

1.2. OVERVIEW OF THE MAIN PROJECT MANAGEMENT METHODS. AGILE-PHILOSOPHY.

Management literature identifies about 10 basic project management methods. It is probably correct to call them approaches rather than methods. It is not so much about strict methods, but about methodology and principles.

Roughly speaking, a distinction is made between rigid (classical) and agile project management.

I. Classical project management.

The assumption is that project execution consists of consecutive phases, and the next phase cannot be reached without completing the previous one. This linear structure is characteristic of rigidly defined projects. Classic examples are construction and engineering projects.

Traditionally, the following stages are usually identified.

Stage 1: Initiation. The project manager and team define the requirements for the project. Meetings and brainstorming sessions are often held at this stage to figure out what the project product should be.

Stage 2: Planning. At this stage, the team decides how it will achieve the goal set in the previous stage. The team specifies and details the goals and results of the project, as well as the composition of work on it. Based on this information, a schedule and budget are formed, risks are assessed, and stakeholders are identified.

Stage 3: Implementation and testing. In this phase, the main work on the project takes place. Following the developed plans, the project content defined earlier starts to be created, and control is carried out. In the second part of the phase the product is tested, it is checked for compliance with the requirements of the customer and stakeholders. In the testing part, the defects of the product are identified and corrected. It is clear that this phase is the main one in terms of content. It may consist of many activities/tasks.

Stage 4: Monitoring and finalization of the project. Depending on the project, this phase may simply consist of handing over the project results to the customer, or it may consist of a lengthy process of interaction with the customer to improve the project.

Rigid consistency is in some cases the strength and in some cases the weakness of this approach. The customer is required to define what they want to achieve as early as the first stage of the project. This brings considerable stability to the project, and

planning allows for streamlined project delivery. In addition, this approach involves performance monitoring and testing, which is absolutely necessary for real projects of various sizes. Due to the fact that classical project management is strictly tied to the time of task execution, it is convenient to use tools of calendar-network planning to implement projects within the framework of this approach.

The main weakness of classical project management is the lack of flexibility and reaction to changes / risks.

II. Agile project management methods are now largely based on the *Agile philosophy*.

The adjective "agile" can be interpreted also as "lively, nimble, skittish". In February 2001 17 specialists in the field of software development and management, gathered at a ski resort in Utah (USA), formulated the so-called "Agile Manifesto" (<https://agilemanifesto.org>). The Manifesto contains 4 values and 12 principles. At the same time, the values were formulated first of all, and the principles were described later.

Value 1. Individuals and interactions over (are more important than) processes and tools.

People and their interactions should define the set of processes and select the tools. The needs of the teams' interactions are primary; processes and tools should help them, not hinder them. Teams should be able to customize processes, but must follow them.

Value 2. Working software over comprehensive documentation.

Sometimes this value is interpreted as that there is no documentation in Agile. This is not true. Documentation is very important, especially documentation related to product development. However, in addition to working documentation, there is often a lot of unnecessary documentation created – primarily because in many companies it is used for communication. Terms of reference, various justifications, budgets and the like. Much of this documentation does not also carry value for the customer. Create the product first, then document it.

Value 3. Customer collaboration over contract negotiation.

If you enter into a contract around which you argue and litigate for a long time at the end of the project, you will lose. Even if you end up getting paid, you will have wasted time and energy and destroyed your relationship with your current customer and possibly future ones. In Agile, the focus is on the customer. You need to collaborate with them – and the contract should support that collaboration, not hinder it.

Value 4. Responding to change over following a plan (willingness to change is more important than following the original plan).

Agile approaches were created for conditions of uncertainty and frequent change. Pre-planning, i.e. the approach where we first plan the project for a long time, allocate resources and tasks, does not work. Of course, it has some benefit, but priority is given to operational planning. As a rule, the horizon of detailed planning of tasks is 2-4 weeks. If everything around you changes frequently, your plans should change too.

See also *12 principles* of the Agile Manifesto:

<https://agilemanifesto.org/iso/en/principles.html>

The Agile methodology was originally focused on projects related to software development, but the philosophy has since spread much more widely.

The basic thing that is important to know to understand Agile is the iterative-incremental approach underlying agile management methods. Its essence is not to develop the whole product and deliver the result once at the end, as in classic projects, but to act gradually, in small batches. The difference between purely iterative and iterative-incremental approaches was jokingly illustrated by Jeff Patton.

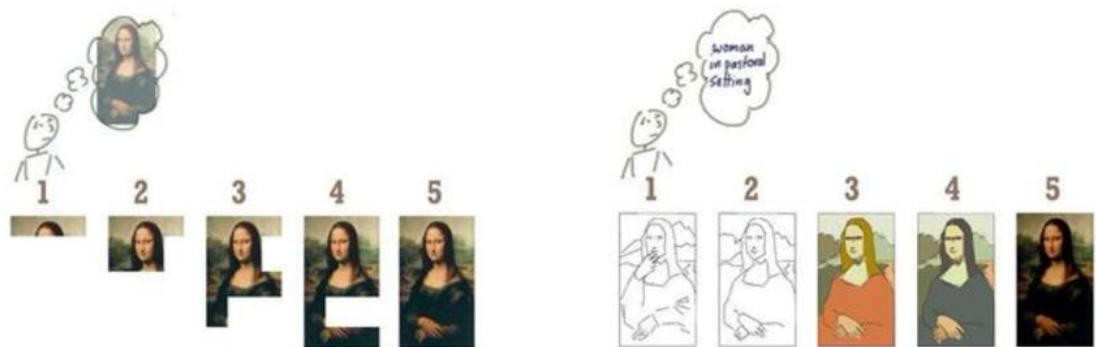


Figure 1.5. A humorous illustration of the difference in the two approaches

When developing a product in small iterations, it is possible not only to present some results to the customer earlier. What is much more important, constant feedback from the customer is organized and works.

So, there is no single Agile methodology. The authors of the manifesto tried to compile one, but then decided that it would not be possible to create a template for all situations, and that by doing so they would limit the possibilities of applying Agile.

Instead, there is a group of approaches to put the values and principles of Agile into practice.