INTRODUCTION

HELLO, I'M Agile

The fourth annual "State of Agile Development" survey was conducted between July 22nd and November 5, 2009. Sponsored by VersionOne, respondents were recruited from mailing lists, websites, and other software development industry fora. The survey data includes information from 2,570 participants from 88 countries. The data was analyzed and prepared into a summary report by Analysis.Net Research, an independent survey consultancy.
**CURRENT COMPANY POSITION**

About half of respondents were in managerial / coordination roles, with virtually all the remainder directly involved in software development.

- 4% President / CEO / COO
- 7% Product Manager
- 7% Consultant / Trainer
- 7% Architect
- 8% Senior Developer
- 9% VP / Dir. of Development
- 10% Team Lead
- 10% Developer
- 10% Development Manager
- 17% Project Manager

**EXPERIENCE WITH AGILE DEVELOPMENT PRACTICES**

Respondents were quite knowledgeable about Agile Development, with 93% saying that they were at least "knowledgeable" about Agile practices.

- 45% Extremely Knowledgeable
- 27% Moderately Knowledgeable
- 21% Knowledgeable
- 7% Very Little Knowledge

How experienced are you with Agile development practices?
AGILE ADOPTION
The median size of development organizations was 75. One fourth had 20 or fewer employees.

84% of respondents worked in organizations that used Agile development practices to some degree.

58% of respondents worked in companies with distributed development teams.

WHO DECIDES?
Initial champions of Agile methods are typically found within the management layer – nearly 70% of the time.
AGILE METHODS & PRACTICES

AGILE METHODOLOGY MOST CLOSELY FOLLOWED

Scrum or a variant were by far the most common Agile methodologies employed.

AGILE TECHNIQUES EMPLOYED

Core Agile tenets – daily standup, iteration planning, and unit testing – were used by the vast majority of respondents.

69% of respondents reported that their Agile teams adhered to the 3 questions during their daily meetings / scrums / standup.
HOW MANY TEAMS HAVE ADOPTED AGILE?
Most companies only had a few teams using Agile; about half had fewer than five.

PERCENT OF COMPANY PROJECTS USING AGILE
About half of projects in respondents' companies used Agile.

NUMBER OF SEPARATE SITES / LOCATIONS USING AGILE
Most companies only had 1 or 2 sites using Agile.

HOW MANY PROJECTS ARE RUN USING AGILE?
Similarly, most companies only had a few Agile projects.
(Size of project was not considered)
**Leading Causes of Failed Agile Projects**

- Lack of experience with agile methods: 15%
- Company philosophy or culture at odds with core agile values: 10%
- Don’t Know: 10%
- External pressure to follow traditional waterfall phases and practices: 10%
- Lack of cultural transition: 10%
- Lack of management support: 8%
- Unwillingness of team to follow agile practices: 6%
- New to Agile Methods, Haven’t completed our first Agile project: 4%
- Insufficient training: 4%

23% of respondents reported they had not experienced a failed Agile project at all.

**Barriers to Further Adoption of Agile**

Management opposition and lack of upfront planning were the most commonly cited barriers to further adoption of Agile within companies.

**Greatest Concerns About Adopting Agile**

Corporate concerns about the adoption of Agile methodologies were most commonly centered around its implementation. Respondents said their companies were concerned about the lack of upfront planning (46%) or the lack of documentation (34%).

- Management opposed to change: 25%
- Lack of upfront planning: 25%
- Loss of management control: 20%
- Lack of predictability: 20%
- Lack of documentation: 15%
- Lack of engineering discipline: 15%
- Development team opposed to change: 15%
- Quality of engineering talent: 10%
- Other: 10%
- Regulatory compliance: 5%
- Reduced software quality: 5%
- Inability to scale: 5%
- No Concerns: 5%

- Lack of upfront planning: 23%
- Lack of documentation: 23%
- Loss of management control: 18%
- Lack of predictability: 18%
- Management opposed to change: 15%
- Lack of engineering discipline: 15%
- Development team opposed to change: 15%
- Inability to scale: 10%
- Regulatory compliance: 10%
- Reduced software quality: 10%
- Quality of engineering talent: 10%
- Other: 10%
- No Concerns: 10%
REASONS FOR ADOPTING AGILE

The main reasons cited by respondents as to why they decided to adopt Agile practices hinged on overall process flexibility, productivity, and quality. Other aspects like reducing cost were cited less often.

- Accelerate Time to Market
- Enhance Ability to Manage Changing Priorities
- Increase Productivity
- Enhance Software Quality
- Improve Alignment Between IT and Business Objectives
- Improve Project Visibility
- Reduce Risk
- Enhance Software Maintainability/Extensibility
- Simplify Development Process
- Improved Team Morale
- Reduce Cost
- Improved/Increased Engineering Discipline
- Manage Distributed Teams

OVERALL CONSENSUS REGARDING ADOPTION OF AGILE

Eighty percent of respondents felt that Agile projects were the same or faster to completion than previous non-Agile ones.

64% said FASTER TIME TO COMPLETION
16% said SAME TIME TO COMPLETION
16% said NOT YET COMPLETED AN AGILE PROJECT
4% said SLOWER TIME TO COMPLETION
**BENEFITS OBTAINED FROM IMPLEMENTING AGILE**

Respondents cited increased flexibility and productivity as the strongest gains won by a shift to Agile.

- Enhance Ability to Manage Changing Priorities
- Improve Project Visibility
- Improve Alignment Between IT and Business Objectives
- Improved Team Morale
- Accelerate Time to Market
- Increase Productivity
- Enhance Software Quality
- Simplify Development Process
- Reduce Risk
- Improved / Increased Engineering Discipline
- Enhance Software Maintainability / Extensibility
- Reduce Cost
- Manage Distributed Teams

90% of respondents said implementing Agile either improved or significantly improved their ability to manage changing priorities.

83% of respondents showed either improvement or significant improvement in project visibility.

**OUTSOURCED DEVELOPMENT PROJECTS**

While most respondents did not have outsourced projects, the vast majority of those that did use or or are planning to use Agile techniques with them.

**USE AGILE ON OUTSOURCED PROJECTS?**

- **43%** Do Not Outsource
- **28%** Outsource and are planning to
- **13%** Do not currently outsource, but are planning to
- **11%** Do not currently outsource, and do not plan to
- **3%** Outsource, but are not planning to in the future
Microsoft products like Excel and Project were used by the majority of respondents, followed by JIRA, in-house and VersionOne.

*PREVIOUSLY VENDORS “X” AND “Y” REQUESTED NOT TO BE IDENTIFIED IN STATE OF AGILE SURVEYS
*RESPONDENTS WERE ALLOWED TO ANSWER FOR MULTIPLE TOOLS
*24% OF RESPONDENTS ALSO SELECTED “OTHER”