

Lean Software Development

Issues in Agile

Lecture 11

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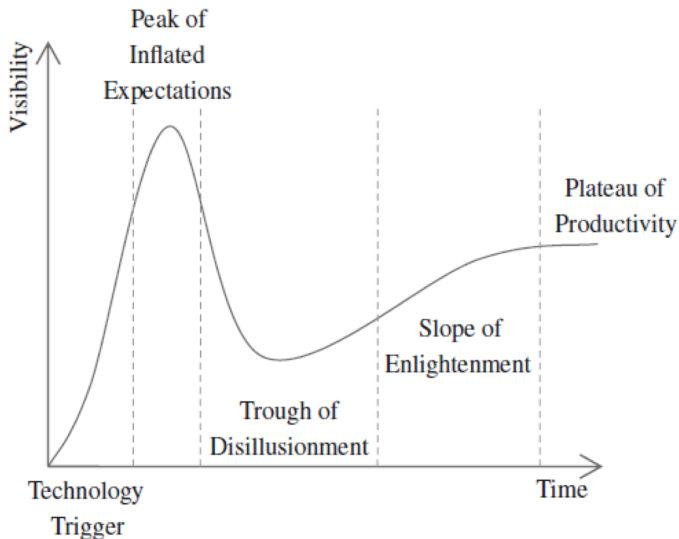
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- **Gartner Innovation Hype Cycle**
- The Dark Side of Agile
- The Skepticism Towards Agile Methods

Gartner's Innovation Hype Cycle



1. The Technology Trigger.

A potential technology breakthrough kicks things off. Early proof-of-concept stories and media interest trigger significant publicity. Often no usable products exist and commercial viability is unproven.

¹https://en.wikipedia.org/wiki/Hype_cycle

2. The Peak of Inflated Expectations.

Early publicity produces a number of success stories – often accompanied by scores of failures. Some companies take action; most don't.

¹https://en.wikipedia.org/wiki/Hype_cycle

3. The Trough of Disillusionment.

Interest wanes as experiments and implementations fail to deliver. Producers of the technology shake out or fail. Investments continue only if the surviving providers improve their products to the satisfaction of early adopters.

¹https://en.wikipedia.org/wiki/Hype_cycle

4. The Slope of Enlightenment.

More instances of how the technology can benefit the enterprise start to crystallize and become more widely understood. Second- and third-generation products appear from technology providers. More enterprises fund pilots; conservative companies remain cautious.

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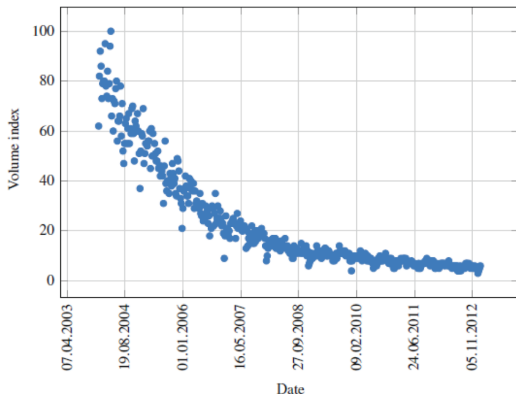
5. The Plateau of Productivity.

Mainstream adoption starts to take off. Criteria for assessing provider viability are more clearly defined. The technology's broad market applicability and relevance are clearly paying off.

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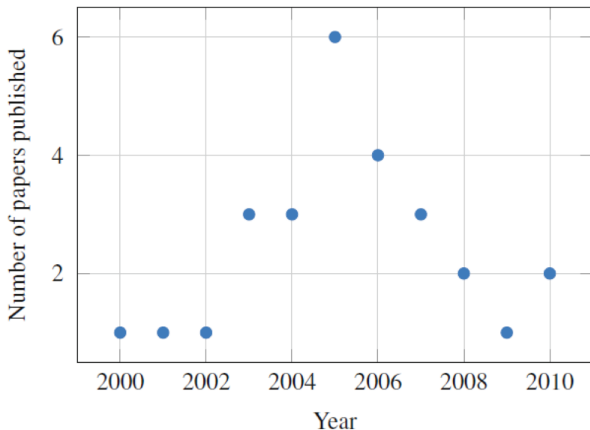
Gartner's Innovation Hype Cycle

Extreme Programming popularity has followed quite closely the Gartner's Hype Cycle: after the first hype, there has been a period of disillusion



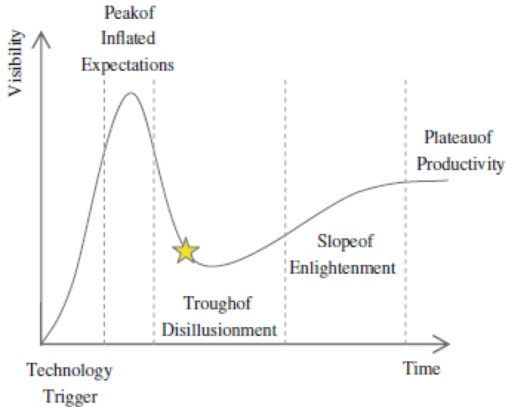
Gartner's Innovation Hype Cycle

Published articles containing the terms “Agile,” “extreme programming,” or “scrum” in their title or abstract on the International Conference on Software Engineering from 2000 to 2010



Gartner's Innovation Hype Cycle

Where the Gartner Group sees the “Project-Oriented Agile Development Methodology” now



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The Dark Side of Agile

Agility was interpreted just as the cut in complexity, a rather simplistic and unjustified cut in complexity whatever the term complexity was—documentation, good development practices as design, etc.
(continued)

The Dark Side of Agile

Enthusiastic early subscribers to the Agile Manifesto became zealot. So they read the Agile manifesto as in Figure

We are uncovering ~~better~~ **the only** ways of developing software by ~~doing it and helping~~ **teaching** others ~~do it~~.
Through this work we have come to value:

Individuals and interactions ~~over~~ **and not** processes and tools
Working software ~~over~~ **and not** comprehensive documentation
Customer collaboration ~~over~~ **and not** contract negotiation
Responding to change ~~over~~ **and not** following a plan

That is, ~~while~~ **since** there is **no** value in the items on the right, we value **only** the items on the left ~~more~~.

The Dark Side of Agile

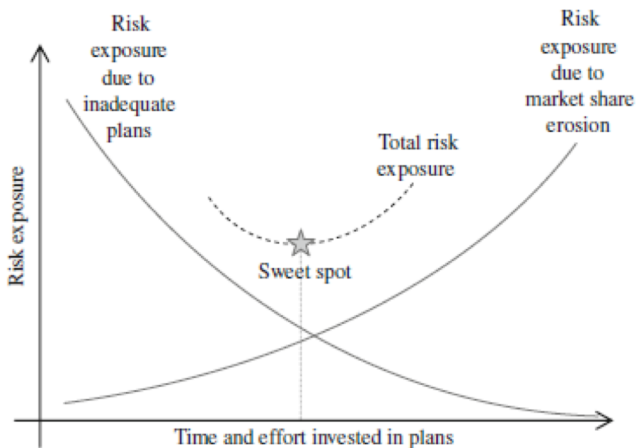
In fact, the misconceptions about Agile can be linked to the four statements of the “Dark Agile Manifesto”:

- Individuals and interactions over processes and tools: “Talking to people instead of using a process gives us the freedom to do whatever we want.”
 - Working software over comprehensive documentation: “We want to spend all our time coding. Remember, real programmers don’t write documentation.”
- (continued)

The Dark Side of Agile

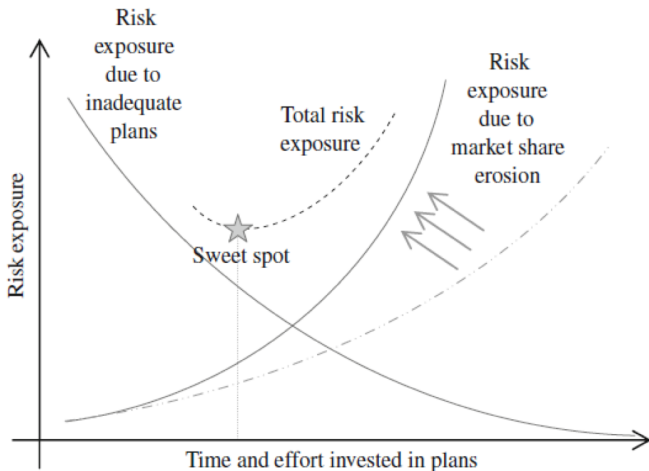
- Customer collaboration over contract negotiation: “Haggling over the details is merely a distraction from the real work of coding. We’ll work out the details once we deliver something.”
- Responding to change over following a plan: “Following a plan implies we have to think about the problem and how we might actually solve it. Why would we want to do that when we could be coding?”

The Dark Side of Agile



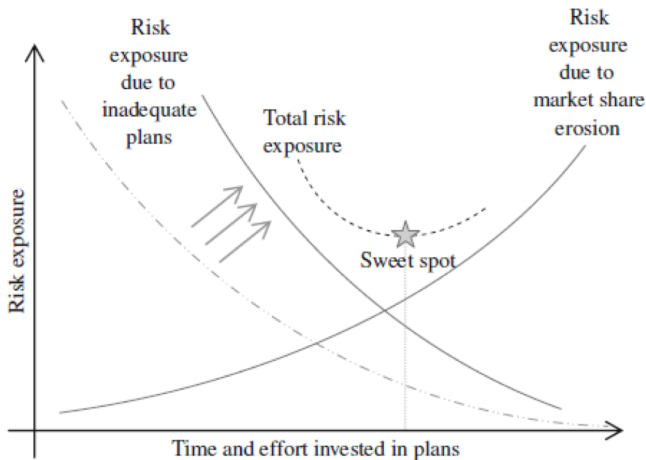
Determination of the sweet spot

The Dark Side of Agile



Sweet spot in companies in turbulent markets

The Dark Side of Agile



Sweet spot in companies in markets requiring thorough planning

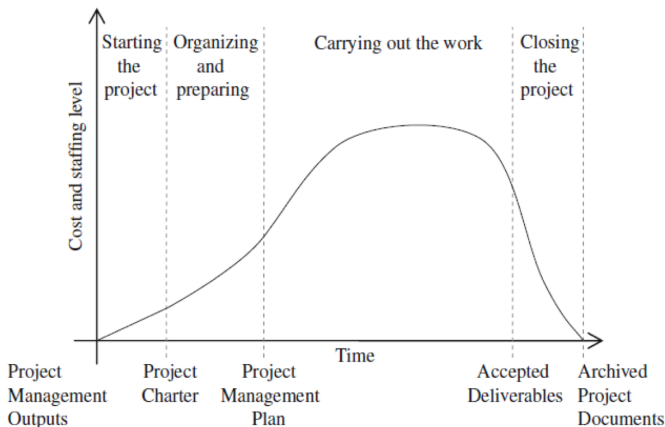
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The Skepticism Towards Agile Methods

The adaptive nature of Agile methods was conceived with a premise in mind: it is not possible to plan every detail in advance. This goes against conventional wisdom, which teaches us to “first think, then do.”

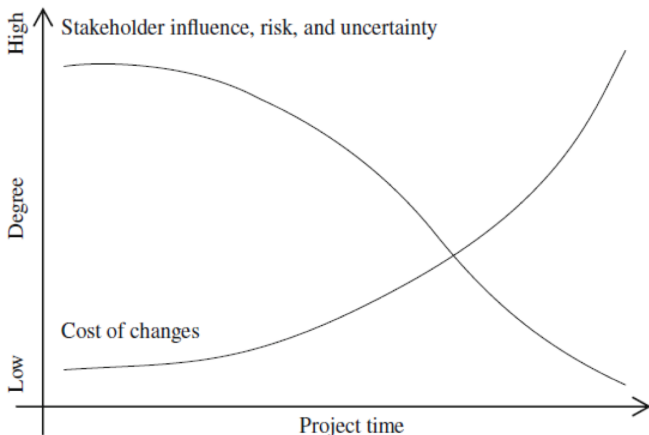
Agile software development goes against the current best practices of project management. Software development projects are seen as any other project, and therefore, project managers assume they should be managed as any other project.

The Skepticism Towards Agile Methods



Typical cost and staffing levels across the project life cycle (waterfall model)

The Skepticism Towards Agile Methods



Stakeholder influence, risk, uncertainty, and the cost of changes during the project (waterfall model)

The Skepticism Towards Agile Methods

Managers without IT background expect to work like the PMBOK standard teaches and will oppose an approach that appears to:

- Promote inadequate preparation.
- Accept exploding costs of changes.
- Accept a high risk.

The Skepticism Towards Agile Methods

To put it in other words, if one looks at Agile methods from the perspective of the Guide to the Project Management Body of Knowledge, the conclusions may be wrong because they are based on assumptions that differ from the assumptions of Agile methods.

The Skepticism Towards Agile Methods

To overcome these differences it is important to agree on:

- “Where we are”: an assessment of the current situation.
- “Where we want to go”: a description of the goals.
- “How to get there”: a description of the method to achieve the goal.