IT PROJECT MANAGEMENT METHODOLOGIES AND APPROACHES

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Abstract
This article discusses project management methodologies and how they are used to achieve goals in organizations and projects. It provides an overview of project management methods and approaches, including traditional approaches, Agile methodology, Scrum, Kanban, DevOps, Extreme Programming (XP), and Prince2.

Keywords: Methodology, Agile, Scrum, Kanban, DevOps, Prince2, Project, IT, program, information, technology, computer, integrated schedule, management.

Introduction
Project management methodology represents a systematic approach to creating a work order, managing resources, and evaluating results to achieve goals in organizations and projects. Management methodologies vary depending on the type of company, the scope of projects, and the range of systems management.

A project management approach is a philosophy or set of principles that describes how a project should be handled. On the other hand, methodology is the actual set of rules and practices used to implement this approach.

Project management has been around for as long as projects have existed. This means that some form of project management has been present since ancient times, such as during the construction of the pyramids. However, by the early 1900s, project management was becoming more formalized. In fact, Henry Gantt created (or adapted) a useful tool called the Gantt chart in 1917. Since then, new methods and tools have been developed to help teams initiate projects.

As a project manager, it's important to know your history, not just to know what happened. Understanding how methods were created can help you decide how to adapt them to your work today. There are many types of project management methodologies, including:

- Traditional approaches
- Agile methodologies
- Changing management styles
- Process-based methodologies

When it comes to project management methodology, no method is inherently "better" than another. You must choose what works best for your team, your stakeholders, and the project itself. Whatever you do, make sure you define and discuss your methodology with your team and ensure that everyone understands it.

We can list the following as the best project management methodologies.

1. Waterfall methodology:

• This methodology moves the structure and project through several phases, and after completing each phase, it moves on to the next phase.

• In each phase, activities go from initial design to testing.

2. Agile methodology:

a. Designed for agile, short-term and variable projects.

b. All stages of the project are carried out in parallel.

c. Each stage contains brief and well-defined tasks.

3. Scrum methodology:

a. Scrum is an offshoot of Agile methodology that involves teams working on tasks in short time intervals (sprints).

b. Events such as sprint planning and daily scrum are held.

4. Kanban methodology:

a. Kanban is a visual representation of the work process in a linear display and is aimed at reviewing its current state.

b. Allows for a wide variety of adjustments in drone and detailed operation.

5. DevOps methodology:

a. DevOps is a methodology that aims to accelerate development processes by integrating programming and operations.

b. This methodology integrates and improves software development and operations.

6. Extreme Programming (XP) methodology:

a. XP aims to improve the quality of the written code and communicate with customers many times to determine their requirements and wishes.

b. Based on the development of high-quality structures in a short period of time.

7. Prince2 methodology:

a. This methodology provides a detailed framework for project management.

b. Prince2 has fundamental principles for project organization, management, and change processes.

Each methodology has its advantages and should be chosen according to the purpose of project management. Which methodology to choose will depend on the specifics of the project, the experts on the team, and the type of project.

A project management methodology is one used to plan, execute and manage projects. Project management methodologies help project managers manage team members and manage work while facilitating team collaboration.

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