the feedback; the product is refined and developed.
- All increments are added in the final iteration to deliver the complete product.



Incremental Life Cycle

Hybrid Life Cycle



- The hybrid life cycle is a hybrid of life cycles discussed in this post.
 - It can be any combination of life cycles.
 - A project manager is responsible for selecting the life cycle best suited for their project.
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Vevox questions

The screenshot shows a Vevox session interface. In the top left corner, there is the Silesian University logo and the text: SILESIA UNIVERSITY, SCHOOL OF BUSINESS, ADMINISTRATION IN KARVINA. Below this, it says 'Join at: vevox.app' and 'ID: 197-129-585'. A QR code is also present. A large grey speech bubble in the center contains the text 'The session has not started' and an orange 'START SESSION' button. At the bottom, there is a control bar with a play button, a 'RE-OPEN' button, and a question: 'WHAT ARE THE TYPES OF PROJECT LIFECYCLE?' with a progress indicator '1/3'. There are also icons for volume, a clock, and a refresh symbol.

PART 3

Significance of the Project Life Cycle

- Offers a Framework to Execute Projects
- Enhances Team Communication
- Helps Measure Progress and Development
- Allows Project's Evolution
- Helps Organize Reviews and Improve Governance



Significance of the Project Life Cycle



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Significance of the Project Life Cycle



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Offers a Framework to Execute Projects

- Provides a systematic method for project delivery.
 - This allows to track the project's progress and determine the issues with deliverables or a process.
 - A project life cycle framework provides teams with a uniform road plan to follow.
 - It helps define each phase's tasks, results, and allocated duties.
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Significance of the Project Life Cycle



Enhances Team Communication

- it helps facilitate communication and define roles and responsibilities in the project.
 - Team members easily comprehend what they should do throughout each step.
 - Resource planning avoids wasted and ensures its availability whenever they are required.
 - Most resources are required in the third stage of the project life cycle.
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Significance of the Project Life Cycle



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Helps Measure Progress and Development

- Plans, benchmarks, key performance indicators, project metrics, etc., will be available.
 - You can check the status and determine whether the progress is on track by comparing it to the project baselines.
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Significance of the Project Life Cycle



Allows Project's Evolution

- The stages of the project life cycle give insight into how the project progresses, and
 - enable the identification of areas that need special attention, such as risk management in the early phases and project evaluation in the execution stage.
 - The project details expand every next step.
 - As the project moves forward, the plans are developed and elaborated, and the cost baseline, schedule baseline, and scope baseline are improved.
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Significance of the Project Life Cycle



Helps Organize Reviews and Improve Governance

- Since the project lifecycle will outline when the Project Evaluation Review takes place, the project manager can schedule the performance reports' completion before the reviews.
 - It permits people who must attend in advance, enabling quick “go or no go” decisions on product development.
 - The project is feasible and on time, and these monthly evaluations reassure stakeholders that early accomplishments have been validated.
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Limitations of Project Life Cycle



- The works conclude after the completion of the final stage.
 - High risks and uncertainty.
 - It is not the best choice for tricky and complicated projects.
 - It is not a correct framework for object-oriented projects.
 - Implementing the project life cycle for longer projects is challenging and out of place.
 - The progress is challenging to measure at every stage as the project progresses.
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Vevox questions

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References



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- **Grit, R. (2021). Project management : A practical approach. Taylor & Francis Group.**
 - **Kerzner, H. (2017). Project Management: A Systems Approach to Planning, Scheduling, and Controlling. Hoboken, New Jersey: John Wiley & Sons, Inc. ISBN 978-1-119-16535-4.**
 - **<https://pmstudycircle.com/project-life-cycle/>**
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