

30.4 Agile vs. Waterfall: Homework

Your team has been assigned to develop a social media analytics platform for a startup company aiming to revolutionize digital marketing. The project involves gathering and analyzing vast amounts of data from various social media platforms in real-time. The client emphasizes the need for rapid development and continuous innovation to stay ahead of competitors in the fast-paced digital landscape. There are unclear priorities, constant changes in direction from stakeholders, and a lack of defined processes. Moreover, missed deadlines, and compromised quality.

The Agile methodology is declared, because of its iterative nature, flexibility, and ability to respond to changing requirements.

Instructions:

- Describe how despite the Agile declaration, the project has fallen into chaos due to frequent scope changes, conflicting priorities, and inadequate communication among team members and stakeholders.
- Justify your assessment by highlighting the discrepancies between the Agile principles and the actual implementation, resulting in inefficiencies, missed deadlines, and compromised quality.
- Discuss lessons learned and propose strategies for aligning project execution with Agile principles to mitigate chaos and improve project outcomes in future endeavors.

1. Describe how despite the Agile declaration, the project has fallen into chaos due to frequent scope changes, conflicting priorities, and inadequate communication among team members and stakeholders.

In described team there are unclear priorities, constant changes in direction from stakeholders, and a lack of defined processes.

According to Agile the members of the team should work iteratively to define requirements.

Missed deadlines also is one of the reasons why the project has fallen into chaos. Agile uses Sprints, normally one to two weeks long. It provides clear deadlines, not missed ones as in the describe project.

Here we cannot see communication between team. The lack of communication leads to misunderstanding, conflict priorities.

2. Justify your assessment by highlighting the discrepancies between the Agile principles and the actual implementation, resulting in inefficiencies, missed deadlines, and compromised quality.

1. *Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.*

The client emphasizes the need for rapid development and continuous innovation to stay ahead of competitors in the fast-paced digital landscape instead of customer satisfaction.

Moreover, as I can see there is no valuable product delivered.

2. *Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.*

Despite that frequent changing requirements are welcomed, there is no space for customer's advantage. The processes are not defined.

3. *Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.*

Deadlines are missed. The team not working according to short sprints (week or two).

4. Business people and developers must work together daily throughout the project.

There is no attention to every team member. Business works separately from development team.

5. Build projects around motivated individuals. Give them the environment and support their needs, and trust them to get the job done.

As it was said before business works separately from development team.

There is lack of motivation in development team. They did not participate in whole cycle of the project. They did not see the whole picture, plus constant changes without visible result can make the team upset. There is no room for motivation in such atmosphere.

6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

There is no communication in the project. All decisions are made by stakeholders.

7. Working software is the primary measure of progress.

There is no working software in this project to measure a progress.

8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.

Missed deadlines prevents a constant pace. Thus, there is no space for sustainable development.

9. Continuous attention to technical excellence and good design enhances agility.

In the project is given a high attention to innovations, technical equipment and technologies. But it is not enough to thrive and succeed.

10. Simplicity—the art of maximizing the amount of work not done—is essential.

It seems that maximizing the amount of work not done is presented in the project, but it is complexity instead of simplicity.

11. The best architectures, requirements, and designs emerge from self-organizing teams.

The team is not organized.

12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

There is lack of motivation, absence of reflection in the team.

According to Agile manifesto:

Individuals and interactions over processes and tools.

As we can see from the description of the issue 'The client emphasizes the need for rapid development and continuous innovation **to stay ahead of competitors** in the fast-paced digital landscape.' Thus, his main goal is to stay ahead of competitors. According to Agile principles individuals and interactions over processes and tools.

Working software over comprehensive documentation.

We did not see a working software in this project. This point is not done at all.

Customer collaboration over contract negotiation.

The collaboration is absent in this project.

Responding to changes over following a plan.

Stakeholders are responding to changes, flexible. That can correspond with Agile principles. But there is no clear plan.

We can see that in the project there are unclear priorities, constant changes in direction from stakeholders. According to Agile in Analyze stage requirements should be approved. That is not done.

I can conclude from the description that the stakeholders prefer not to empower team members. Maybe they do not trust the team members.

Compromised quality of the product can be said that there is no feedback from the customers.

According to Agile the highest priority is to satisfy the customer through early and continuous delivery of valuable software.

The team should regularly interact with customers.

Thus, practically almost all Agile principles are just declared but there are huge discrepancies between the Agile principles and the actual implementation.

As a result we can see that project has fallen into chaos.

3. Discuss lessons learned and propose strategies for aligning project execution with Agile principles to mitigate chaos and improve project outcomes in future endeavors.

As per lesson learned It is possible to propose strategies according to 12 principles:

- 1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.*
To satisfy the customer through early and continuous delivery of valuable software, this means to involve the customer in project as early as possible. To show to the customer the result of development, to get feedback from him. To make sure that the team develops valuable software.
- 2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage.*
Accept changing requirements in every stage of development. It will be your advantage.
- 3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale.*
Make sure that development software are working. Work according to short sprints (week or two). Check working functionality every sprint.
- 4. Business people and developers must work together daily throughout the project.*
Empower every team member, not just stakeholders.
- 5. Build projects around motivated individuals. Give them the environment and support their needs, and trust them to get the job done.*
Motivate every team member to build successful project together. Make sure that for every team member his need are satisfied.

6. The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
Speak with every team member face-to-face. Collect information. Manage it.
7. Working software is the primary measure of progress.
Again, make sure every sprint that you have working software. It will be a measure of progress.
8. Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
Be prepared to promote your project indefinitely. To develop and to improve you product.
9. Continuous attention to technical excellence and good design enhances agility.
Give attention to technical equipment and technologies. Make sure that you have a good design.
10. Simplicity—the art of maximizing the amount of work not done—is essential.
11. The best architectures, requirements, and designs emerge from self-organizing teams.
Pay attention to leadership in the team. Encourage self-organization of the team. They can bring interesting, useful ideas for product.
12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.
Give time to the team to reflect.