

2015 STATE OF AGILE

EXECUTIVE SUMMARY

Technology and Business leaders are inherently positioned to facilitate the transition to new digital business models based on Agile processes and structures and supported by digital innovation. However the reality is that many senior IT executives have difficulty working out where to begin and how to proceed. On the one hand, they can draw from a rich arsenal of Agile methods, tools and examples for software development, but on the other hand, it is not always obvious how to turn this knowledge into an actionable framework for increasing agility above and beyond application development.

This report contains an introduction to Agile, a list of tips and recommendations, our insights on Agile and a survey result on the State of Agile in Vietnam answered by employees from **5%** of VietnamWorks IT customers.

Organizations embarking on agility-enabling initiatives follow similar learning curves and steps as they advance from understanding how Agile methods work to attaining high levels of organizational agility and process maturity. Success depends on the ability to overcome the barriers that stagger or stall many implementations. Specifically when it comes to Agile frameworks, leaders need to be aware of a few pitfalls, including lack of agile skill talents, failing to address the need for more collaborative and less formal decision-making processes between business stakeholders and IT experts that causes lack of support from executives, and lack of engineering disciplines which can be a misinterpretation of agile.

In Vietnam, **60%** of the companies enquired uses Agile in their organization while only 1 out 4 respondents says that they use Agile for all their projects. Companies using Agile acknowledge benefits over disadvantages (top 4 benefits includes: Ability to manage changing priorities (**80%**), Improved project visibility (**75%**), Increased productivity (**67%**), and Faster time to market (**67%**)) and willingness to expand Agile adoption further in their organizations.

Scrum is the dominant Agile methodology in Vietnam and job trends indicate that will continue to grow during the coming months.

We are confident this summary will demonstrate the unmatched quality of our unique agile research; we expect the insights presented here support you and your team to gain deeper agile adoption and drive greater business success.

AUTHOR



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Thu is an experienced Product Owner, she has gained a wide range of experience working with software and web development companies working for local and international customers.

Thu is currently working as Product Owner for tech and mobile applications for tech professionals in Vietnam. She is very passionate about Agile and is helping both businesses and teams get the most out of Agile practices and processes.

"I think we have to live and practice the Agile values in all aspects of our life. I know that supporting people is key to producing better outcomes for businesses. Applying Agile approach contributes to make sure we can deliver more values sooner."

"If you'd like to know more about me, or you'd like to learn more about Agile, feel free to get in touch - I'm always happy to share and learn, and I'd love to connect".

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The 2015 Vietnam State of Agile survey was conducted between **September and December 2015**.

Vietnam is quickly becoming Southeast Asia's technology hub and is gaining on long established outsourcing locations. During this year, hundred of companies have shown interest in the state of Agile in Vietnam.

This report gives software professionals deep insight into agile trends, best practices and lessons learned to help organizations succeed with their agile transformations.

Sponsored by VietnamWorks.com, the survey invited individuals from a broad range of industries in the global software development community. A total of **113 companies** participated, and provided insights on their experience with Agile.

KEY TAKEAWAYS



AGILE MOMENTUM

Agile development is grabbing attention of the business. Our survey found that more companies are scaling and embracing agile as part of the larger vision to deliver software faster, easier and smarter.

Sixty percent (60%) of all organizations surveyed now practice agile more than 1 year. **8 out of 10** respondents work in organizations with less than 1,000 people.



BENEFITS OF AGILE

There is plenty of evidence to conclude that agile works. After 1 year running the top four benefits of agile development remain:

1. Ability to manage changing priorities (**80%**)
2. Improved project visibility (**75%**)
3. Increased productivity (**67%**)
4. Faster time to market (**67%**)

Furthermore, **14%** of respondents said that the majority, if not all, of their agile projects have been successful.

When asked what causes agile to fail, respondents pointed to lack of experience with agile methods (**50%**).



AGILE PROJECT MANAGEMENT

PRACTICES AND TOOLS

Scrum still dominates as the agile methodology of choice (**82%**) while Feature-Driven Development, Scrum/XP Hybrid, Custom Hybrid (**2%**) is the least used among respondents.

Regarding agile project management tools, the top three preferred solutions were Microsoft Excel (**54%**), Atlassian/JIRA (**54%**) and Google Docs (**43%**).

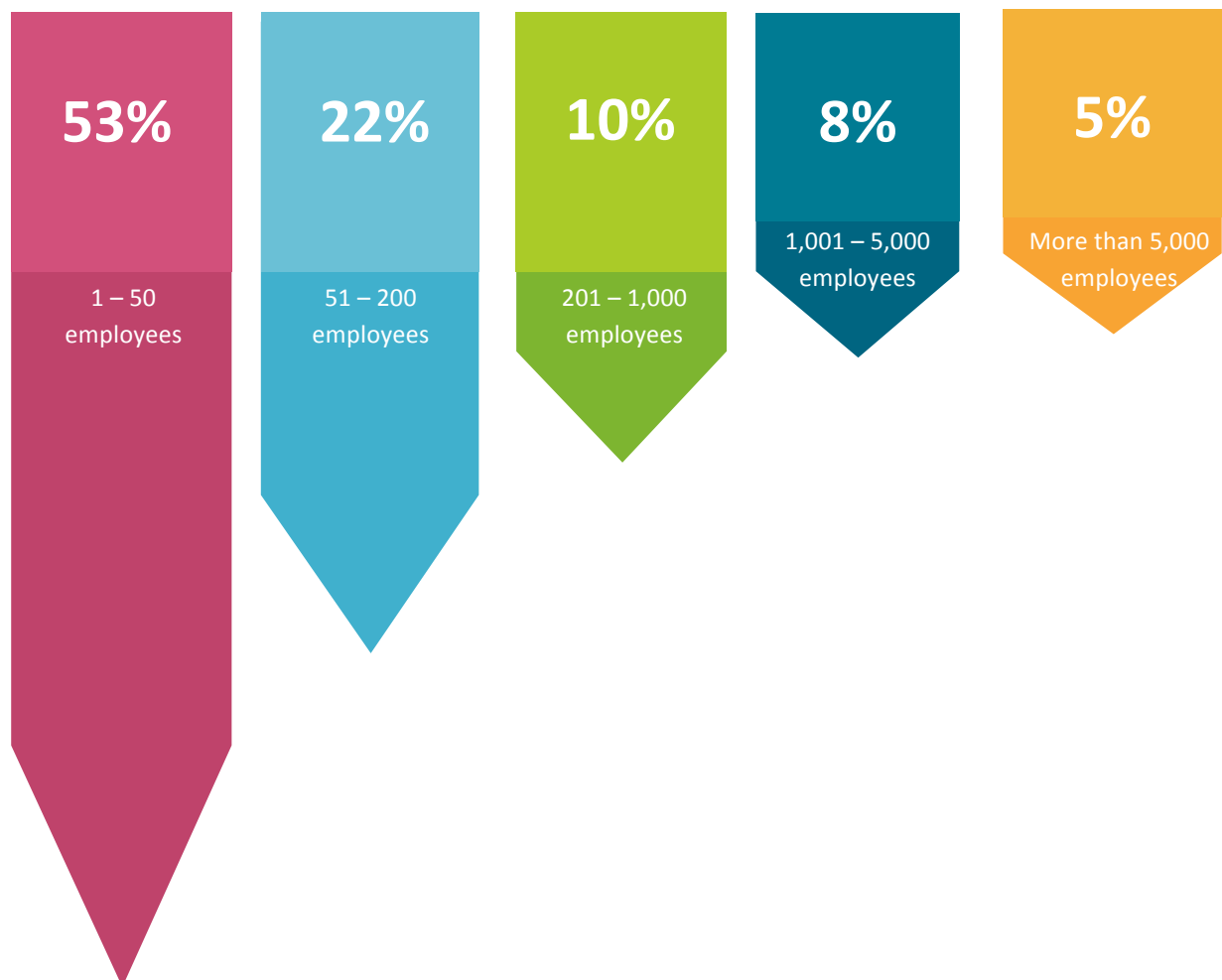


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RESPONDENT DEMOGRAPHICS

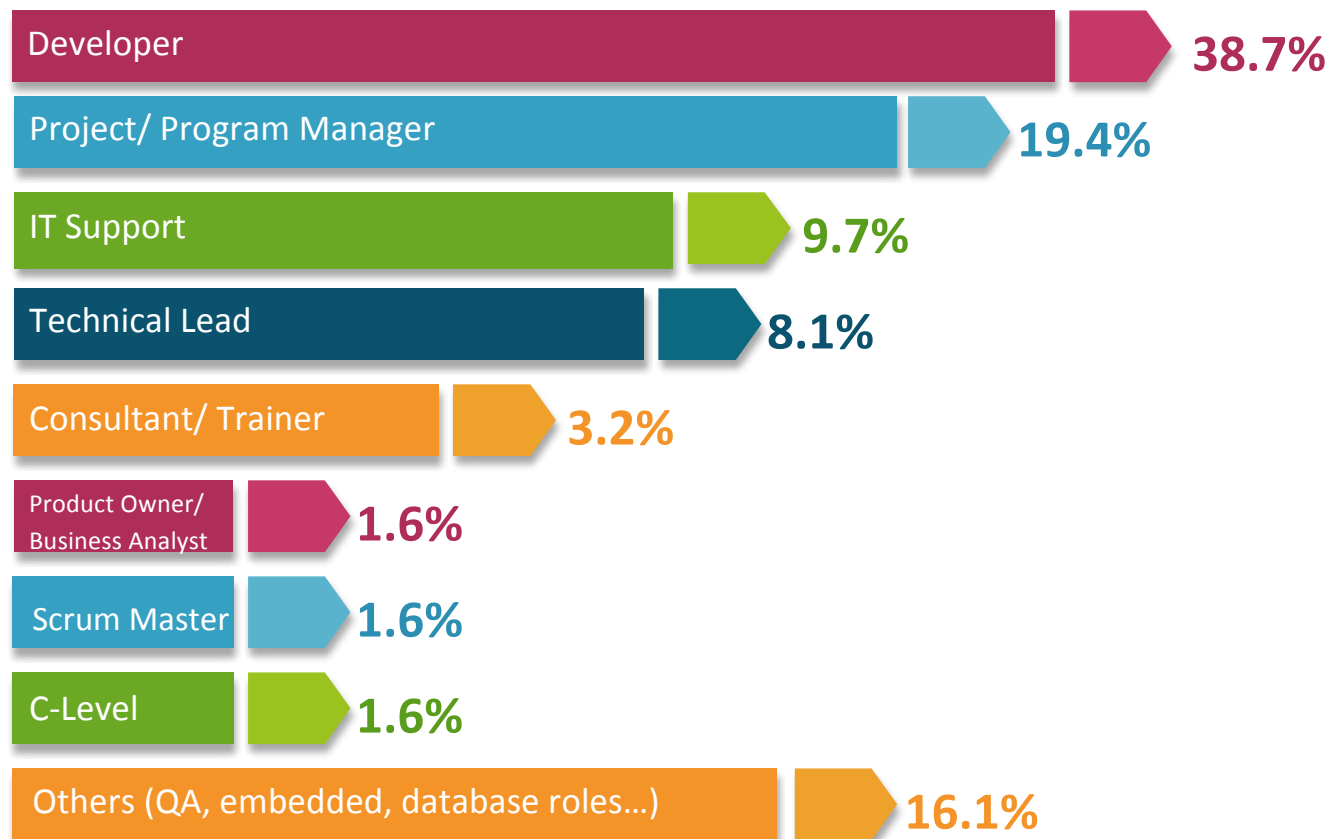
113 individuals representing **5%** of VietnamWorks IT customers have participated in this survey. Only **13%** of the respondents belong to organizations with **1,000 or more** employees. **More than half** of the respondents (**53%**) works for organizations with 50 or less employees.

SIZE OF ORGANIZATION



WHO RESPONDED

All respondents have between 1 to 20 years of experience in IT field. **3 out of 4** respondents are either developers, project managers, IT support or technical leads.



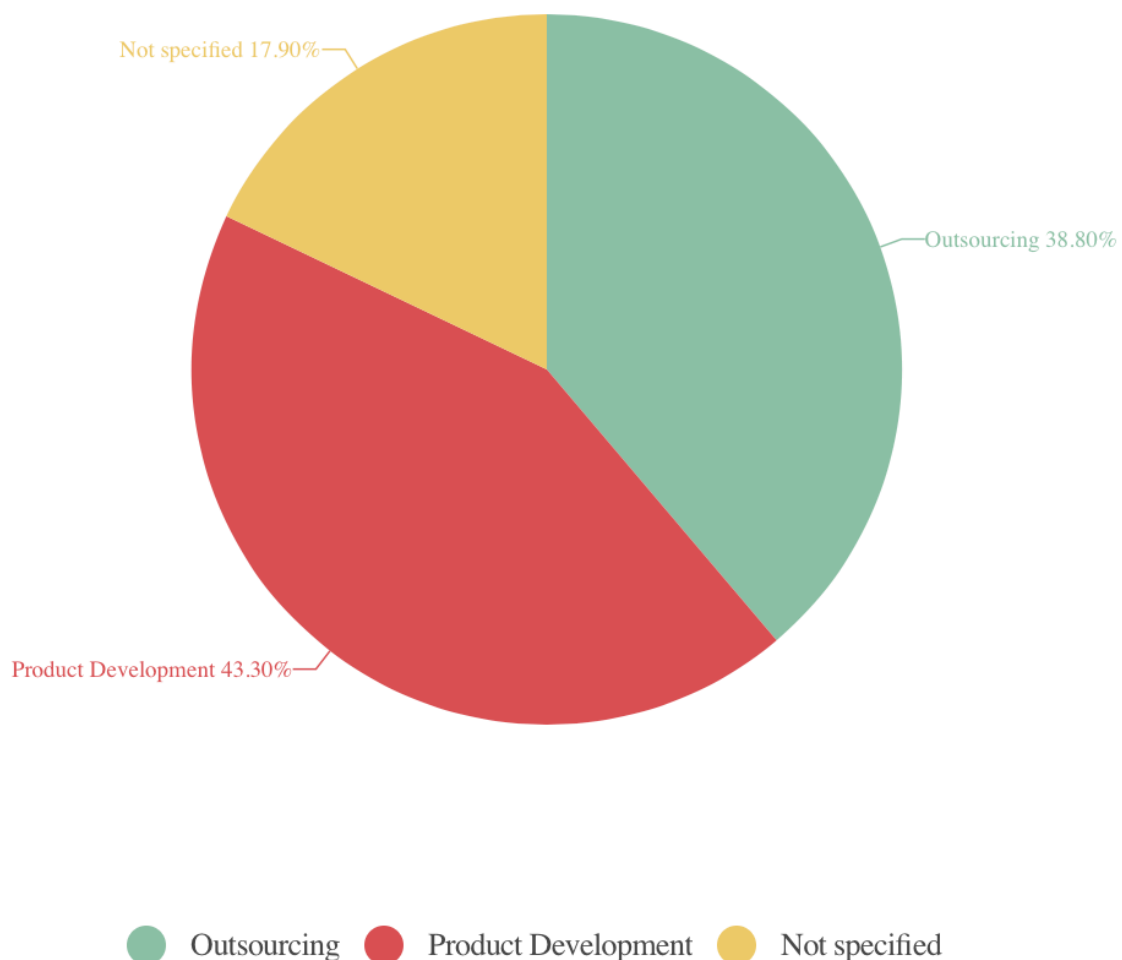
OUTSOURCING MODEL

Ho Chi Minh City and Ha Noi **ranked 18th and 20th** respectively among the top 100 most attractive global cities for software outsourcing.

Viet Nam is **ranked 12th** worldwide for Outsourcing software development and it is forecasted to continue growth for the years to come. Skilled labor force is increasing at the rate of more than **40,000** engineers graduating each year from 290 universities across the country, in addition to **160,000** Vietnamese studying overseas.

* More information: <http://www.orientsoftware.net/blog/vietnam-and-the-software-outsourcing-industry-in-2015>

Despite the growth in outsourcing software industry, **43%** of the respondents pointed out to work for a software product development company:



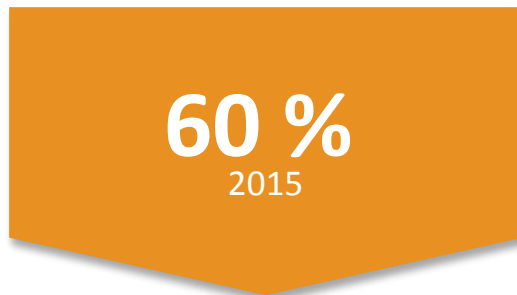


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COMPANY EXPERIENCE AND ADOPTION

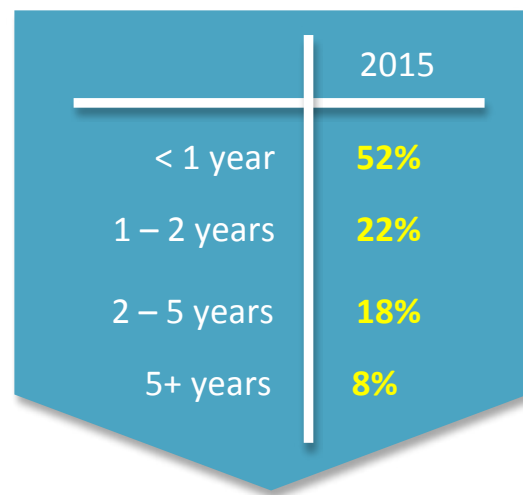
HOW MANY?

The number of organizations that practice agile.



HOW LONG?

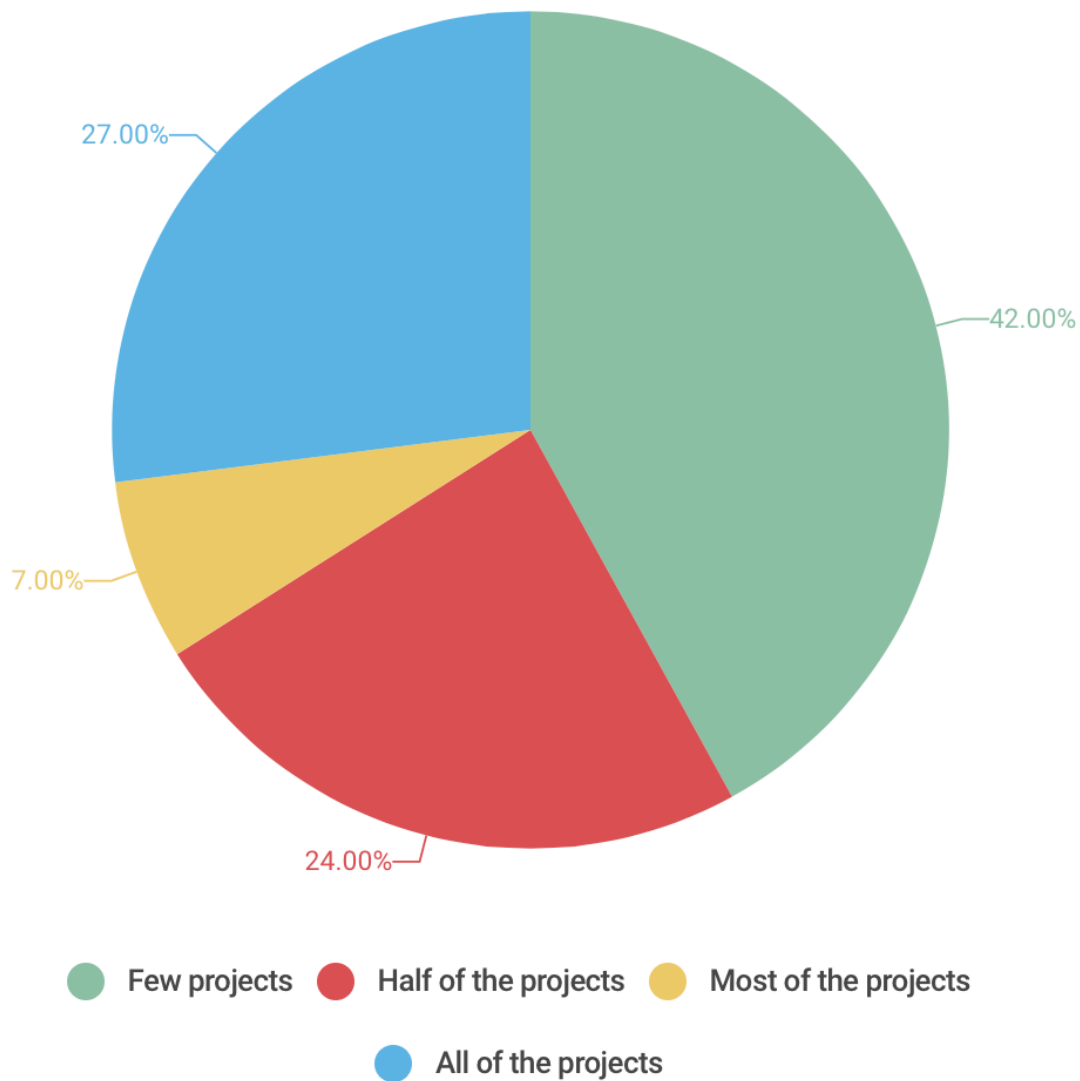
Approximately **48%** of respondents worked in organizations that have practiced agile for more than 1 year



Agile practices are still in early stages in Vietnam, **40%** of the companies have not used Agile yet; **more than half** of the companies, which have implemented Agile, just started from this year.

PERCENTAGE OF PROJECTS USING AGILE

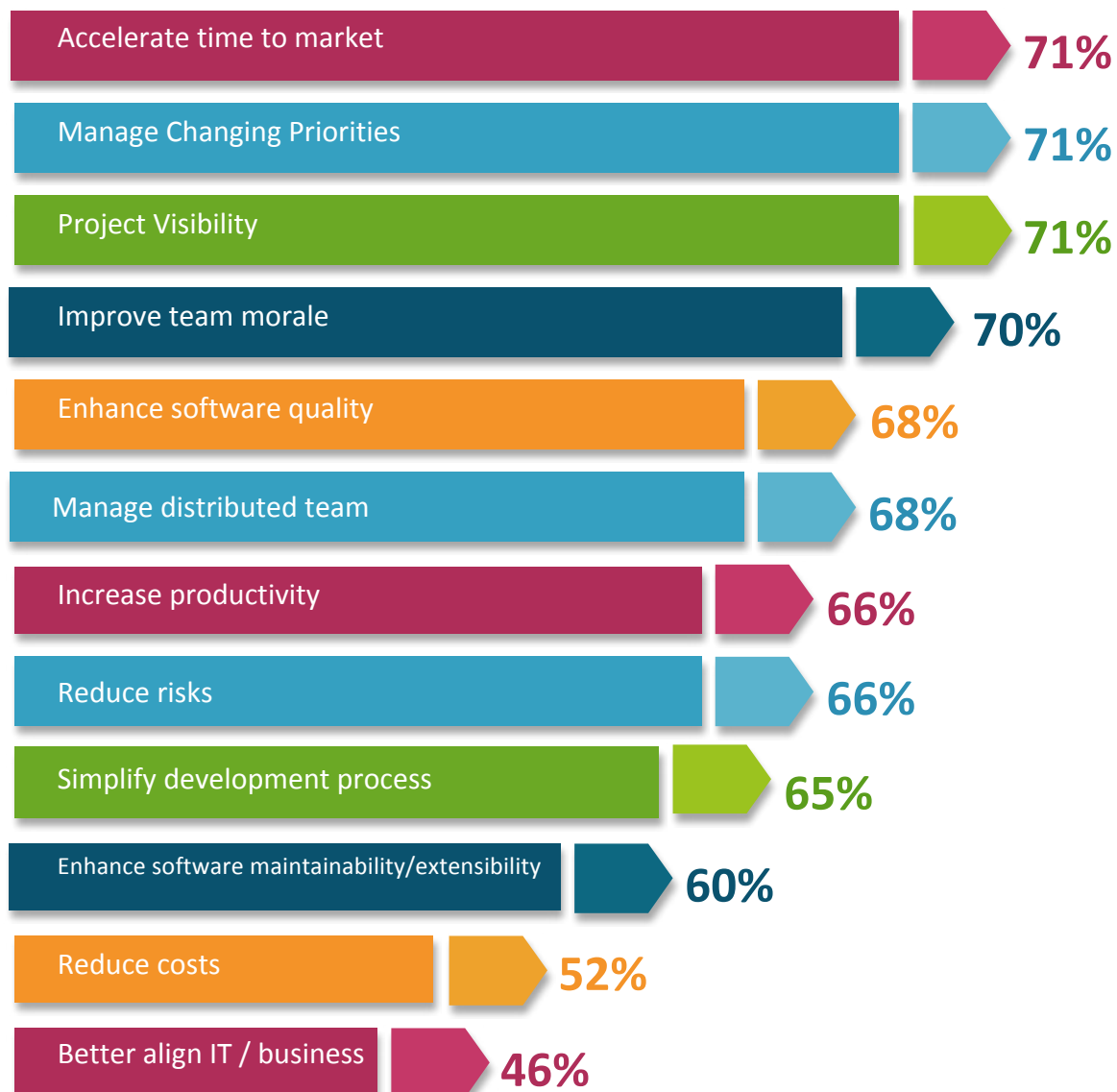
As mentioned in previous section, companies are starting to adopt Agile. Only **1 out of 4 company** fully uses Agile to manage their software development cycle.



REASONS FOR ADOPTING AGILE

When asked participants about the main reasons to adopt Agile practices in their organizations, the Top 3 includes: Accelerate Time to Market (**71%**), Manage Changing Priorities (**71%**) and Project visibility (**71%**).

* Respondents were able to make multiple selections.



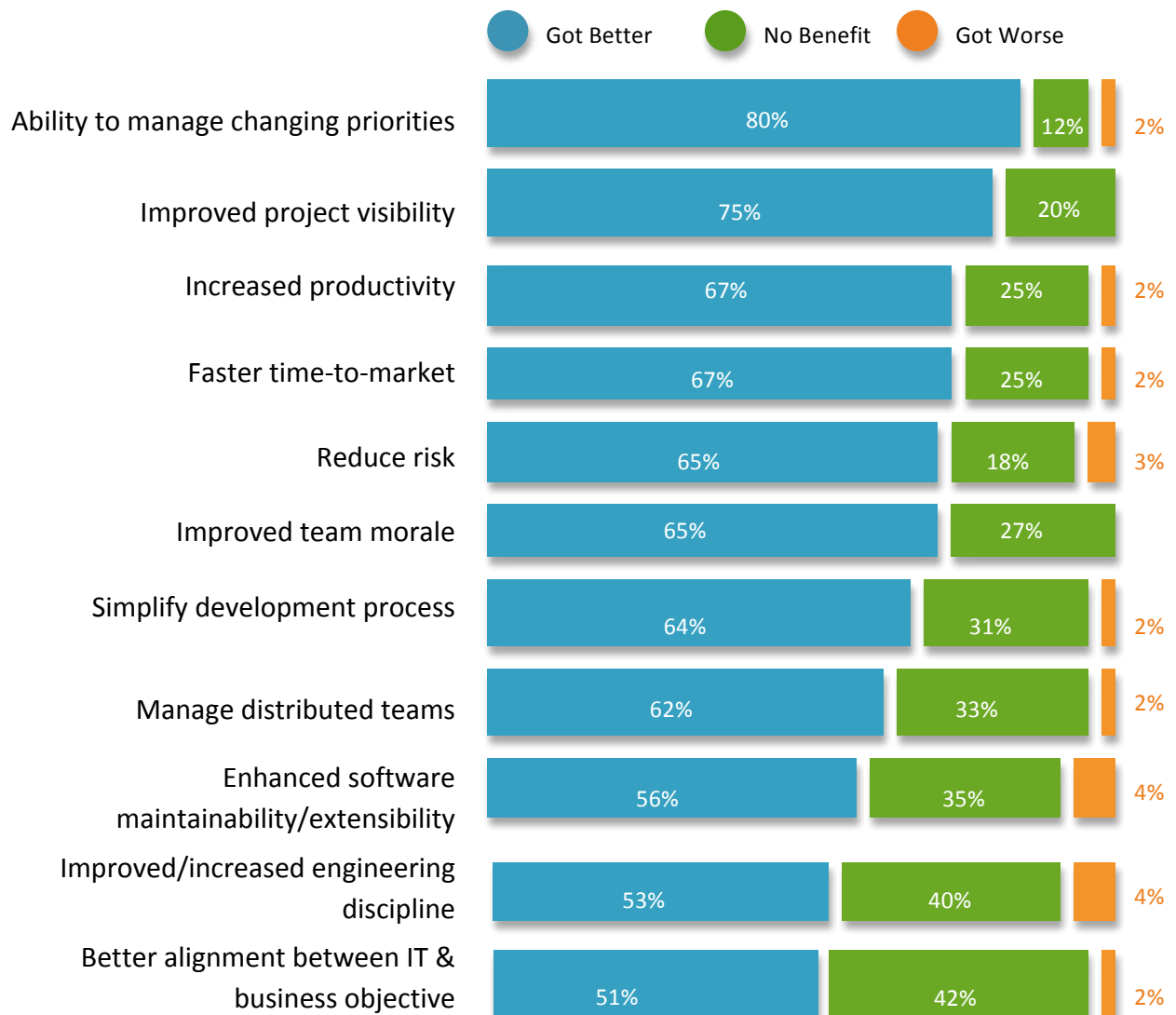


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BENEFITS OF AGILE

ACTUAL IMPROVEMENTS FROM IMPLEMENTING AGILE

Top 3 benefits of adopting agile are: Ability to manage changing priorities (**88%**), Improved project visibility (**77%**), and Reduce risks (**73%**)





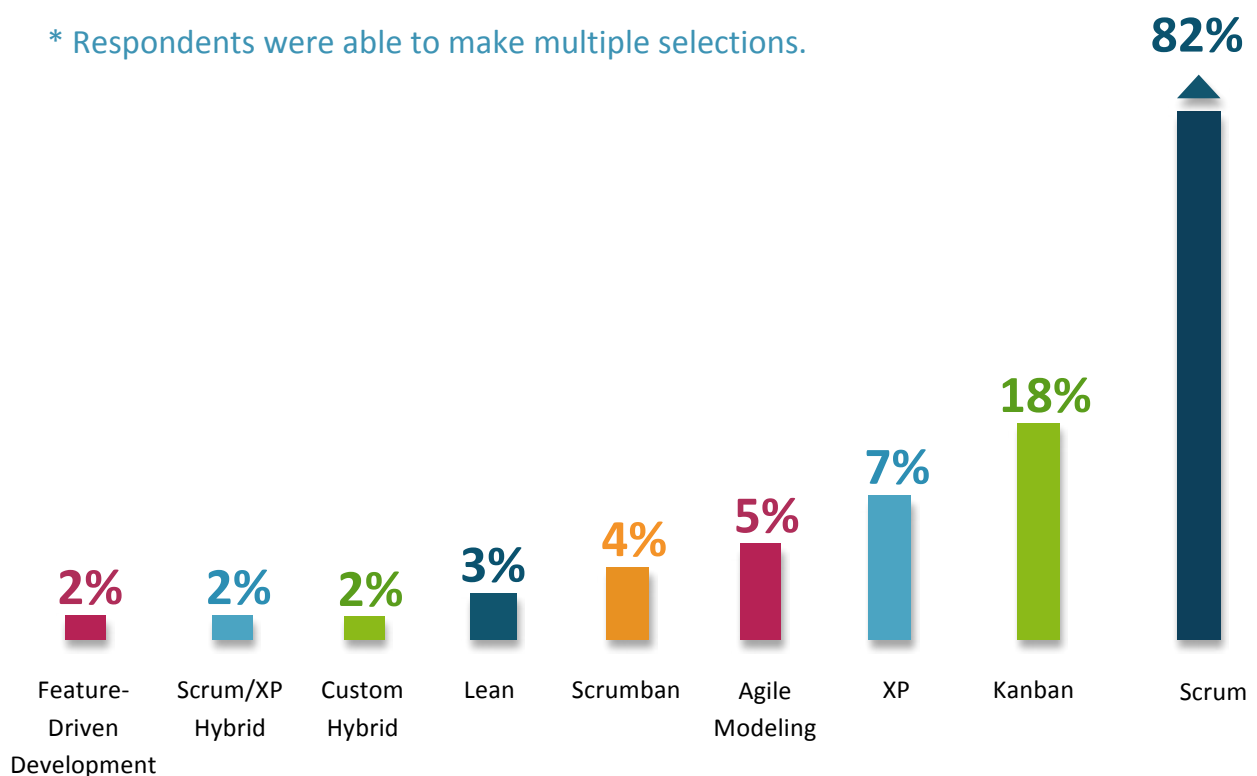
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AGILE METHODS AND PRACTICES

Agile is a set of methods and methodologies that promotes adaptive planning, evolutionary development, early delivery, continuous improvement, and encourages rapid and flexible response to change. Within Agile, Scrum is the most widely spread among other methodologies.

AGILE METHODOLOGY USED

* Respondents were able to make multiple selections.

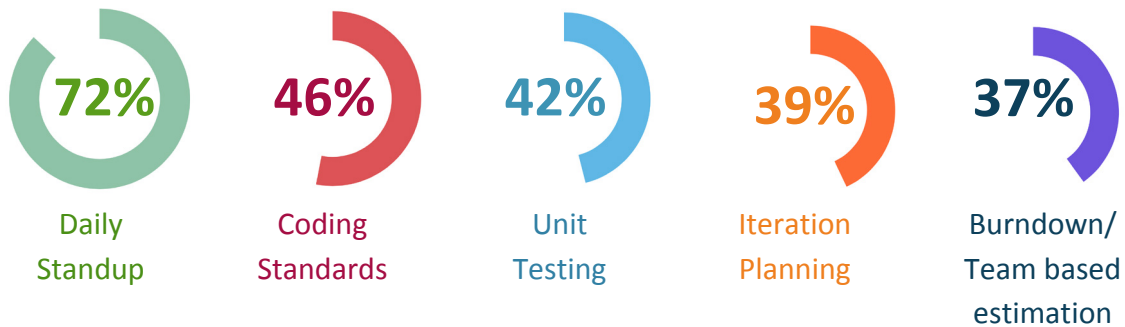


AGILE TECHNIQUES EMPLOYED

Agile proposes a series of techniques to successfully execute software development projects. The most widely practiced agile technique is the Daily Standup (**72%**), followed by the use of Coding Standards (**46%**) and Unit Testing (**42%**). Almost **40%** of respondents said they conduct Iteration Planning and Burndown/ Team based estimation, while less popular techniques includes Testing Analog Taskboard (**6%**) and Open Workarea (**5%**).

* Respondents were able to make multiple selections.

Top 5 Agile Techniques



Percent of 100

72%	Daily Standup	16%	Integrated Dev/QA
46%	Coding Standards	16%	Continuous Deployment
42%	Unit Testing	15%	Velocity
39%	Iteration Planning	13%	Pair Programming
37%	Burndown / Team-Based Estimation	12%	Automated Acceptance
34%	Release planning	10%	Story Mapping
32%	Retrospectives	9%	Agile Games
27%	Refactoring	9%	BDD
25%	TDD	9%	Dedicated Product Owner
24%	Continuous Integration	7%	Cycle Time
21%	Kanban	7%	Digital Taskboard
18%	Automated Builds	6%	Testing Analog Taskboard
		5%	Open Workarea



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AGILE SUCCESS AND SCALING

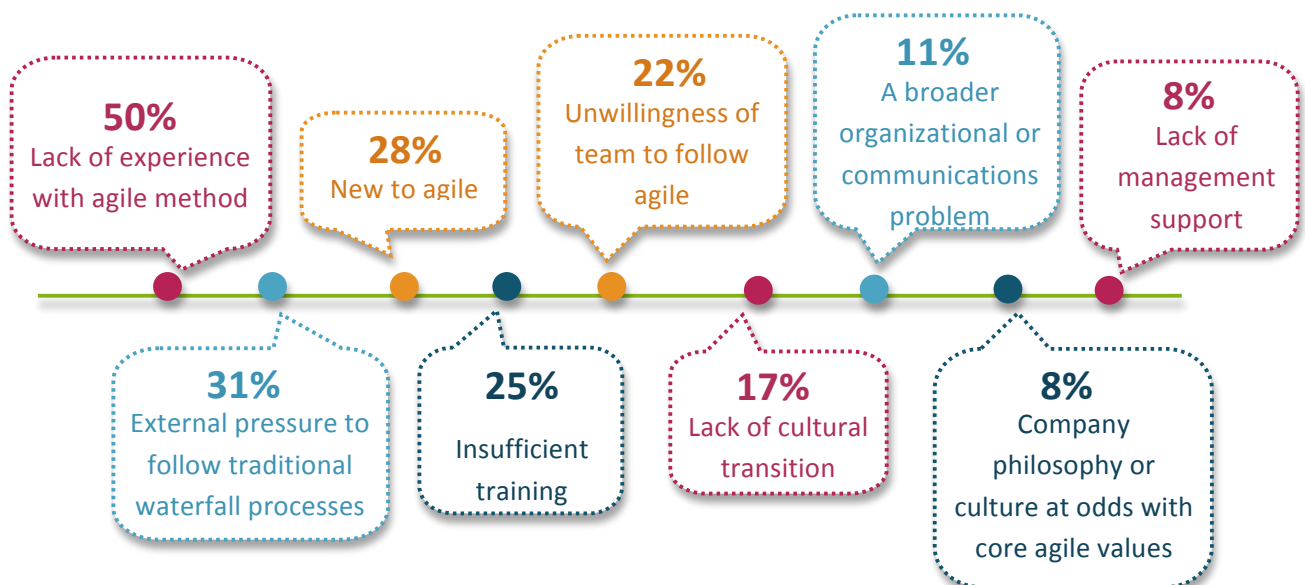
Respondents defined success when projects meet customer's expectation and satisfaction while delivering the agreed scope within budget and on-time.

WHAT CAUSED AGILE PROJECTS TO FAIL? WHAT IMPEDES AGILE ADOPTION?

When a project is declared unsuccessful (not meeting customer's expectation and/or within project constraints), most of the respondents pointed to lack of experience with agile method (**50%**), External pressure to follow traditional waterfall processes (**31%**), or being completely new to Agile (**28%**)

Approximately **14%** respondents said that None of their Agile projects failed.

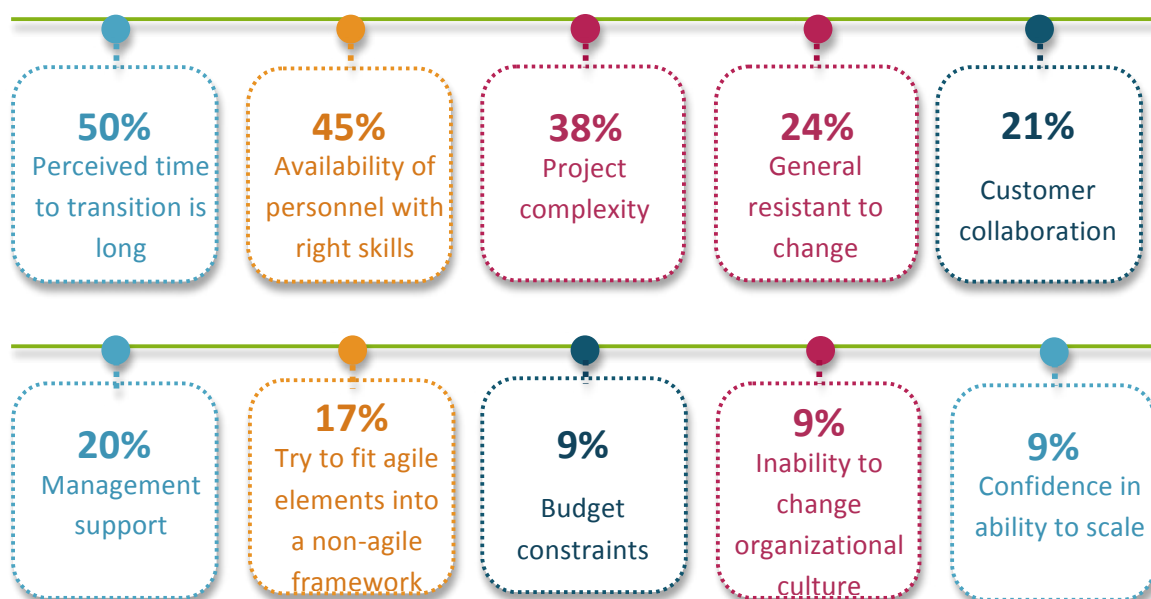
* Respondents were able to make multiple selections.



CHALLENGES TO FUTHER AGILE ADOPTION

While we don't have data that compare the ratio of unsuccessful projects in Agile versus Waterfall, the answer below shows why Waterfall is still a preference over Agile. Respondents cited *Long perceived time to transition*, *Not having personnel with right skills* and *Project complexity* as their biggest challenges to futher agile adoption.

* Respondents were able to make multiple selections.



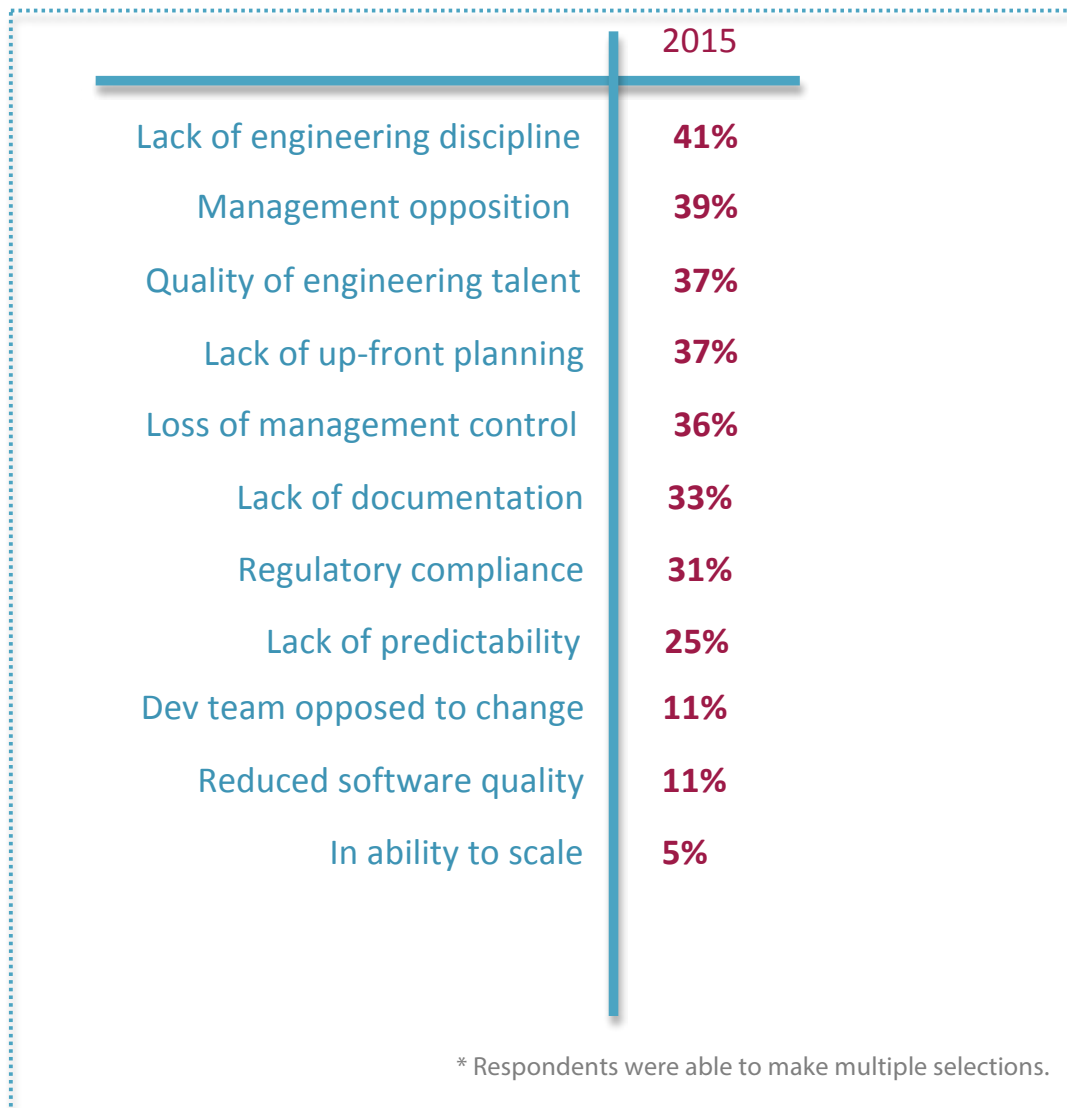
HOW FAST AGILE PROJECTS ARE DELIVERED COMPARED TO NON-AGILE ONES?

Agile proposes faster time to market than traditional methodology. **60%** respondents confirm that hypothesis.

	2015
Faster time to complete	60%
Same time to complete	7%
Slower time to complete	13%
Not yet completed an agile project	20%

GREATEST CONCERNS THAT AGILE RAISES IN YOUR ORGANIZATION

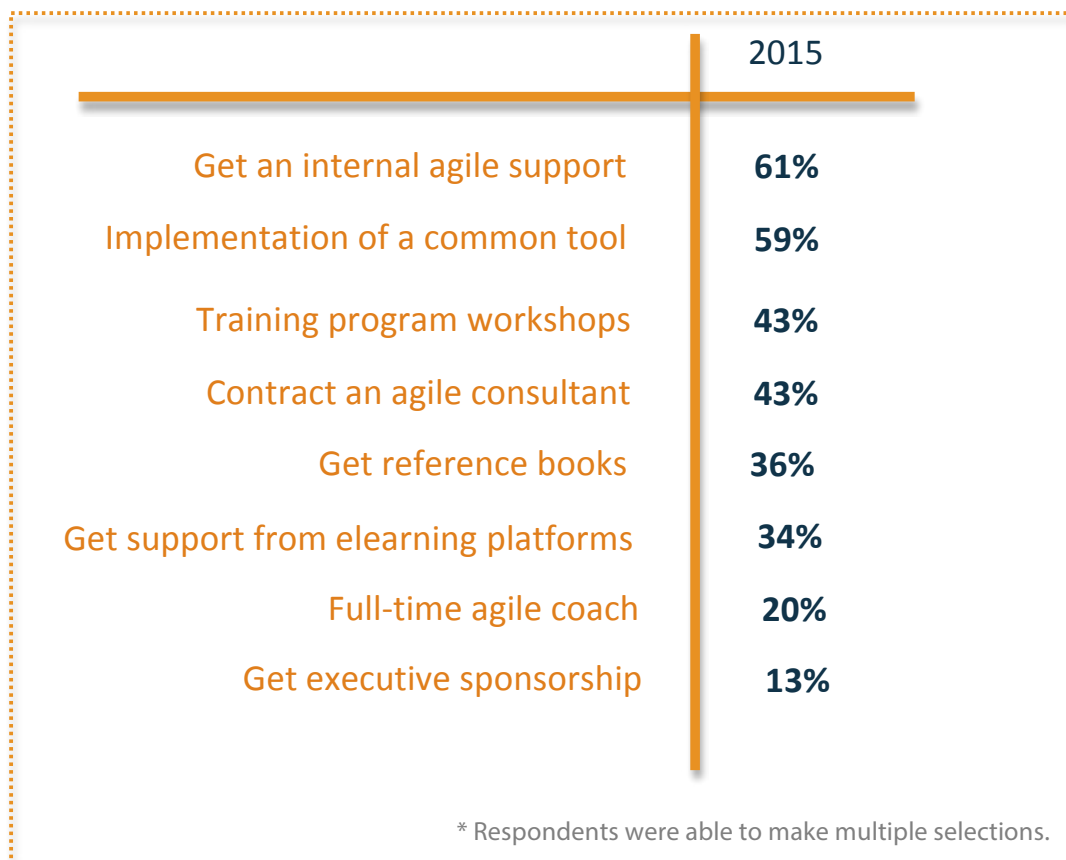
Lack of formal foundation in Agile engineering discipline raises the biggest concern in organizations. Lack of Management support is still one of the hurdles on agile adoption within organizations. And surprisingly and despite of other reports indicating the high quality of software engineering talents in Vietnam, quality of engineering talent is pointed out as one of the biggest concerns.



MAJOR LESSONS LEARNED TO RECOMMEND TO OTHER ORGANIZATIONS

After companies have practiced Agile, they believed that adoption would have been easier if they would have:

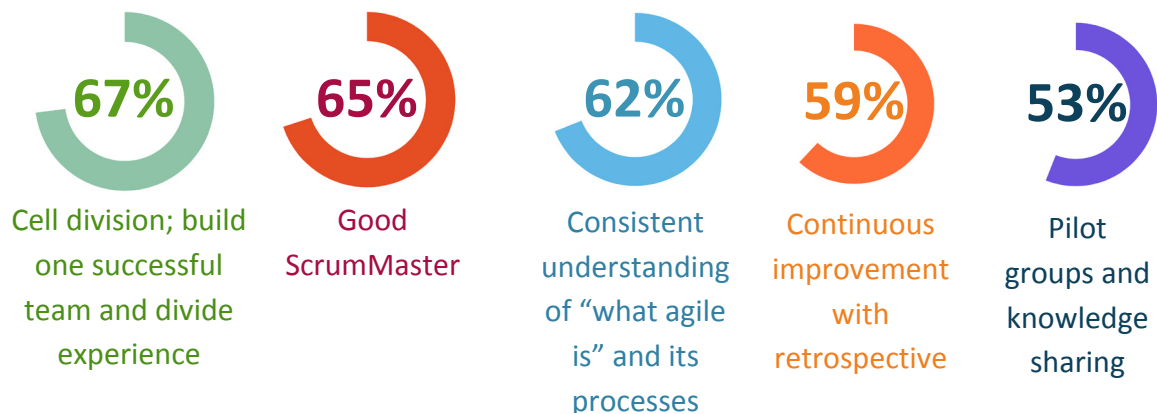
- got support from experienced internal group in Agile (**61%**)
- used common tools (**59%**)
- contracted an agile consultant and/or got a training (**43%**)



TOP 5 TIPS FOR SUCCESS WITH SCALING AGILE

While introducing Agile might not be complicated, when scaling it to organization wide challenges might appear. When asked what has been the most valuable lesson(s) learned in easing their adoption at scale, respondents cited top five tips:

* Respondents were able to make multiple selections.



Percent of 100

67%	Cell division; build one successful team and divide experience
65%	Good ScrumMaster
62%	Consistent understanding of "what agile is" and its processes
59%	Continuous improvement with retrospectives
53%	Pilot groups and knowledge sharing
52%	Teams talking to one another
35%	Grassroots commitment inside and outside engineering
35%	Buy-in from technology and the business
28%	Collaboration / work flow tool
22%	Good Leadership



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PROJECT MANAGEMENT TOOLS

GENERAL TOOL USES & PREFERENCES

Taskboards (**66%**), Bug Trackers (**64%**) and Agile project management tool (**57%**) are among the most used tools in Agile practices for project management.

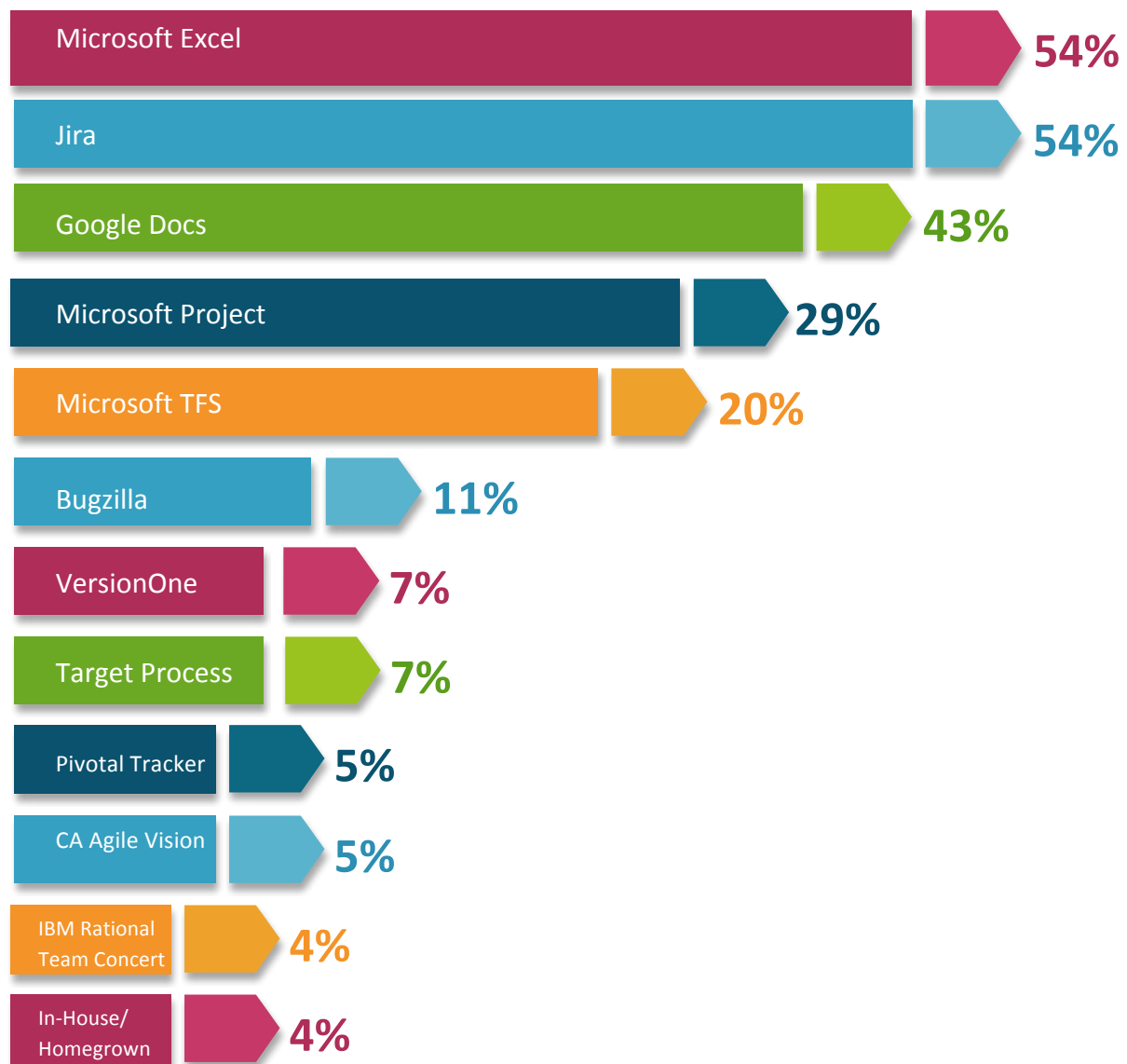
	CURRENT TOOL USAGE	FUTURE PLANS TO USE
Taskboards	66%	4%
Bug trackers	64%	4%
Agile project management tool	57%	7%
Wikis	43%	< 1%
Unit test tool	43%	11%
Automated build tool	37%	4%
Spreadsheets	36%	5%
Story mapping	34%	5%
Continuous integration tool	30%	5%
Requirements management tool	30%	11%
Kanban board	27%	9%
Release management tool	23%	9%
Index cards	23%	4%
Traditional project management tool	23%	5%
Automated acceptance test tool	18%	7%
Refactoring tool	18%	7%
Ideas management tool	14%	5%
PPM tool	5%	7%

USE OF AGILE PROJECT MANAGEMENT TOOLS

More than half of respondents use Microsoft Excel and/or Jira (**54%**) in their Agile projects. Other commonly used tools are Google Docs (**43%**), Microsoft Project and Microsoft TFS (**20%**).

At [VietnamWorks.com](https://vietnamworks.com), we mainly use IceScrum (as Agile product management tool, Kanban), Spiceworks (as Bug Tracker), Product Board (as Agile PPM).

* Respondents were able to make multiple selections.



** HP Quality Center 2, Rational 4, IBM ClearCase 2, LeanKit 2, ThoughtWorks Mingle 2, Xplanner 4 < 1%