When is Agile the Best Project Management Method?

Lana Tylka
Emerging Application Development
1960’s – 1990’s

Requirements

Design

Implementation

Testing

Maintenance

Change Management Process

Contract Amendment

“I want something else”

1 year

1.5 years

6 months

1 + years
Build for Value

Requirements evolve over time

- Never: 45%
- Rarely: 19%
- Sometimes: 16%
- Often: 13%
- Always: 7%

64% - Rarely or Never

20% - Often or Always

Standish Group Study Reported at XP2002 by Jim Johnson, Chairman
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.

Agile Manifesto - www.agilemanifesto.org
KanBan Approach (Still Agile, just not Scrum)

- No defined iterations
- No defined roles
- Direct communication with customer

- Limit your work-in-progress
- Visualize your work
- Ever-changing backlog with on-the-fly prioritization
Scrum Sprint Cycle

Product Backlog

Sprint Planning

Sprint Backlog

The team

Scrum Master

Daily Scrum

2 - 4 Week Sprint

Potentially Shippable Product Increment

Retrospective

Product Owner

Stakeholders

Scrum
SAFe (Scalable Agile Framework)

- Product Backlog
- Stakeholders
- The team
- Sprint Planning
- Scrum Master
- Product Owner
- Release Manager
- Scrum of Scrum Master
- Daily Scrum
- Sprint Backlog
- 2-4 Week Sprint
- Daily Scrum of Scrums
- Potentially Shippable Product Increment
## When Do These Models Work Best?

<table>
<thead>
<tr>
<th>Scope, Technology, Contract</th>
<th>Waterfall</th>
<th>Staged Delivery</th>
<th>Agile</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Clear requirements</td>
<td>• Several applications</td>
<td>• Flexible scope, deliverables</td>
<td></td>
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<tr>
<td>• Fixed deliverables</td>
<td>• Prototypes expected</td>
<td>• One or several applications</td>
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<tr>
<td>• Single application</td>
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<table>
<thead>
<tr>
<th>Size, Duration</th>
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<tbody>
<tr>
<td>• Small size, short duration project</td>
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<table>
<thead>
<tr>
<th>Capacity, Capabilities, Environment</th>
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<tbody>
<tr>
<td>• Limited capacity, resources, and environment</td>
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<tr>
<td>• Frequent turnover on project team</td>
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Using Agile in a Consulting Project

Method

Waterfall

Agile

Time
Using Agile in a Consulting Project
Using Agile in a Consulting Project

Waterfall

Agile

Time
Using Agile in a Consulting Project

Method

Waterfall

Agile

Time

Sprint 0.0
Sprint 0.1
Sprint 0.2
Sprint 1.1
Sprint 1.2
Sprint 1.3
Release 1
Release 2
Sprint 2.1
Sprint 2.2
Sprint 2.3
Release 2
Release 3
Sprint 3.1
Sprint 3.2
Sprint 3.3
Release 3
Release 4
Sprint 4.1
Sprint 4.2
Final Release
Questions?

Section Subhead
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Select the session you attended

Scroll down to “Survey”

Log in to access the survey

Complete the survey and select “Submit”
<table>
<thead>
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<th>SESSION</th>
<th>LOCATION</th>
<th>TIME FRAME</th>
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</thead>
<tbody>
<tr>
<td>• Esri Best Practices: Collect and Manage Requirements for Successful GIS Projects</td>
<td>• SDCC Room 30A</td>
<td>• Wednesday 1:00 pm – 2:00 pm</td>
</tr>
<tr>
<td>• Esri Best Practices: Implementing and Enterprise Geodatabase</td>
<td>• SDCC Room 31A</td>
<td>• Wednesday 2:30 pm – 3:30 pm</td>
</tr>
<tr>
<td>• Implementing ArcGIS Island</td>
<td>• SDCC Expo Hall</td>
<td>• 8:30 am – 6:30 pm daily</td>
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