AGILE VS. WATERFALL: A COMPARATIVE ANALYSIS

Practical Implementation at ChadaTech

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OVERVIEW OF SCRUM-AGILE METHODOLOGY

- Agile is a flexible, iterative approach that emphasizes team collaboration and customer feedback.
- Scrum is a subset of Agile that uses fixedlength iterations called sprints, typically lasting two to four weeks.
- Emphasizes continuous improvement and responsiveness to change, critical for rapidly changing markets (Cohn, 2010).



KEY ROLES IN A SCRUM-AGILE TEAM

PRODUCT OWNER:

 Manages the product backlog and ensures the product meets user needs, like a client liaison at ChadaTech.

SCRUM MASTER:

Ensures the team follows
 Agile practices, removes
 impediments, acts as a
 coach and facilitator.

DEVELOPMENT TEAM:

 Developers, designers, and testers who work collaboratively on sprints.

• **Brief Note:** Each role is essential for the Agile cycle to function effectively, ensuring efficient project management and execution (Sutherland, 2014).

PHASES OF THE SDLC IN AGILE

Iteration/Construction:

reviewing in cycles

Developing, testing, and

• Inception: Setting up team structures

Sprint
1-4 weeks

Y
Y
Y
Product
Backlog
Sprint
Backlog
Sprint
Backlog
Sprint
Backlog

• Concept: Initial planning

• Release: Finalizing release details

Daily

Scrum

• (Schwaber, 2004)

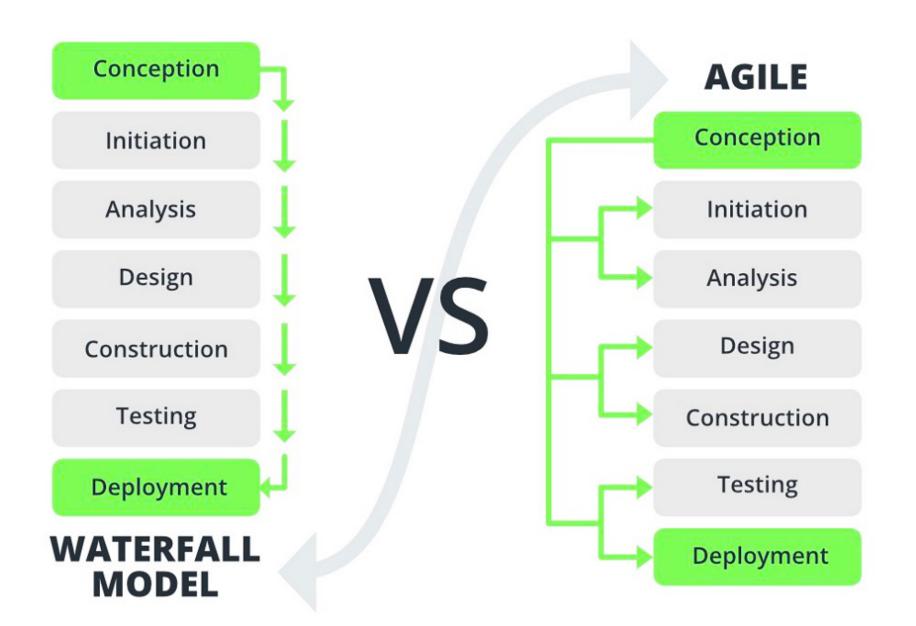
Iteration/Construction:

reviewing in cycles

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PHASES OF THE SDLC IN AGILE

Agile offers
 flexibility to
 adapt to
 evolving
 project needs.



Waterfall uses
 a sequential
 design
 process, ideal
 for projects
 with clear,
 unchanging
 requirements.

References

Beck, K., Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M., ... & Thomas, D. (2001). Manifesto for Agile Software Development. Retrieved from http://agilemanifesto.org

Cohn, M. (2010). Succeeding with Agile: Software Development Using Scrum. Addison-Wesley Professional.

Royce, W. (1970). Managing the Development of Large Software Systems: Concepts and Techniques. Proceedings of IEEE WESCON, 26.

Schwaber, K. (2004). Agile Project Management with Scrum. Microsoft Press.

