



AGILE AT SCALE

REPORT 2019

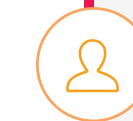
EXECUTIVE SUMMARY

The Agile at Scale Survey for 2018 includes a number of new and exciting insights as well as confirmations for many of the trends identified in last year's survey. Over 5,500 professionals from numerous companies representing multiple industries shared their inputs with us. Cprime's agile transformation and scaling experts analyzed and distilled the responses and added some observation and brief commentary. We are happy to share the results of this survey with you.

Here is a quick breakdown of what we found:



Agile methodology continues to spread far beyond software development as its value is becoming more evident and being proved in various industries and environments.



There is an ongoing disconnect between C-level leadership and the practitioners who are impacted by scaling initiatives. This disconnect is reflected in a difference in goals, expectations, definitions of success, and more.



The importance of executive support and company culture has never been more crucial. Without these factors being in line with agile scaling efforts, the chances of success dwindle quickly.



Expectations around the scaling process are often at odds with reality. Expectation ranging from the duration of the effort to what factors are most likely to lead to success or failure are not being set properly, which can get in the way of success.



The tools that organizations rely on to organize, support, and drive their agile scaling initiatives – a scaling framework, DevOps tools, and lifecycle management tools – are often misunderstood, underutilized, and even under-appreciated.

RESPONDENT DEMOGRAPHICS

We encourage you to dive into the details provided in this report, and consider how your organization measures up in the areas covered.

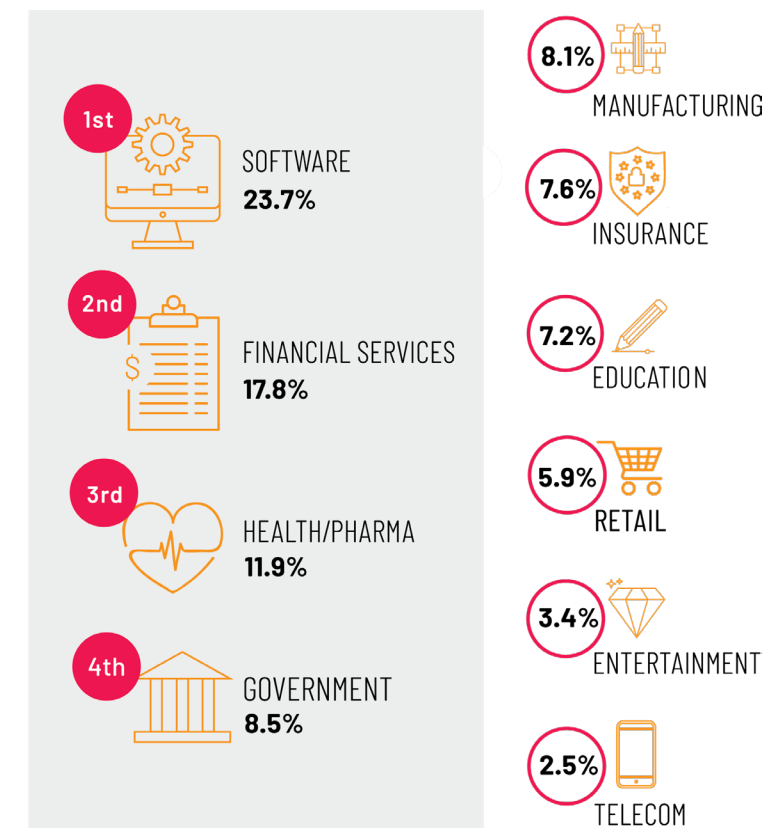
Our team at Cprime welcomes your questions, comments and feedback on the survey, the conclusion drawn or any of the insights shared in this summary.

First, the lay of the land: who do these survey responses speak for? What kinds of companies are represented? Are they large or small? Highly development-oriented, or not? And how do the responses change based on what position the responder holds in the company?

By analyzing demographic information first, you can begin to place yourself into one or more of the situations we'll be describing. As you do, take the opportunity to compare and contrast your own organization's unique position with the trends this report uncovers.

The 5,500 respondents to our survey represent a diverse set of industries including software, education, energy, financial services, healthcare & pharma, insurance, government, manufacturing, media & entertainment, nonprofit, retail, and telecommunications.

INDUSTRY LANDSCAPE OF RESPONDENTS



Agile Scaling – No Longer Software Industry Exclusive

It's not surprising that the largest proportion of our survey responses (23.73%) came from the software industry, since that's obviously where agile processes have the firmest foothold. Software companies have had the longest period in which to mature to the point of scaling agile across their organization.

It's interesting to note, however, that the second and third most common industries among respondents (financial services at 17.8% and healthcare/pharma at 11.86%, respectively) are both highly regulated industries.

Like software, they're also highly competitive, needing to get their products to market faster than, say, the non-profit or energy sectors, each of which only accounted for 1.69% of survey responses.

The overall proportions were similar to last year's results with a few notable exceptions:

- Nearly three times the companies who responded in 2018 were from healthcare and pharma as opposed to the 2017 survey.
- The numbers nearly doubled in government, insurance and education.

It's always good to see the agile methodology continuing to evolve outside the software development realm as companies in all industries find value in it.

Agile Scaling – No Longer Large Organizations Exclusive

As our report is focused specifically on scaling agile, it is important for us to understand the number of people in development organizations and how they are organized in teams, to help us see the correlation between company or team size and how agile needs to scale to remain effective.

As was the case last year, there's still a significant leaning toward development organizations with ten or fewer teams (over 66%) although the number of respondents with more than five teams grew by nearly 25% since 2017.

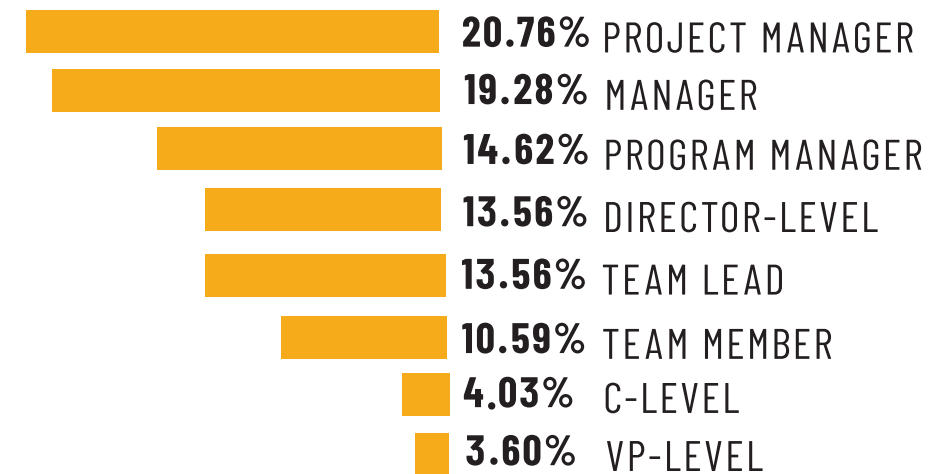
Our survey also revealed that it's the mid-size development organizations, including 50-999 practitioners, where the impetus for scaling peaks. For these organizations it has become mission-critical to scale and at a faster rate and with increased efficiency as compared with larger enterprise organizations.

Zooming out to the full development organization, we find that over three-quarters of respondents belong to organizations of less than 500 people and over a quarter are one of 50 or fewer. While scaling agile is vital in the largest companies, it's equally (if not more) important for smaller development organizations, especially if they're looking to level the playing field and compete with larger companies with deeper pockets.

Agile Scaling – No Longer Practitioners Exclusive

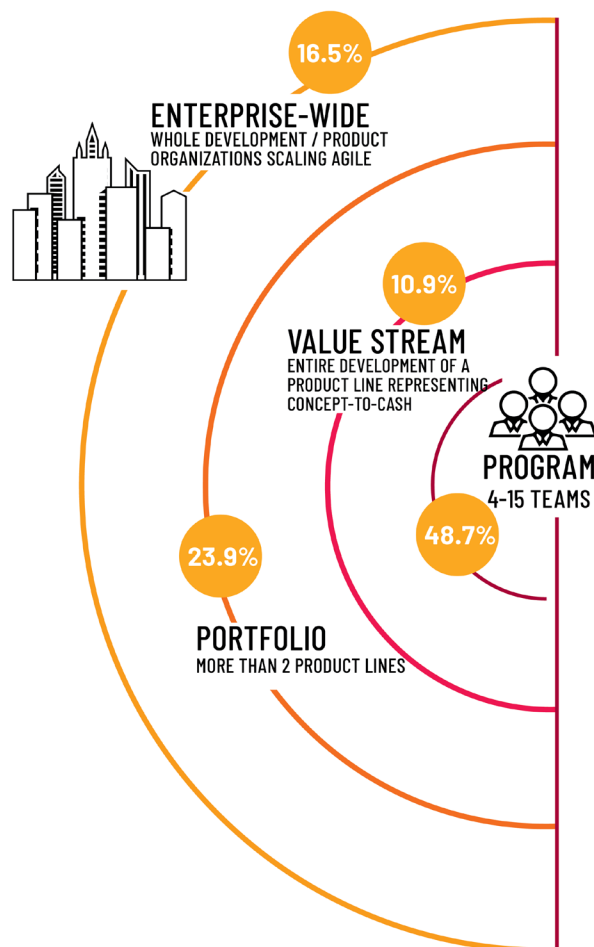
The title with which respondents associate with is one of the key data points in both this year's and last year's survey. The reason is that it highlights some key disconnects across different levels of the company. We will go into more detail as we discuss other survey responses, but the most important point to note at this point is this: People in the C-suite and practitioners in the trenches have very different expectations, measures for success, and levels of understanding when it comes to scaling agile. This results in miscommunication, inefficient procedures, lack of support, and much more that can hinder a successful scaling or implementation.

TITLES OF RESPONDENTS



THE PAST, PRESENT AND FUTURE OF AGILE AT SCALE

THE ORGANIZATIONAL REACH OF SCALED AGILE INITIATIVES



In this section, we're going to break down where our survey respondents are in the scaling process, and what their general level of understanding is when it comes to what scaling agile actually means to their organization. We'll also look into the various scaling frameworks being used, and how they chose what they're using.

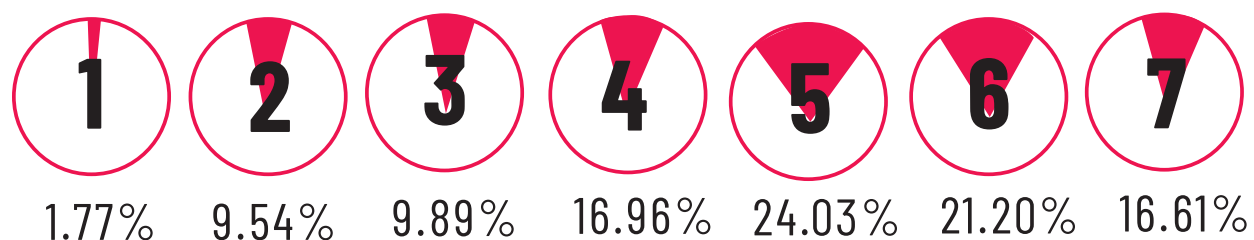
This year's responses on what level of the organization has scaled agile were right in line with last year's. Nearly half the respondents have scaled agile to the Program level (with 4-15 teams involved), and another nearly 25% have scaled to the Portfolio level (with more than two product lines incorporated).

The Multiple Facets of 'Scaling'

A subjective analysis allowed respondents to judge their own understanding of what scaling agile means to their organization. Given the fact that nearly 75%

of the organizations claim to have scaled to at least the portfolio level (see above) we would like to have seen at least that many of the respondents labeling themselves in the 5-7 range of basic understanding. Unfortunately, more than a third of these professionals chose numbers 1-4, indicating little if any real understanding of the subject.

SELF-RATED UNDERSTANDING OF SCALING AGILE

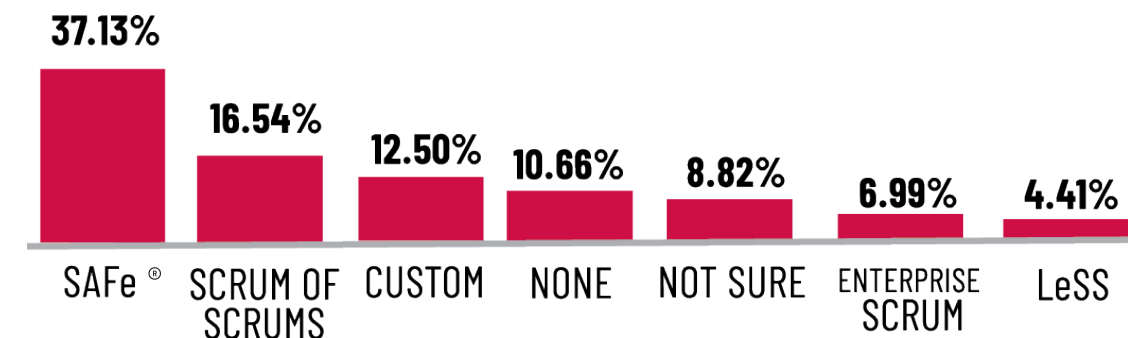


We received multiple responses from both C-suite executives as well as practitioners. Their responses to this question indicate this disconnect spans the range of the organization's decision making hierarchy. Digging deeper, this appears to be a question of prioritization as opposed to a question of budget, headcount, or other resource management concerns. If scaling agile is not considered a priority when weighed against other business initiatives, it remains very challenging.

This, too, falls in line with last year's results, and shows that there is still a significant amount of anguish around understanding what scaling agile entails and why it's important, even among organizations that are actively pursuing scaling goals.

Frameworks of Choice

SCALING FRAMEWORKS UTILIZED AMONG RESPONDENTS



Over 37% of these organizations are using SAFe, and nearly 17% are relying on Scrum of Scrums. What is interesting to note, however, is that "Scrum of Scrums" was, by far, the most popular response by those who identified themselves as C-suite executives. As we can note throughout much of this survey, there appears to be a disconnect between executive decision makers and agile delivery team members (most of whom named SAFe as their framework of choice.)

This issue can hamper scaling efforts by creating inefficiencies and impacting the prioritization of scaling initiatives throughout the company. For example, when no scaling framework is agreed-upon by leadership and team members, value streams can never be effectively defined, which strips away a significant benefit of effective scaling.

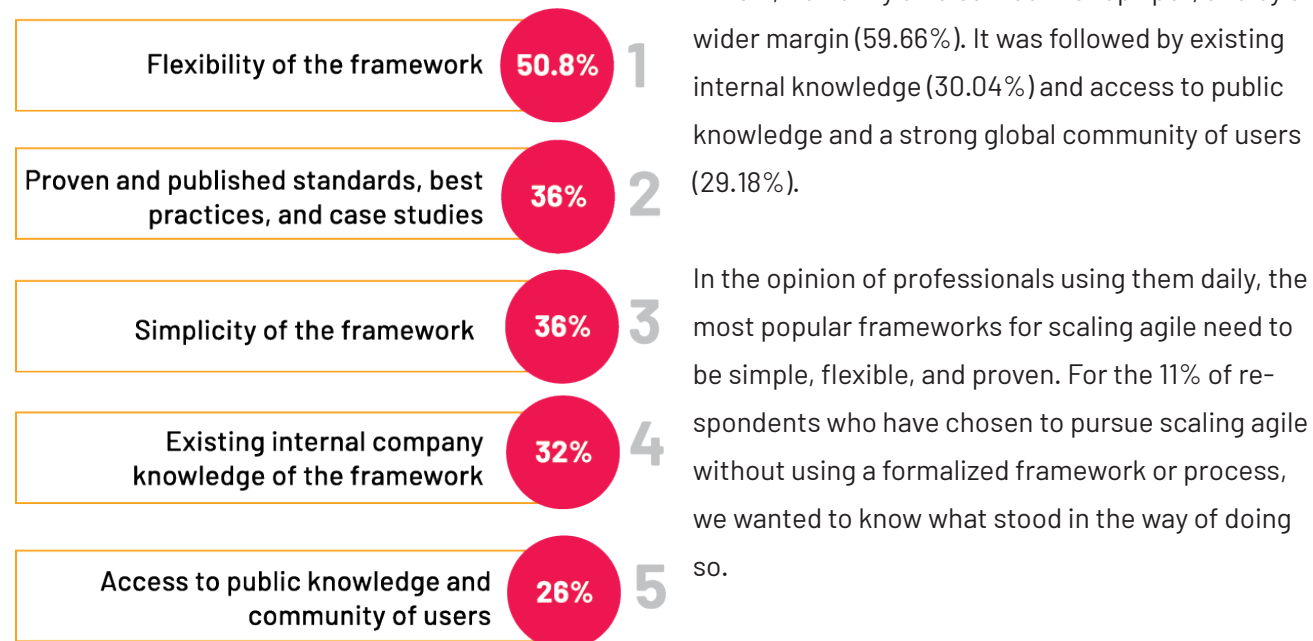
EXPECTATIONS VS. REALITY

It was also interesting to note that nearly 11% of respondents were not using any established framework. While not impossible, this approach makes the scaling journey very difficult and far more likely to be unsuccessful and abandoned.

Criteria for Framework Selection

This year, the top three factors respondents chose when selecting their approach and framework to scaling agile were flexibility of the framework (50.8%), proven and published industry standards, best practices, and case studies (36%), and simplicity of the framework (36%). A close follow-up response was existing internal company knowledge of the framework (32%)

FACTORS IN SELECTION OF SCALING FRAMEWORK



In 2017, flexibility also earned the top spot, and by a wider margin (59.66%). It was followed by existing internal knowledge (30.04%) and access to public knowledge and a strong global community of users (29.18%).

In the opinion of professionals using them daily, the most popular frameworks for scaling agile need to be simple, flexible, and proven. For the 11% of respondents who have chosen to pursue scaling agile without using a formalized framework or process, we wanted to know what stood in the way of doing so.

As it was in 2017, lack of general understanding topped the list by a wide margin with nearly 44% indicating that was why they had not yet chosen a framework. More than half of the C-level respondents chose this reason. Other in-flight initiatives came in at second place with the other possibilities (including budget and headcount) accounting for less than a third of responses combined.

We included several questions designed to compare expectations with reality when it comes to scaling agile. This is important because companies that undertake a scaling initiative almost inevitably realize how large and potentially complex of a process it can be. That's where it often pays to rely on professional guidance from consultants and trainers who have led successful initiatives in the past and understand what's likely to occur throughout the process.

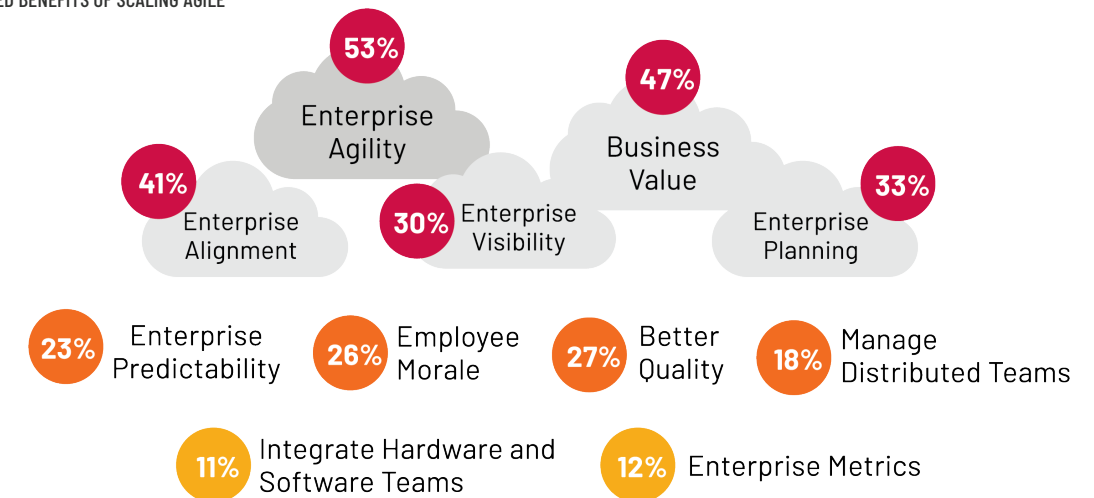
Expected Benefits

Responses to the question of what are the top three benefits you want in scaling agile were spread more evenly than anticipated, but they highlight that enterprise agility, alignment, and visibility are key anticipated benefits, along with business value. Another disconnect appears here between C-suite leadership and respondents at the team level: The C-suite is more interested in visibility while team members give more emphasis to business value.

In any case, all the top responses reveal every company's need to go to market faster with the right products at the right budget. And, they correctly believe scaling agile can accomplish that.

For the other side of the coin, we now look at what these organizations (most of which have made significant progress in their scaling initiatives) can actually point to as benefits of scaling using their chosen framework.

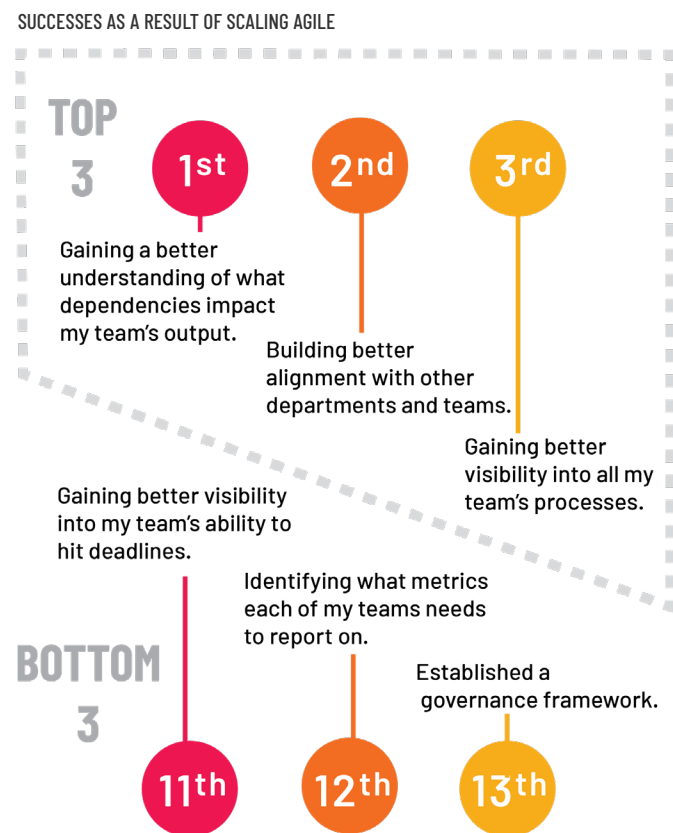
DESIRED BENEFITS OF SCALING AGILE



Attained Benefits

It's encouraging to see that, in this case, reality matches up well with expectations: Enterprise visibility took the top spot (perhaps reflecting how leadership's desires are often prioritized over those of teams), closely followed by planning, business value, alignment, and agility. So, in most cases, these companies who have managed to scale agile to some extent are indeed reaping the benefits they were hoping for, including greater speed to market and transparency throughout the process.

Organizational Scaling Success



Diving deeper into the success they've enjoyed so far, we wanted to see what benefits are being attributed to the framework respondents chose to use. Once again, responses ran the gamut.

Among our C-level respondents, governance was at the top of the list, along with predictability and visibility.

Now that we have an idea what benefits were both expected and achieved by these companies, it's also interesting to look at how they went about defining success.

Throughput metrics won by a small margin, coming in ahead of metrics related to business value and lead/cycle time. The

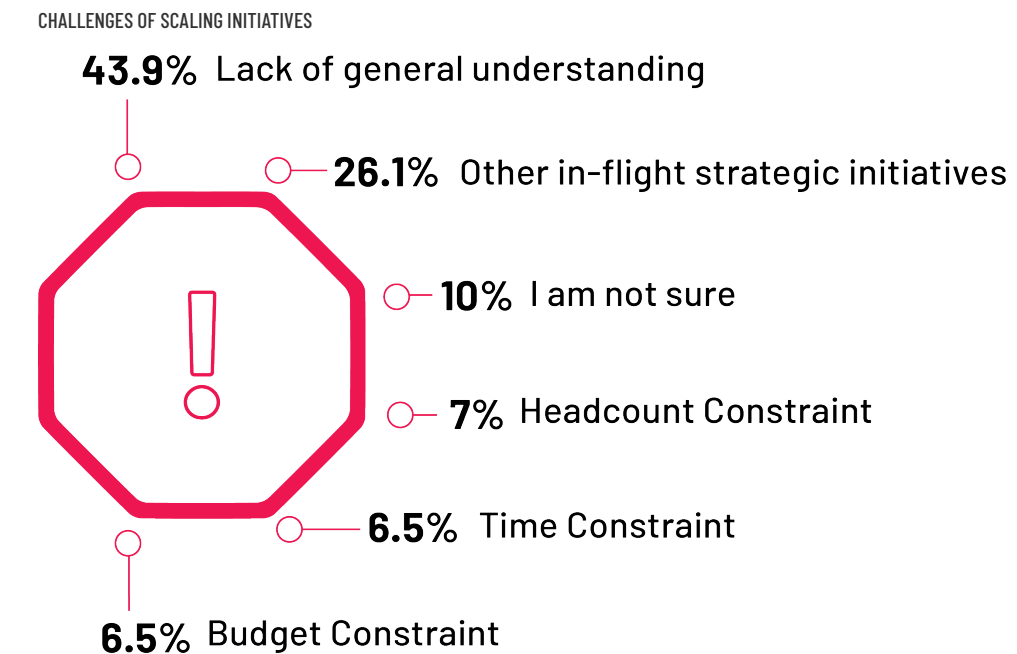
lowest-rated (and presumably least used) metrics had to do with visibility. This is another obvious disconnect in that visibility ranked so highly in the previous questions, especially among leadership. This

tells us that how organizations measure and define success in their scaling efforts is regrettably not indicative of what they are actually hoping to achieve with those efforts.

Organizational Scaling Challenges

Finally, we asked respondents to look at what has actually stood in the way of their scaling initiatives. Right in line with the ranking described above, the top three roadblocks included: company culture (57.25%), lack of experience with agile (35.11%), and lack of executive support (31.3%).

Without adequate support from the executive level, there will be no widespread acceptance via the internal culture. And, without either, scaling efforts are unlikely to succeed.



TIMEFRAME

The following two questions were included in the survey primarily because we've found that a lot of organizations don't realize how long a successful scaling initiative can take and many more are unclear on when they should move forward.

Learn to Walk Before You Run

Responses on length of time organizations had been using or implementing agile development practices before scaling were right in line with last year's results: nearly a third of respondents (32.51%) used agile for 1-3 years before scaling. A smaller group (21.55%) had as much as five years' experience with agile before pursuing a scaling initiative. It was much rarer to find organizations scaling within one year of beginning to use agile or waiting more than five years to do so.



Reasonably, we would expect companies in the tech industry, and especially software development, to be further along on average than their counterparts in industries that historically move down the path of innovation at a slower pace (such as education, energy, and insurance.)

Taking the First Steps

Also in line with last year's figures, the largest percentage of respondents (46.15%) were less than a year into their scaling journey, and the numbers trailed off from there. It's interesting to note that some respondents have been on that journey for more than five years!

Correlating these with previous responses regarding what is important to scaling success and what stands in its way, it would be fascinating to follow up with those companies that have been at it for years and determine what level of executive and culture support they enjoyed, whether or not they took advantage of a formal scaling framework from the outset, or got the help of trainers and consultants early on.

DEVOPS TOOLS AND INITIATIVES

Facilitating optimal collaboration between development and operations has long been recognized as key to agile success, especially as scaling begins. DevOps tools and initiatives are, therefore, an important topic for discussion no matter in which stage of scaling agile an organization finds itself.

The following questions helped us trace the correlations between DevOps activity and scaling success.

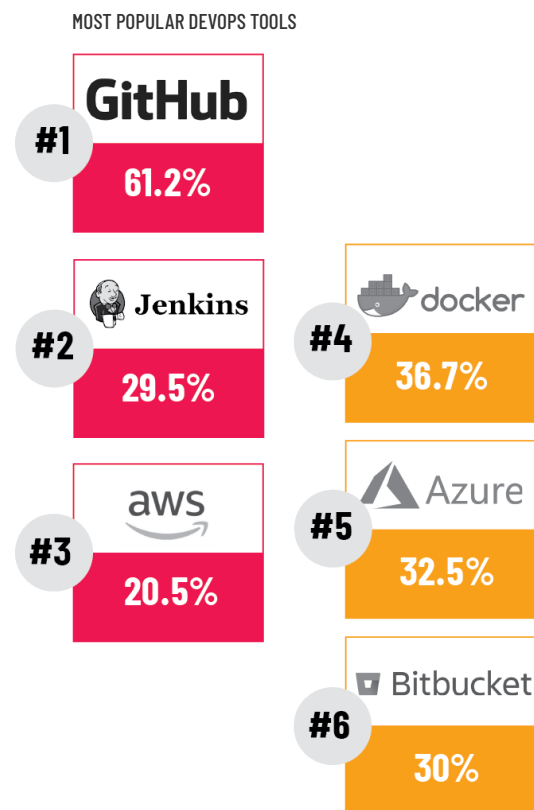
Agile & DevOps Integration on the Rise

As far as how mature organizations were integrating their scaling agile efforts with DevOps initiatives and other technical automation projects and how important DevOps was ranked, the responses to these questions are similar to last year's, although they do show a slight up-tick in the number of organizations that are officially "in flight". It shows that the number of companies that recognize the importance of integrating Agile and DevOps continues to rise, and they are acting on that knowledge.

Still Some Ways to Go

Unfortunately, more than a third of respondents either haven't started or haven't even considered doing so, and just 6.77% consider their agile and DevOps practices to be "well integrated".

Not surprisingly, the top three DevOps tools listed to help organizations automate technical practices together with their agile scaling efforts, are GitHub (61.58%), Jenkins (56.54%), and AWS (45.99%). It was eye-opening, however, to note how many organizations are currently relying on two or more tools to integrate DevOps.



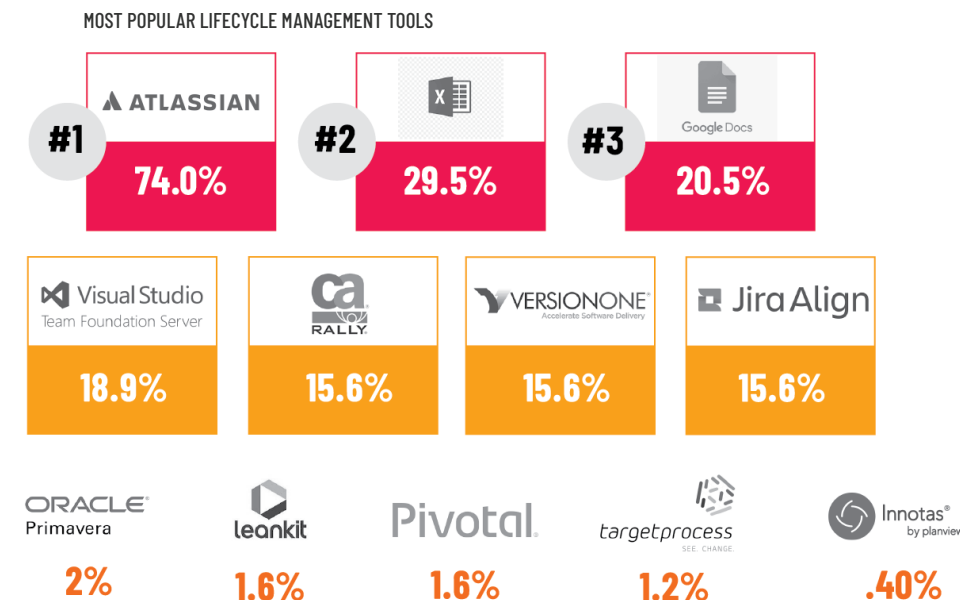
Lifecycle Management Tools and Initiatives

We wanted to break out our questions on lifecycle management tools and initiatives from the other similar questions because these tools tend to be among the most integral to a successful scaling effort. There have been some interesting changes in this list since last year, and some other responses that stayed predictably the same.

EDITOR'S NOTE: Cprime is a longtime Atlassian Partner and one of the nation's largest providers of deployment and education on Atlassian tools, so survey responses may be impacted by the tendencies of our audience. These results may not be indicative of the wider market share figures.

Jira & Confluence Are Way Ahead of the Pack

The most popular lifecycle management tools, by far (74.02%), are Jira and Confluence, part of the Atlassian suite. They led the pack last year as well, though not by quite so high a margin. This year, Atlassian was followed by spreadsheets (29.53%), then Google Docs (20.47%) – likely also a spreadsheet-based method. A notable change from last year was a drop in how many organizations were relying on Microsoft's Team Foundation solutions.



As was the case last year, organizations relied on separate tools rather than full stack solutions to the tune of three to one.

The high dependency on spreadsheets is both concerning and puzzling. In comparison to specialized solutions (like Jira), spreadsheets are notoriously inefficient and tend to slow scaling efforts dramatically. Yet, their use is incredibly persistent, likely highlighting the power of “how we’ve always done it”. Likewise, the dependence on separate tools rather than full stack solutions causes unnecessary friction in what is already a complex process with many moving parts. Companies can dramatically improve their speed and success rates when approaching scaling initiatives using specialized full-stack lifecycle management tools designed for that purpose.

As noted above, industries that historically approach innovation more slowly and cautiously are likely those that are still overly dependent on spreadsheets and/or a patchwork collection of tools. Those more likely to be ahead of the curve, on the other hand, tend to lean more toward full stack solutions that can be integrated fully into their workflow.

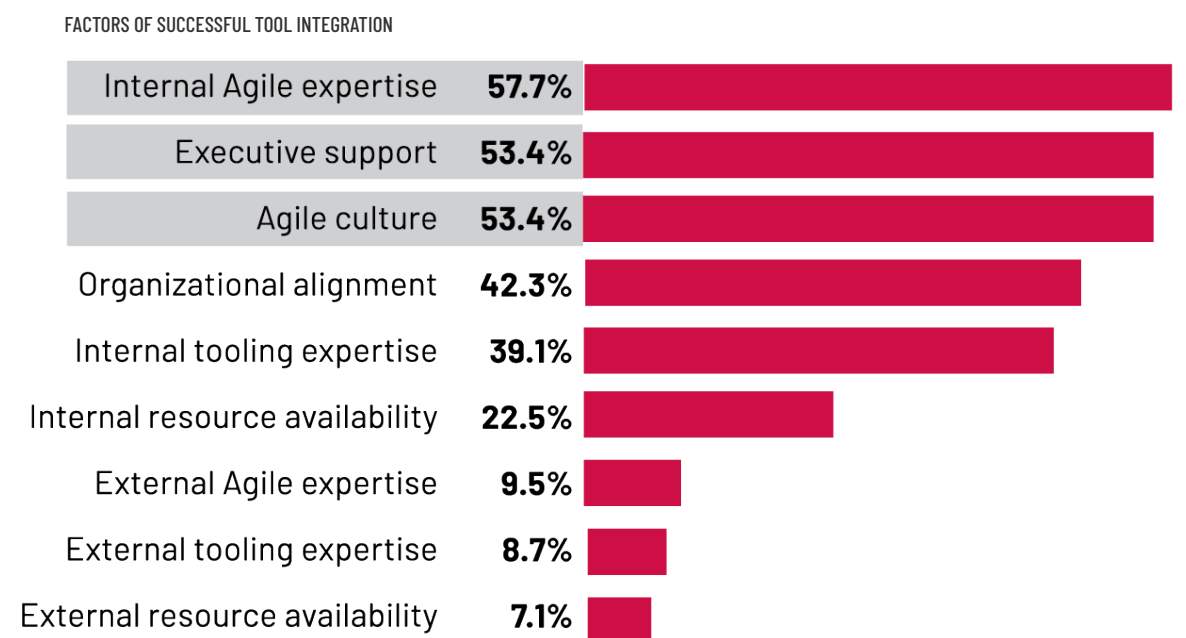
Are Tools Providing the Expected Benefits?

With this question, we wanted to determine if these organizations were gleaning the benefits they were hoping for from these tools. Unfortunately, the answer from most respondents is, “no”.

Whereas respondents noted above that agility, alignment, visibility (for the purpose of predictability), and business value were all benefits they were hoping to achieve through scaling agile. However, in working with lifecycle management tools to achieve those goals, the top three actual benefits they described were: increased ability to manage distributed teams, better visibility into team reports, and better visibility into team processes. We know that, in the case of specialized tools designed to aid with scaling agile, the issue is not that the tools are unable to provide the desired benefits. Rather, this discrepancy seems to indicate any of the following: teams are failing to get the most of their tools; they may not be trained adequately to do so across the organization; or there’s a discrepancy between the decision makers and actual team contributors.

Factors Leading to Tool Integration Success

Interestingly, the number one factor our respondents ranked for what factors contributed to successfully integrating their agile processes with their lifecycle management tools was internal agile expertise (57.71%). This was followed, predictably, by executive/stakeholder support and agile culture. Significantly further down the list, however, was internal tooling expertise.



At first blush, it seems to indicate that teams that are more experienced in agile are more likely to successfully integrate agile processes with lifecycle management tools. This makes sense until you compare the concept with our earlier question regarding general understanding of what scaling agile is and why it’s important. Those responses indicated that general knowledge is lacking in many organizations, especially at the executive level. So, the respondents’ ranking may be skewed by the fact that they don’t know what they don’t know.

The fact that executive support and culture once again rank in the top three just confirms what has already been established as to the importance of those factors.

METHODOLOGY

On the other side of the coin, the highest-ranked factor our respondents listed in a lack of integration was organizational alignment, followed by internal resource availability and, again, agile culture.

These responses seem to indicate that more scaling efforts would be successful — and/or would be completed faster or more efficiently — if the entire organization stood behind the effort. Once again, this reflects back on the unfortunate disconnect we see between leadership and practitioners at the team level, as well as the pervasive impact of company culture.

Cprime conducted “The State of Scaling Agile 2018” survey from May–October 2018 by email using the SurveyMonkey platform. We surveyed more than 5,500 individuals with a professed interest in Agile practices. Our goal was to get better insight into how companies look at scaling their Agile development methods and practices across the enterprise. Respondents from a wide variety of industries represented every level of management and company participation, from C-level to team member. We asked respondents to comment on their Agile framework and tools, the outcomes they seek from scaling Agile as well as outcomes they have achieved, what they consider to be the obstacles to scaling Agile in their organization, the pace of their progress, and their intentions about integrating DevOps with their Agile practice.