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Caltech | **Center for Technology & Management Education**

Full Stack Java Developer

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Agile

Understanding Agile



Learning Objectives

By the end of this lesson, you will be able to:

- 🕒 Learn about Agile methodologies, values, and principles
- 🕒 List the core practices and principles laid by the Agile Manifesto
- 🕒 Use Agile to increase the customer value
- 🕒 Learn the importance of Agile over traditional methods
- 🕒 List the benefits and challenges of using Agile



A Day in the Life of a Full Stack Developer

You are working as an Agile Scrum Master in an organization. The organization's stakeholders have asked you to set up the Agile process for the development and management of all the projects going on in the organization. The stakeholders also want you to provide the importance of using Agile and brief the stakeholders on the same.

Examining the same, you explain the importance of Agile and how it can help in managing the project while including all the stakeholders and enhancing the quality of work.

As a task, you decide to explore and explain more about Agile, its benefits and the challenges faced in order to decide to use Agile or not.



What Is Agile?

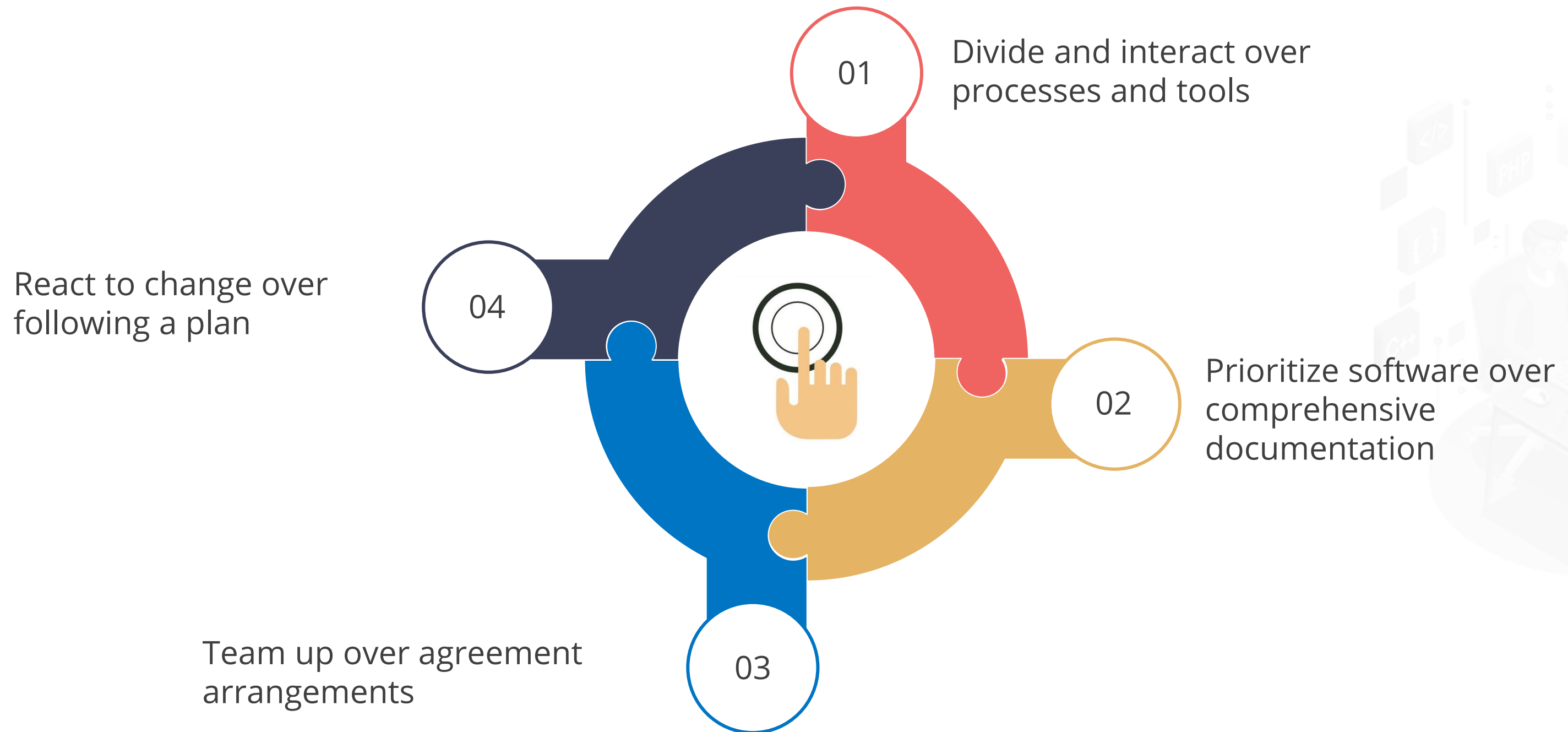
What Is Agile?

Agile is a software development approach to building software incrementally using short iterations.



What Is Agile?

Agile manifesto categorizes Agile values. It helps to:



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Agile Methodology

Agile Methodology

Agile methodology is a framework that brings the Agile mindset into practice.



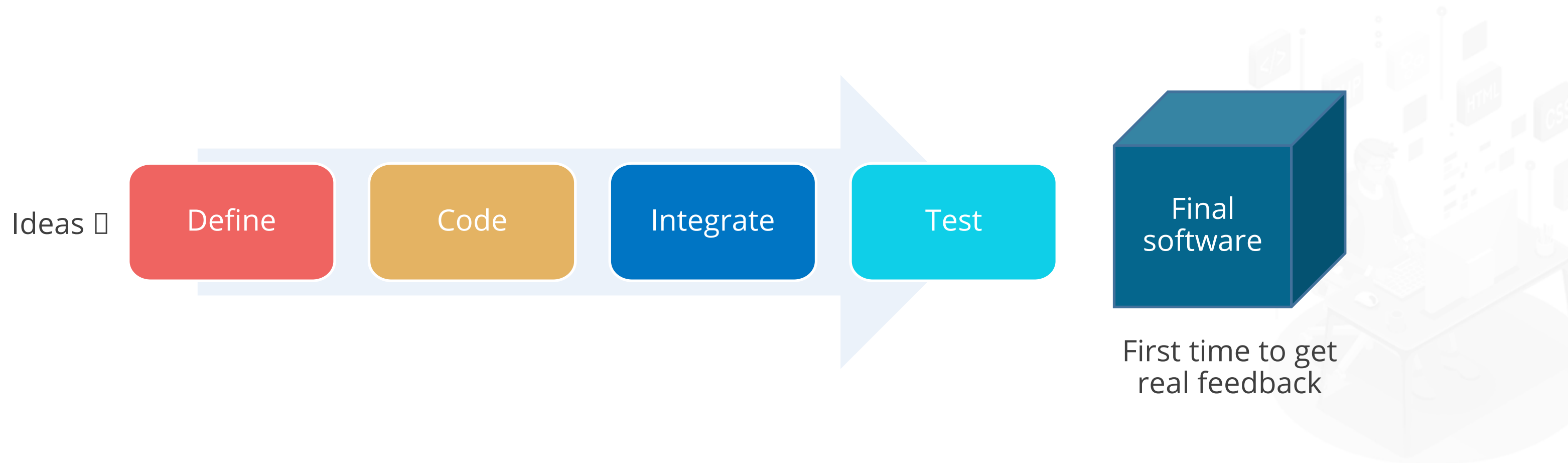
Agile Methodology

Agile methodology refers to a practice that facilitates continuous improvement and testing throughout the project lifecycle.



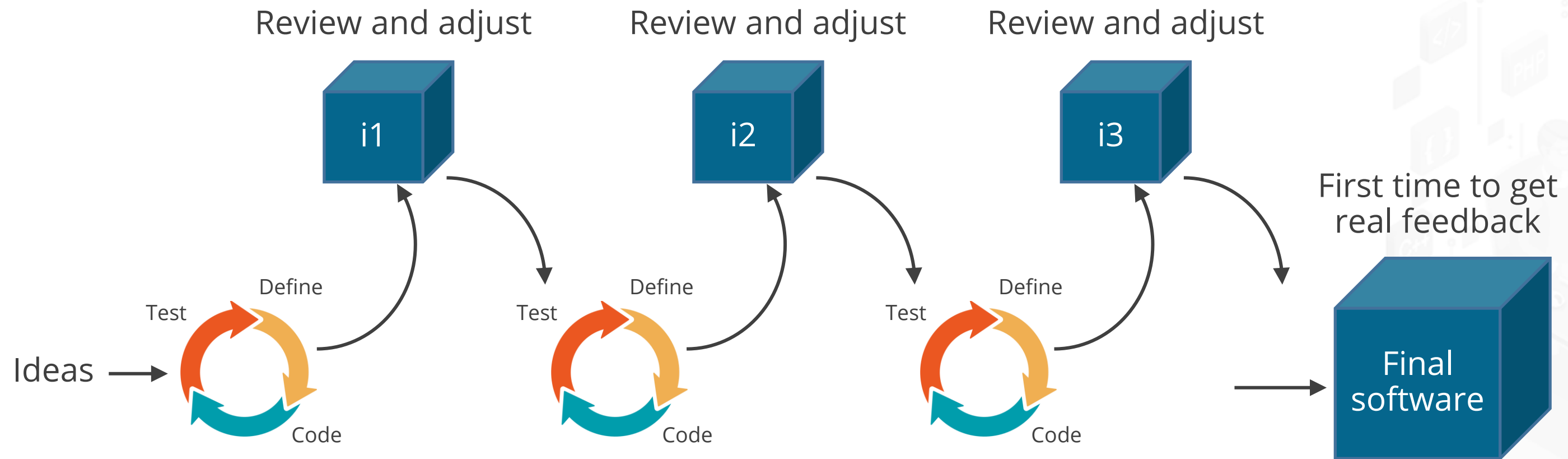
Agile Methodology

The traditional methods require up to 10 months for a single-stage development.



Agile Methodology

Agile is a key approach in software development that focuses on how people work and collaborate to deliver a successful product.



Agile method

Agile Principles

Agile Principles

The Agile manifesto includes guiding practices targeted to implement an Agile mindset in teams:



Customer satisfaction



Change requirement



In-time delivery



Collaboration



Motivation of team members



Information exchange



Progress measurement



Constant pace maintenance



Monitoring



Simplicity



Self-organized and independent teams

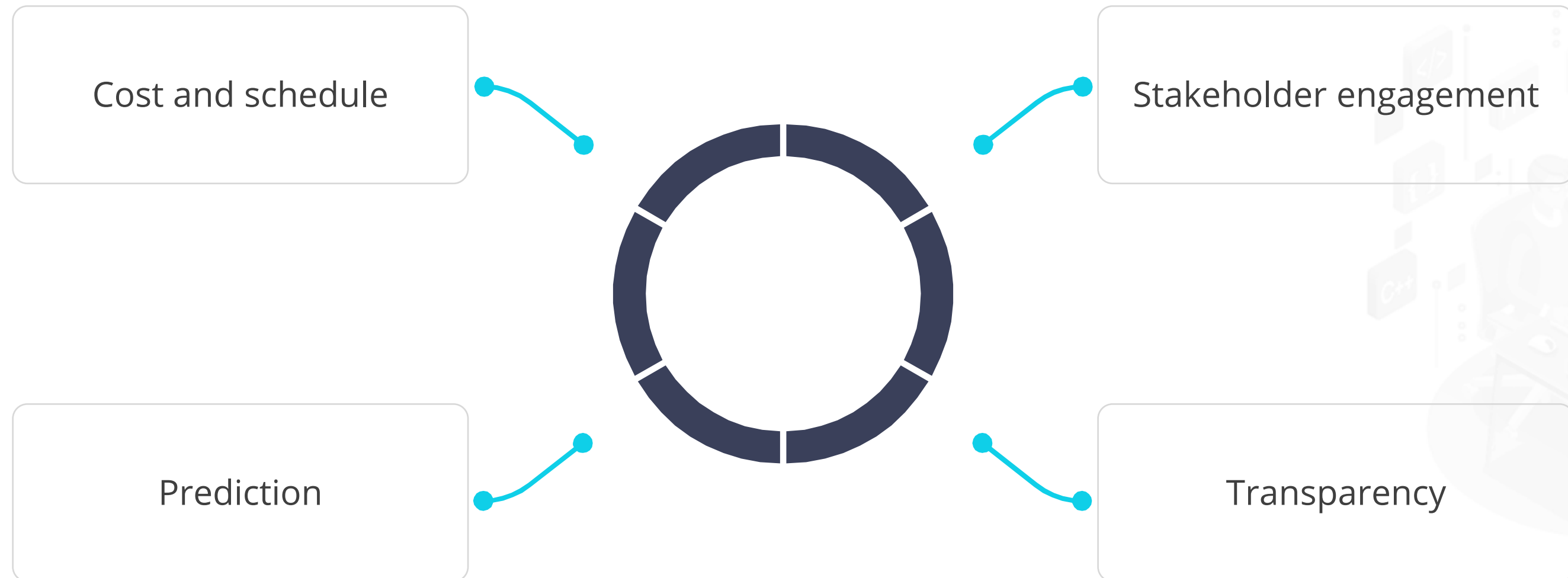


Regular work review

Benefits of Using Agile

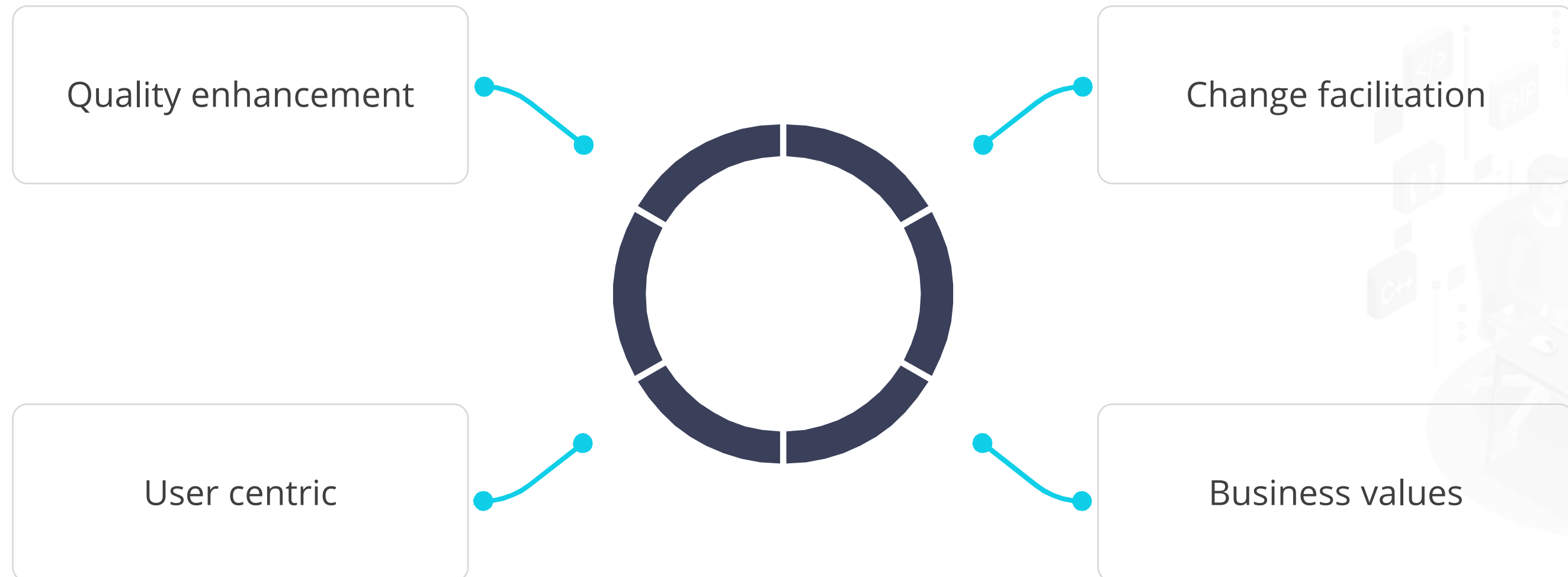
Benefits of Using Agile

The following are the benefits of using Agile:



Benefits of Using Agile

The following are the benefits of using Agile:



Challenges of Using Agile

Challenges of Using Agile



Transition is tricky



Need more strategies

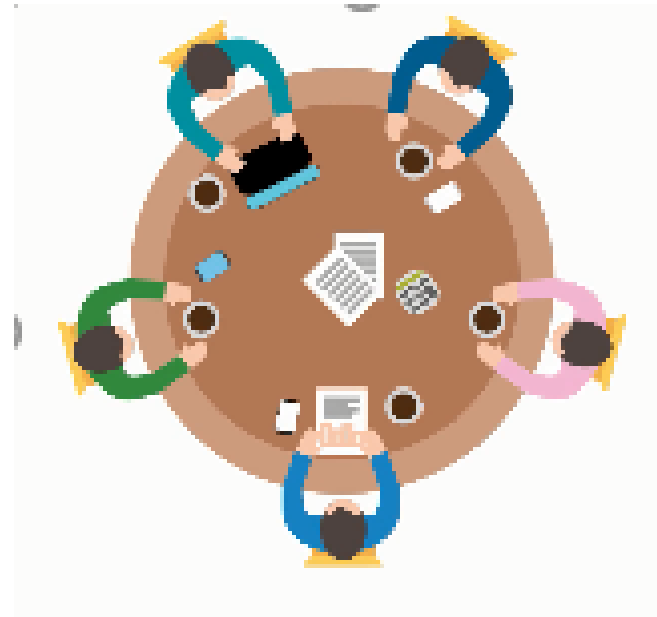


Difficult to change old notions

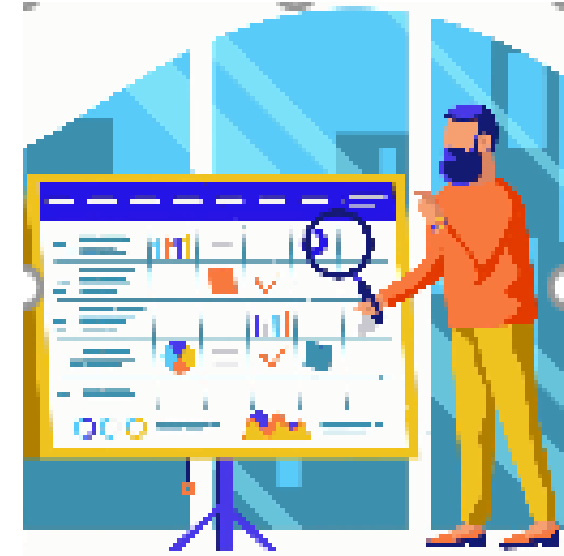
Challenges of Using Agile



Product promotion



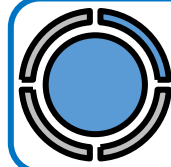
Safeguard from pitfalls



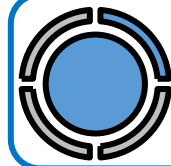
Effective Agile project team

Challenges of Using Agile

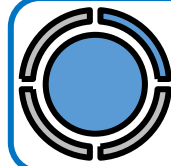
The most widely recognized difficulties looked at by the Agile team include:



Respecting the new processes and strategies



Discussing adequately with partners and entrepreneurs



Adjusting to changes in business necessities



Key Takeaways

- 🕒 The adoption of Agile practice embraces and boosts productivity.
- 🕒 The Agile methodologies and principles introduce the best practices for improving the quality of deliverables.
- 🕒 The stakeholder engagement, predictions, transparency, and so on are a few benefits of using Agile.
- 🕒 Adopting Agile makes the team more productive and responsible.



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Thank You