1.2. Distinguishing Agile from Waterfall

Understanding Agile vs. Waterfall

Agile as a Response to Waterfall

Agile emerged as a response to the rigid, sequential process of Waterfall methodology. While Waterfall strives for predictability and resists change, Agile acknowledges the uncertainty of markets and user preferences. It addresses the challenge of aligning customer expectations with the delivered product by seeking rapid feedback loops to ensure the team builds what the customer truly desires.

Agile Efficiency and Waste Reduction

The Agile mindset prioritizes efficiency by streamlining processes without compromising product quality. Waste reduction, such as minimizing unnecessary documentation and preventing extensive work on features that don't align with stakeholder preferences, is fundamental.

Project Elements in Waterfall vs. Agile

1. **Requirements**
   - Waterfall: Emphasizes detailed product requirement documentation and formal approval processes to avoid scope creep.
   - Agile: Treats requirements as dynamic, evolving with feedback and new information. Prioritization of requirements enables quick iterations and frequent adjustments.
2. **Documentation**
   - Waterfall: Relies on extensive documentation due to phase handoffs and larger work chunks.
   - Agile: Focuses on real-time, person-to-person conversations with concise, purpose-driven documentation, avoiding excessive formalities.
3. **Deliverables**
   - Waterfall: Typically delivers the final product at the project's end with significant celebration.
   - Agile: Features smaller, frequent releases, fostering continuous feedback and learning, especially crucial in uncertain markets to prevent misalignment with customer desires.

Understanding these differences underscores the contrasting approaches of Agile and Waterfall methodologies regarding requirements' dynamism, documentation style, and

delivery frequency.