Debunking Four Myths of Agile Development

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Why is Agility Needed in the Mainframe World Today?
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Four Myths About Agile Development

1. There is only one way to do Agile development

2. Agile development means faster development

3. Only the IT organization is impacted

4. Organizational procedures and structures don’t have to change
THERE IS ONLY ONE WAY TO DO AGILE DEVELOPMENT
Agile: Methodology, Framework or?

When we wrote the agile manifesto, we knew it was not a methodology, and not a framework, either. It was and is a value center, a way of looking at situations and thinking about how to proceed ... Scrum, on the other hand, is a framework ... Not a methodology, because it doesn’t even have enough in it to qualify as a methodology.

-Alistair Cockburn (via blog post)

• Agile values:
  – Individuals and interactions over processes and tools
  – Working software over comprehensive documentation
  – Customer collaboration over contract negotiation
  – Responding to change over following a plan

• Don’t confuse “Agile” with its implementation
Agile for Software Engineering

Scrum
Kanban
Xtreme Programming
SAF
DSDM
Feature Driven
Methodology Comparison

Waterfall
- Analyze
- Plan
- Design
- Build
- Test
- Deploy

Agile

Project Timeline
- Requirements Change
- Customer Turnover
- Technology Innovation
Scrum Team
Cross-functional Representation

The Scrum team is critical to Agile’s success. It must be comprised of the right members from all disciplines that are needed to release the software product.
Agile Change at Compuware

Training

• Formal Change Management training for key positions
• Agile certification
  – Product Owner
  – Scrum Master
• Agile team
  – Led by Scrum Master
  – Two day, self-paced

Organization

• Agile frameworks
  – Kanban: maintenance
  – Scrum: enhancements
• Scrum teams
  – Size: 7 ± 2
  – Team > members
• Dedicated Scrum room
• Master Scrum Master
  – Pseudo Agile coach
AGILE DEVELOPMENT MEANS FASTER DEVELOPMENT
MVP – Minimum Viable Product

- Set of **minimum** capabilities that a user would accept
- Demonstrates **future** benefit to retain early adopters
- Provides Agile team **maximum** amount of feedback
Efficient Task Execution

- Realize value sooner
- Reduce context switching
- Decrease total elapsed time

Source: Multitasking Gets You There Later
http://www.infoq.com/articles/multitasking-problems
Agile Testing

- Integrated into design and development
- Automated testing
  - At each build, sprint and milestone
  - Unit, integration and system testing
- Applications designed for testing
  - Component architecture (Lego architecture)
  - Testing each component
Agile Feeds DevOps

DevOps is a culture of communication, collaboration, integration, automation and measurement of cooperation between software Development and Operations.
Fail Fast, Succeed Faster

- Fail safe vs. safe to fail
- Small failures, recover quickly
- Learn from failures and never repeat them
- Align with 99.999 mainframe reliability
  - Requires CI (Continuous Integration)
  - Fail in development and test, not production!
ONLY THE I.T. ORGANIZATION IS IMPACTED
Business Agility is the Goal!
Business Needs Are Met With Agility

**BUSINESS NEEDS**

- **88%** of non Agile users say improving speed to market is a priority
- **91%** of non Agile users say being able to switch gears more quickly and effectively is a priority
- **96%** of non Agile users say making their team more productive is a priority
- **88%** of non Agile users say enhanced prioritization of the things that matter is a priority
- **89%** of non Agile users say delivering a better, more relevant end-product is a priority

**GET TO MARKET FASTER**

**ADAPT AND RESPOND FASTER**

**BE MORE PRODUCTIVE**

**IDENTIFY AND PRIORITIZE HIGH-IMPACT ACTIVITIES FASTER**

**DELIVER CUSTOMER-CENTRIC OUTCOMES**

**RESULTS OF AGILE**

- **93%** said adopting Agile helped them to improve speed to market (ideas, products or campaigns)
- **93%** said adopting Agile helped them switch gears more quickly and effectively
- **87%** said adopting Agile made their teams more productive
- **80%** said adopting Agile led to an enhanced prioritization of things that matter
- **80%** said adopting Agile helped them deliver a better, more relevant end-product

*Source: The Agile Advantage, CMG Partners – Sixth Annual CMO Agenda*
It’s More Than Just Engineering

**IT**

**Agile**

- **Pre-planning**
  - Business Strategy
  - Customer Needs
  - Market Trends

- **Design**

- **Build**

- **Test**

- **Deploy**

- **Post Go-to-market**
  - Customer Support
  - FTS
  - Marketing

**Business Agility**
ORGANIZATIONAL PROCEDURES AND STRUCTURES DON’T NEED TO CHANGE
Agile Requires Executive Sponsorship

**Seriously**, Agile requires changes in culture, processes and tools. It cannot succeed without executive management support.
Embrace Change

- Agility, flexibility and ability to embrace (constant) change
- Continuous *stakeholder* feedback
- Transparency and collaboration
- Break down into granular initiatives
- Automation of manual steps
- Common instead of customized
- Fail fast – learn and adapt

**Change is difficult**, but essential! People embrace change differently. Implement change training, not just Agile development training.
Culture Change at Compuware

What We Did ...

- Focus on Business Agility
- Bimonthly communications
- Total Agile commitment
- Product Council to set priorities
- Bring customers closer to our process
- Continuously recruit next-gen workforce

What We are Doing ...

- Collaboration across all business groups
  - Tools: Confluence, JIRA
- Lean Startup
- Business Approach
  - Customer focused
  - Quick to change and adapt
  - Reduce bureaucracy
- Internal training program
Myths Debunked

1. Agile is a software development methodology
Myths Debunked

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   1. Agile is a philosophy, select the right methodology
Myths Debunked

1. Agile is a software development methodology
   - Myth: Agile is a software development methodology
   - Truth: Agile is a philosophy, select the right methodology

2. Agile development means faster development
   - Myth: Agile development means faster development
Myths Debunked

1. **Myths**  
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2. **Myths**  
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1. **Truth**  
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2. **Truth**  
   Agile development is about efficiency rather than speed
Myths Debunked

1. Agile is a software development methodology
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   - Myth: Agile success requires agility throughout the business
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   Truth: Agile success requires agility throughout the business

4. Organizational procedures and structures don’t have to change
   Truth: Agile requires a change in culture, tools and processes
Final Thoughts: Keys to Success

- Agile Software Development is Engineering’s contribution to Business Agility
- Focus on creating alignment with the rest of the business
- Quality is the responsibility of the team: win or lose as a team
- Collaborate and be transparent throughout the entire business, not just within IT
QUESTIONS
The Mainframe Software Partner
For The Next 50 Years

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