**Agile Modeling: An Agile Methodology for Systems Modeling**

Historical Background

* Introduced in 2002 by Scott Ambler in his book *Agile Modeling*
* Ambler was concerned by developers’ overreliance on prescriptive processes (e.g., Waterfall)

What is “Agile Modeling,” anyway?

* Ambler defines Agile Modeling as a “practice-based methodology for effective modeling and documentation of software-based systems”
* For Ambler, modeling is a critical point in development—it can decide success or failure
* Agile Modeling’s main goals:
  + Improve the efficacy and efficiency of the modeling process
  + Maintain a limited amount of documentation

Agile Modeling is a Supplement

* Agile Modeling is not a “full” agile method (*only* focuses on modeling and documentation)
* Agile Modeling has to be used with a base process, such as Extreme Programming

Agile Modeling’s Five Values

* Borrowed from Extreme Programming
  + Communication
  + Simplicity
  + Feedback
  + Courage
* Unique to Agile Modeling
  + Humility

Agile Modeling’s Core Principles

* Borrowed from Extreme Programming
  + Assume simplicity
  + Incremental change
  + Embracing change
  + Quality work
  + Travel light
* Unique to Agile Modeling
  + Software is primary
  + Enabling the future is secondary
  + Model with a purpose
  + Multiple models in parallel
  + Maximize stakeholder investment

Agile Modeling’s Core Practices

* Iterative and Incremental Modeling
  + Use the right artifacts
  + Create multiple models
  + Iterate to other artifacts
  + Model in small increments
* Simplicity
  + Create simple content
  + Depict models simply
  + Use the simplest tools
* Teamwork
  + Model with others
  + Active stakeholder participation
  + Collective ownership of project
  + Public display of models
* Validation
  + Consider testability
  + Prove models with code

Strengths and Weaknesses

* Strengths
  + Small teams and short projects
  + Good with Extreme Programming
  + Increased modeling and documentation efficacy
  + Improved teamwork and communication
  + Active stakeholder participation
* Weaknesses
  + Not a sufficient agile method
  + May not be suitable for all projects and teams
  + May not always work, even with perfect conditions
  + “All-or-nothing” philosophy
  + Serious lack of supporting empirical research