

Agile Programming Methods

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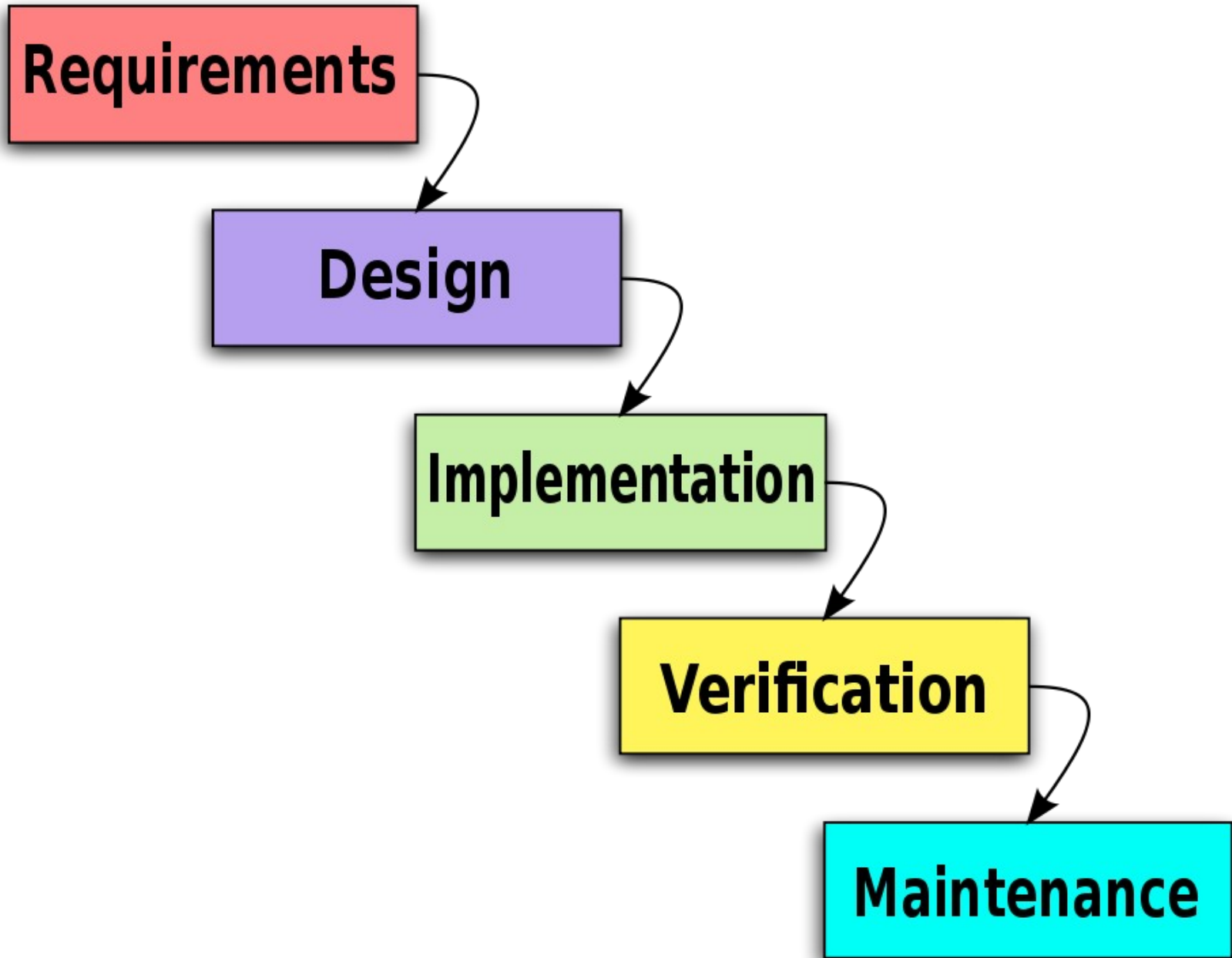
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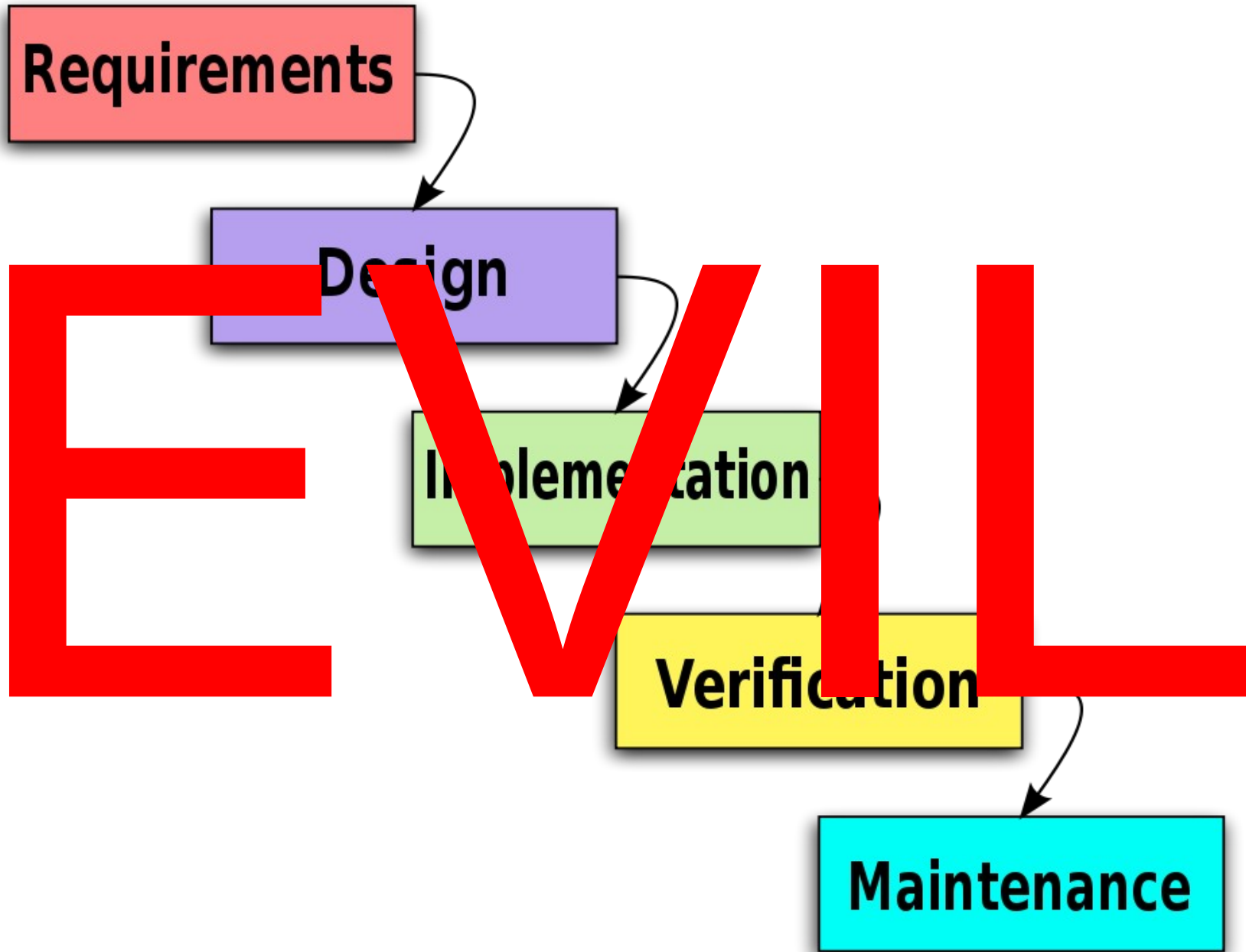
Presented At



Topics

- Agile: Setting the stage
- Agile Methodologies
- Agile Activities





Requirements

Design

Implementation

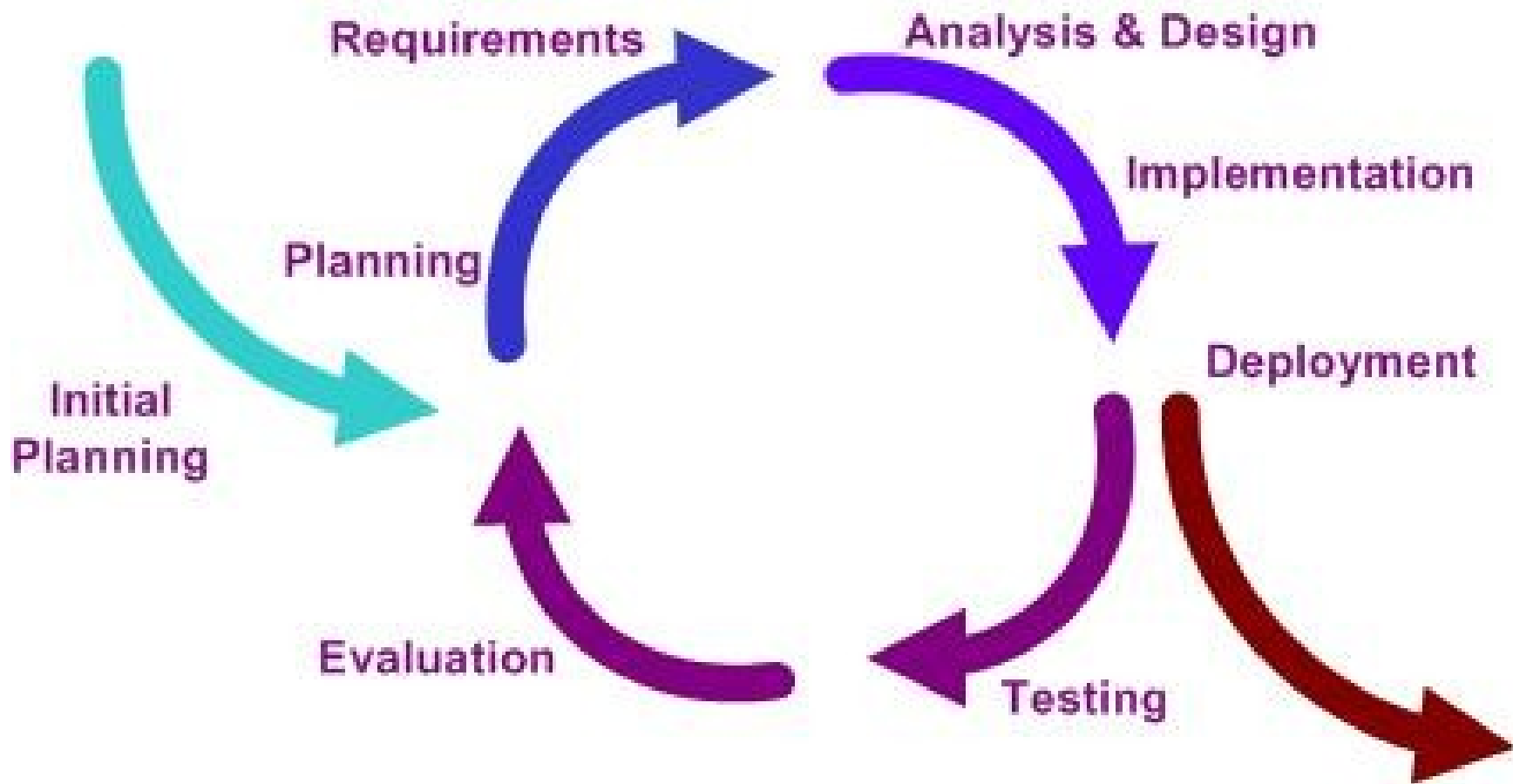
Verification

Maintenance

EVL

What is Agile?

Agile software development refers to a group of software development methodologies based on **iterative development**, where requirements and solutions evolve through collaboration between self-organizing **cross-functional** teams.



Agile Manifesto

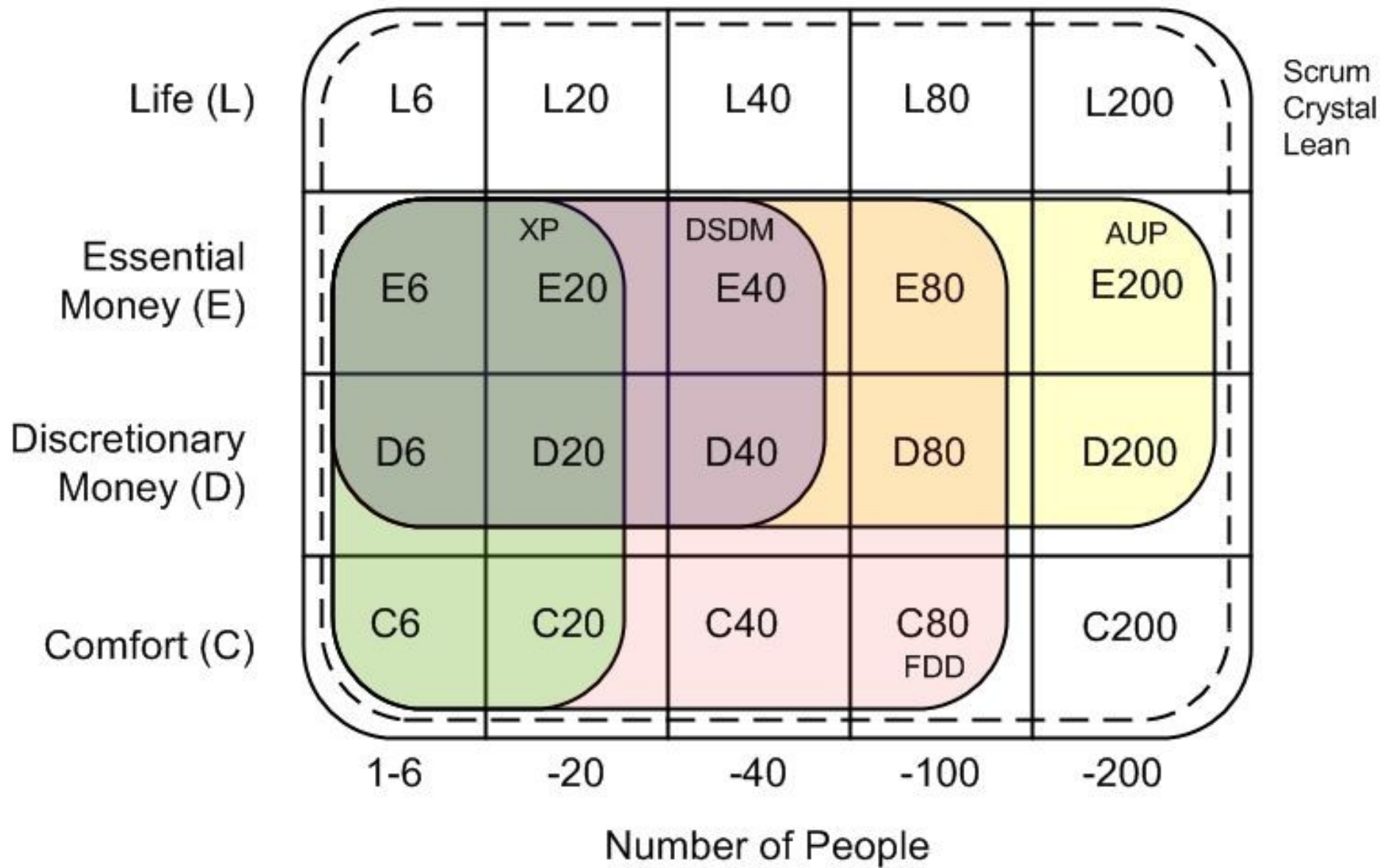
We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- **Individuals and interactions** over processes and tools
- **Working software** over comprehensive documentation
- **Customer collaboration** over contract negotiation
- **Responding to change** over following a plan

That is, while there is value in the items on the right, we value the items on the left more.

Methodologies

- Extreme Programming
- SCRUM
- Lean Software Development
- Feature Driven Development
- Agile Unified Process
- Dynamic Systems Development Method



Practices

Continuous Integration!!!

- Source Control
- Automated Builds
- Automated Testing
 - Unit Tests / Mock Objects
 - Functional Tests
- Continuous Deployment
- Reports / Artifacts

Practices

- Refactoring
- Sharing Knowledge
 - Pair Programming
 - Code Reviews
- Defect/Request Tracking
- Planning What To Do Next