Lesson 2 - Level 1

SDLC and STLC. Software development methodologies

**Make a comparative table of the most common methodologies. In your answer, support your opinion on why a given strength/weakness/appropriate field of application is proper for the methodology.**

| No | Methodology | Pros | Cons | Appropriate industry |
| --- | --- | --- | --- | --- |
| 1. | Waterfall | Clear and well-structured process. | Limited flexibility to accommodate changing requirements | Traditional industries where requirements are stable and well understood, such as construction and manufacturing. |
|  |  | Easy to manage and track progress | Limited customer involvement until the late stages. |  |
|  |  | Documented phases and deliverables. | High risk of late-stage defects. |  |
| 2. | Agile | Flexibility to adapt to changing requirements | Requires active and continuous customer involvement. | Industries with dynamic and evolving requirements, such as software development, startups, and technology sectors. |
|  |  | - Frequent delivery of working software. | It can be challenging to manage large projects with complex dependencies. |  |
|  |  | Early defect detection and correction. | It may require experienced team members |  |

In summary, the choice of methodology depends on various factors, including project requirements, industry, team expertise, and organizational culture. Waterfall suits industries with stable and well-understood requirements, while Agile methodologies are well-suited for industries requiring adaptability, frequent customer feedback, and collaboration among cross-functional teams.