



DEVOPS STUDY:

HOW IT OPS CAN THRIVE IN A DEVOPS WORLD

MOVING BEYOND 'NOOPS' FUD

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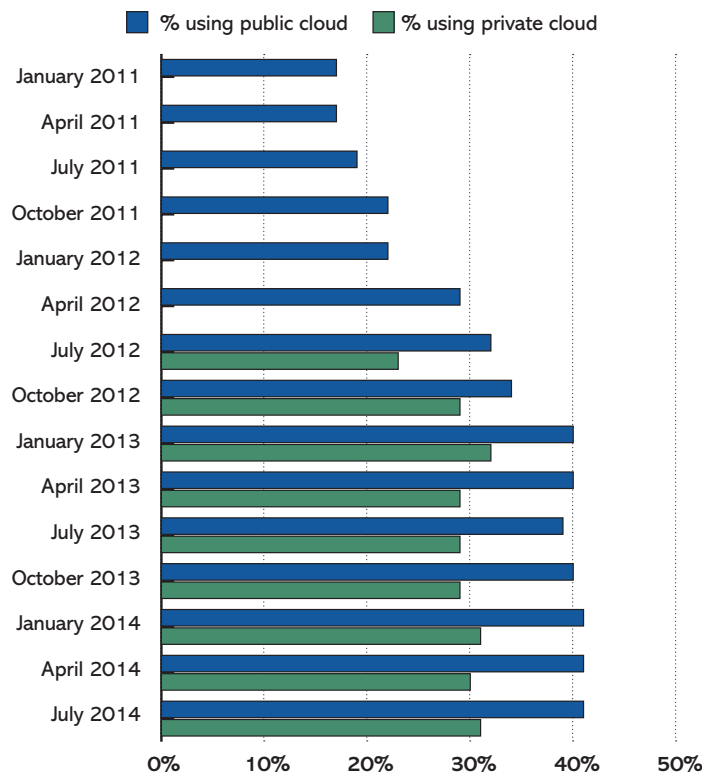
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PROBLEM STATEMENT

HOW MUCH, IF AT ALL, DOES CENTRAL IT NEED TO CHANGE IN RESPONSE TO DEVOPS?

In recent years, the role of central IT has been in question. 'Subversive' elements in development and lines of business have sought to circumvent what they perceive as the long approval and deployment cycles that come with procuring IT resources through central IT. Meanwhile, companies are slowly but surely adding public cloud services to their portfolio as *our ChangeWave survey* has been showing for over 15 quarters. And at the same time, we see a rise in private cloud use.

FIGURE 1: CORPORATE MARKET: PUBLIC & PRIVATE CLOUD USAGE



Source: ChangeWave Corporate Cloud Computing Trends 2014

Coupled with this general movement of applications out of central IT's control, the fecundity of raw infrastructure at public IaaS providers is calling into question the efficacy of traditional IT service management (ITSM) and other tools used by central IT. We still use mainframes and green-screens, of course, so the ice isn't melting at too fast a pace, but understanding how ITSM expectations and sourcing methods are changing is vital for ITSM vendors. This research project focuses on developers and operators who are part of one aspect of all this cloud transformation: DevOps.

The major question we explore is: How does centralized IT need to change the way it does business in order to meet the demands of DevOps-minded end users and teams? In answering this question, we also explore the current state of 'mainstream DevOps' practitioners to provide context for this discussion.

METHODOLOGY & DEMOGRAPHICS

This survey was conducted via the Web in the third quarter of 2014 and involved 237 respondents, all US-based. Companies surveyed varied by size, from 500 employees to 50,000+ employees. The verticals represented varied as well, although 22% identified as being in 'high technology.' The following charts cover the demographics of the study.

FIGURE 2: STUDY ORGANIZATIONS BY SIZE

QS1 - How many people are employed, full-time, in your entire organization?

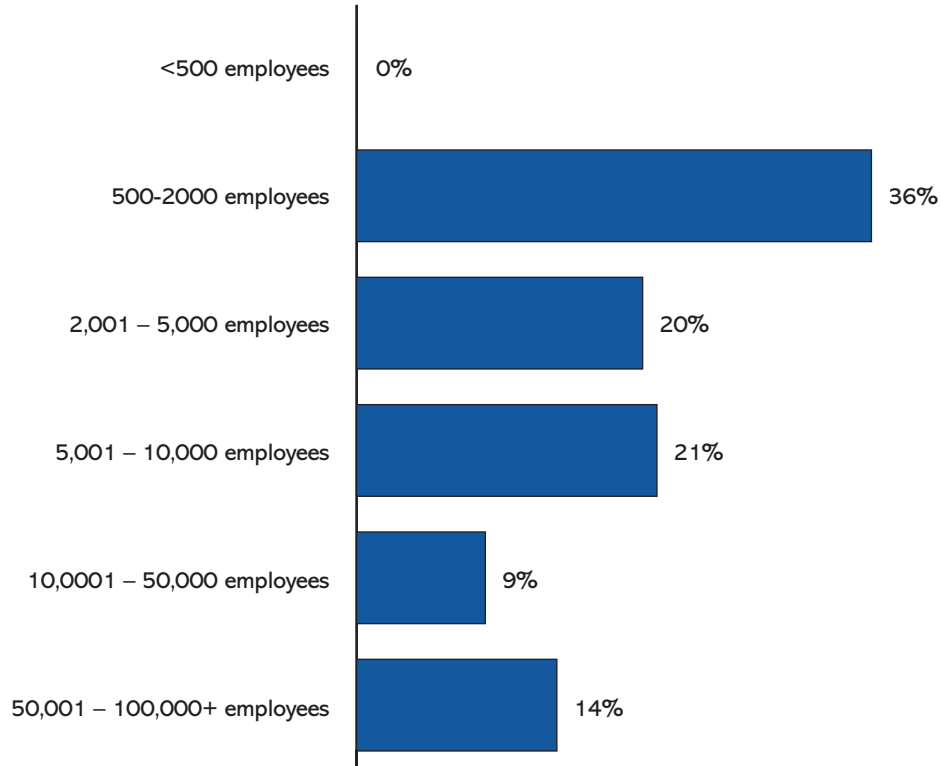
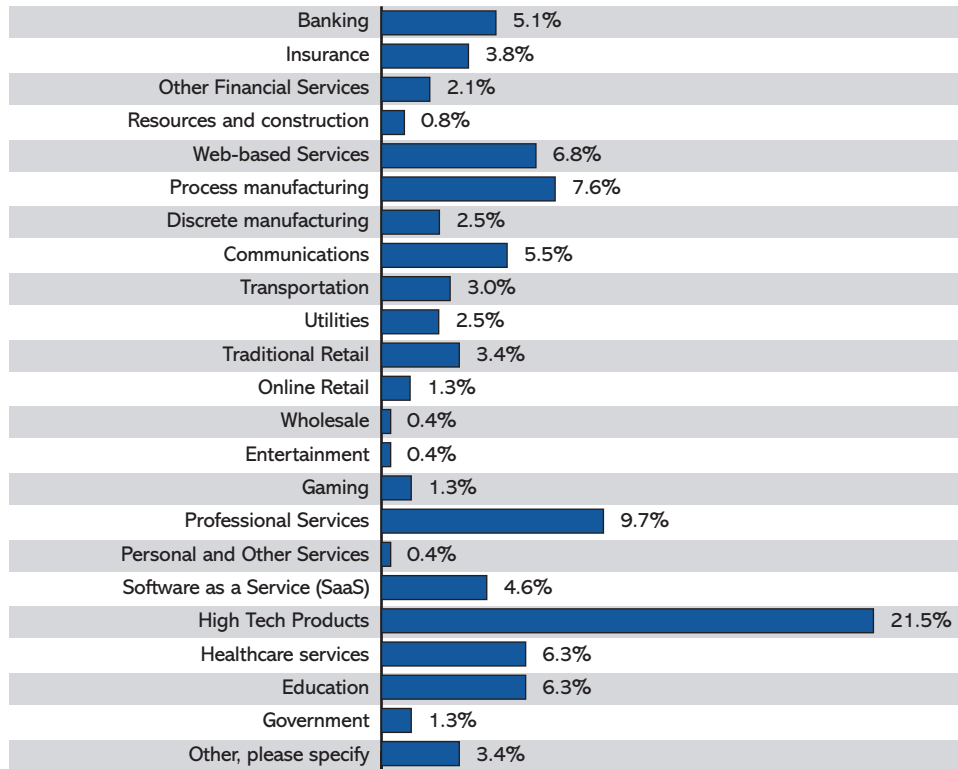


FIGURE 3: STUDY ORGANIZATIONS BY INDUSTRY

QS2 - Please indicate what business or industry your company is in.



We targeted IT staff from both development and operations, with many of them being direct purchasers and decision-makers, or at the very least influential in the buying process. We skewed toward operations managers to get the operations view, and also the views of key (budget) decision-makers.

FIGURE 4: STUDY RESPONDENTS BY ROLE

QS3 - Which job title most closely corresponds to your job?

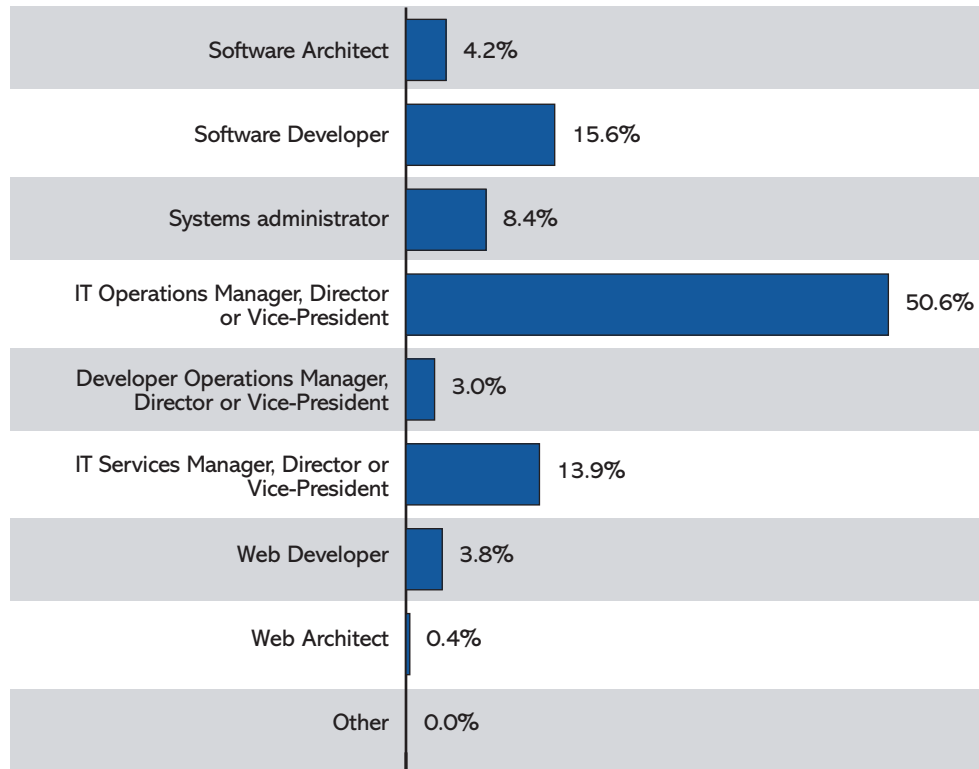
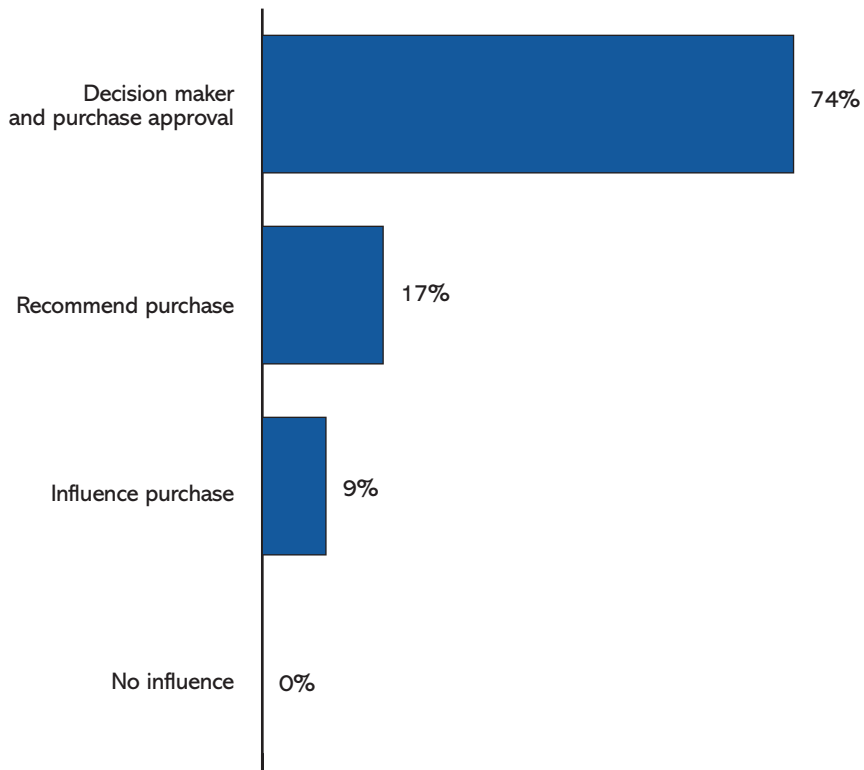


FIGURE 5: STUDY RESPONDENTS BY PURCHASING INFLUENCE

QS4 - Please indicate your level of purchase influence or purchase authority for software development tools, whether they are delivered as a service or as software.



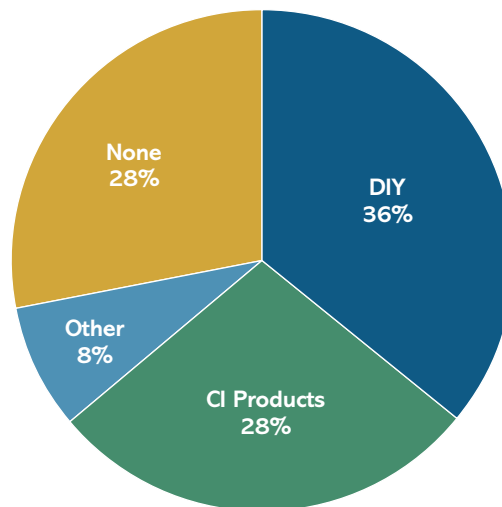
As with all our DevOps studies, we try to screen for respondents who are DevOps practitioners or DevOps-minded. While there is a concentration of high tech companies in the demographics, we feel that the vertical spread helps represent the 'mainstream' DevOps market rather than the 'unicorns' of early adopters like Netflix, Facebook and others that have developed and continue to evolve the idea of DevOps.

We make reference to our first DevOps study, conducted in Q1 of 2014. This study included 201 respondents, all in the US. The demographics were similar, but with much fewer high tech companies. The first study was conducted by phone, while the current study was done via the Web. Numbers are rounded unless otherwise noted.

DEVOPS – WHAT IS IT?

In our 2014 Q1 mainstream DevOps study, we created a baseline of the market that indicated it was still in its early stages. While there is good mainstream interest in and desire for DevOps – as our two DevOps studies this year show – DevOps hopefuls have much maturing still ahead of them before they can match the ideal ‘DevOps state.’ For example, in our earlier study, we found that just 28% of respondents used third-party continuous deployment tools, and a full 28% used nothing! The fact that 36% of users surveyed built their own continuous integration framework illustrates enterprises’ tendency to employ in-house tools and processes as well, often started from an open-source project but evolving in a ‘Frankenstein’s monster’ style into complex, grotesque constructs.

FIGURE 6: CURRENT USAGE OF CI TOOLS



Source: 2014 Q1 DevOps Study, 451 Research

In our latest study, we revisited this question and found that 38% of respondents were using build and continuous integration tools, which is an equally dismal response. One of the easiest, most mature processes and tools to adopt in DevOps is continuous integration: these technologies pre-date DevOps, and we would expect them to be widely used in IT shops today.

This and other issues lead us to the following theory on the mainstream DevOps market: there is a good-enough understanding of what DevOps is, as well as commensurate demand, but the market is immature and, thus, far from ‘saturated.’ This makes DevOps seem like a good area for growth – in short, a technology that the market wants, but does not yet have.

STUDY ANALYSIS

This section covers several theories we tested via the questions we posed in this study. The evaluation of responses to these questions informed our analysis of the theories and the conclusions presented above.

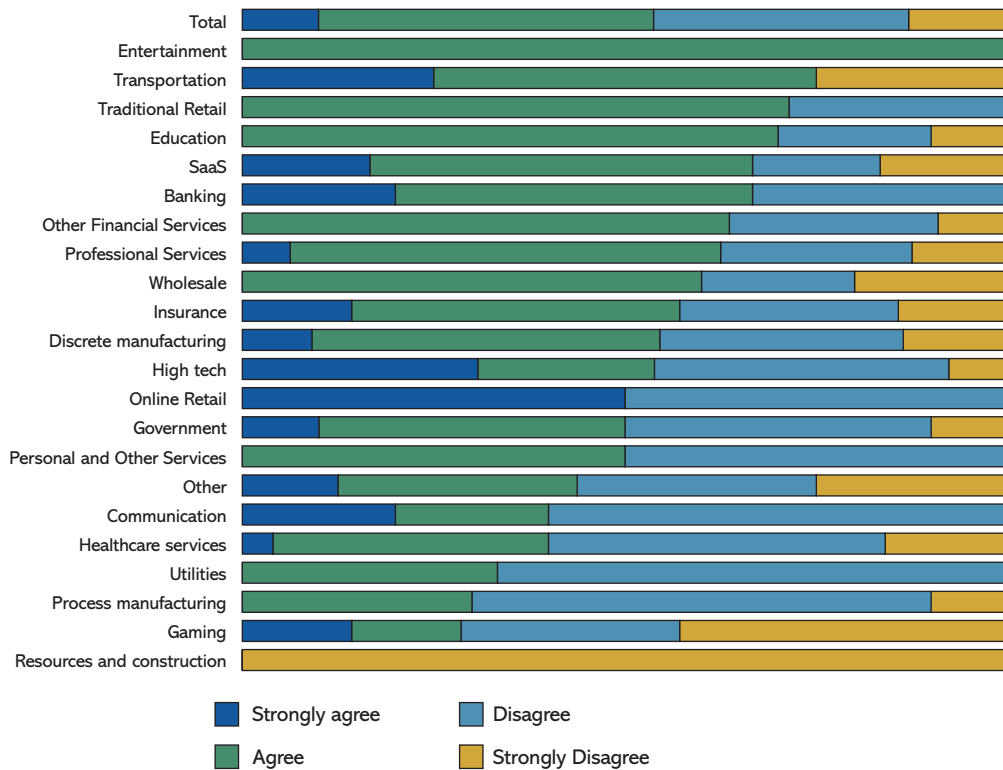
IS THERE DEMAND FOR DEVOPS – ‘IS DEVOPS A THING?’

Yes, there is significant demand for DevOps, where DevOps is understood to mean reducing release cycles – 63% of respondents agreed that their company struggles to reduce release cycles, and this did not vary significantly across the roles of development, operations and management.

In studying the market, we use a crude but effective method for testing interest in DevOps: how the core value proposition of speeding up release cycles appeals to respondents. In our opinion, this is just part of the overall value that DevOps provides (increasing the amount and quality of user feedback into the product cycle is another key component), but it helpfully narrows the focus to provide one way of looking at and asking about DevOps.

In our 2014 Q1 study, we found that there was demand for the fundamental benefit of DevOps – speeding up deployments to production – as Figure 7 illustrates.

FIGURE 7: DEMAND FOR FASTER SOFTWARE DEPLOYMENT

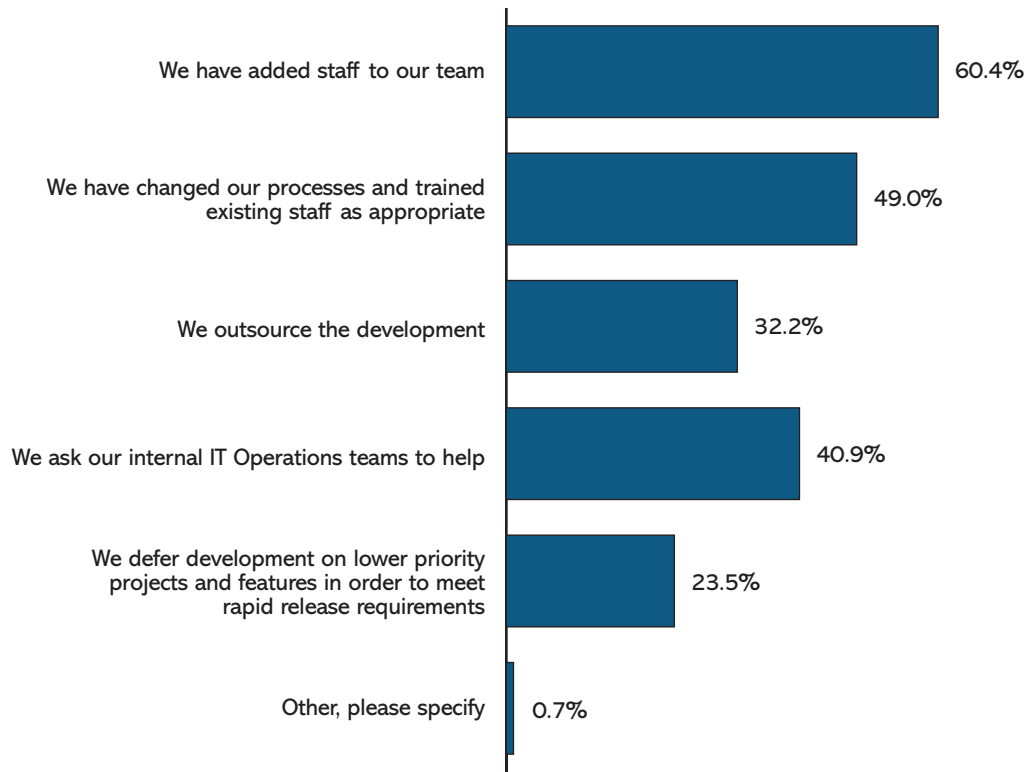


Source: 2014 Q1 DevOps survey, 451 Research

While about half of survey respondents in our original study said they were “fine” with their software release frequency, in this iteration the desire was more dramatic. We asked “Does your company struggle with increased demands for shorter release cycles, with business managers expecting weekly, daily or even hourly releases and updates?” – and 63% of respondents said ‘Yes.’ We further asked what companies were doing to respond to this demand to speed up. Companies are hiring staff and changing processes – two moves that show a commitment in budget and company culture to change; it’s not just window dressing:

FIGURE 8: CURRENT PRACTICES FOR MEETING RELEASE DEMANDS

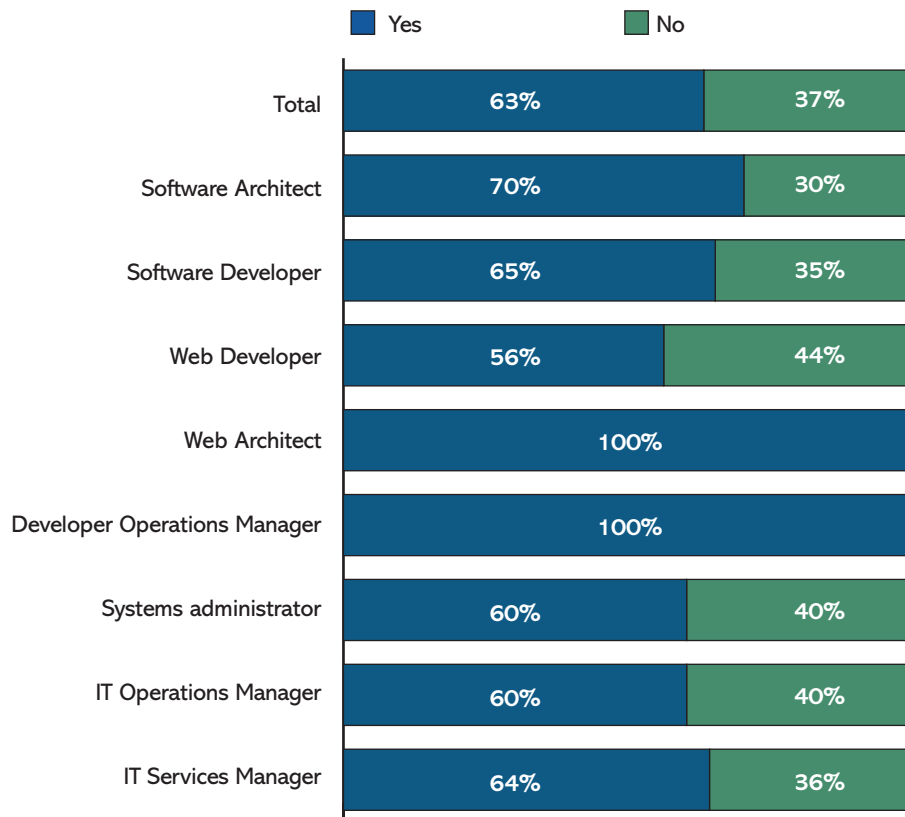
QM3a - How are you addressing demand now?



It would be easy to think that it's just developers who say their company needs to reduce release cycles – but broken out by role, this demand is clearly universal.

FIGURE 9: RELEASE DEMANDS BY RESPONDENT ROLE

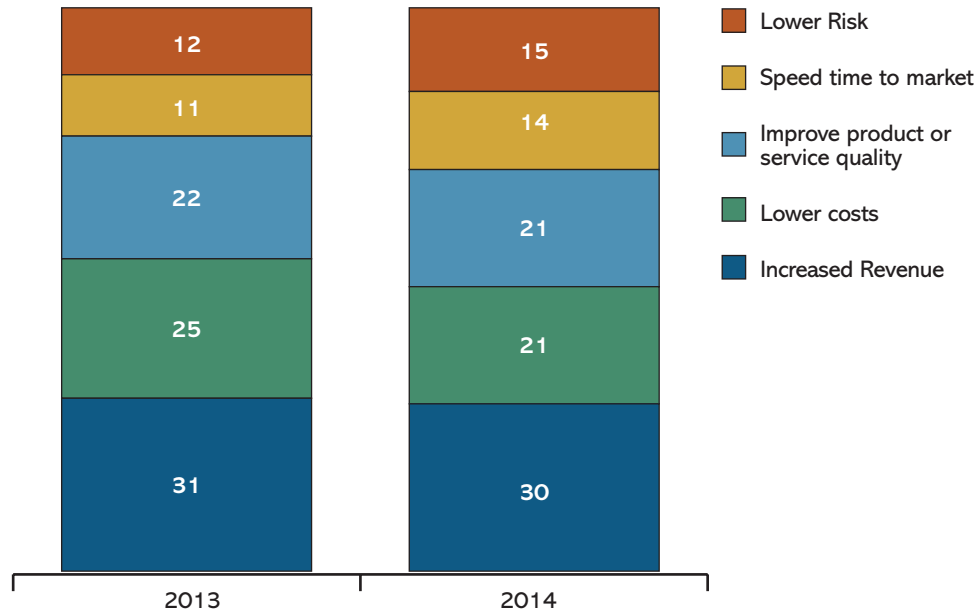
QM3 cross-tabbed to QS3 – Does your company struggle with increased demands for shorter release cycles, with business managers expecting weekly, daily or even hourly releases and updates?



Clearly, the operators know that they need to speed up as well. They are likely compelled by their personal experience with public cloud tools and when exposed to what we called “shadow-y IT” – the use of out-of-policy IT, like Dropbox or Trello, that is all but officially sanctioned by official IT policy. Central IT has had to look the other way for years now, and is often eager to deliver those, or comparable, services officially.

Why do companies want to reduce release cycles? We believe it's mainly because they are slowly but surely shifting how they view IT. If we look at other 451 research, we see a consistent business demand to shift IT spending to support growth and innovation (leading to competitive advantage) – not just a focus on cost savings and keeping the lights on, as Figure 10 illustrates.

FIGURE 10: TOP OVERALL BUSINESS GOALS



Source: Various custom 451 Research studies

This data and other qualitative work (such as talking with actual DevOps practitioners and tools vendors) leads us to believe that the value proposition of DevOps is valuable and in-demand in the marketplace. DevOps is, indeed, 'a thing.'

WHAT DO DEVOPS GROUPS LOOK LIKE?

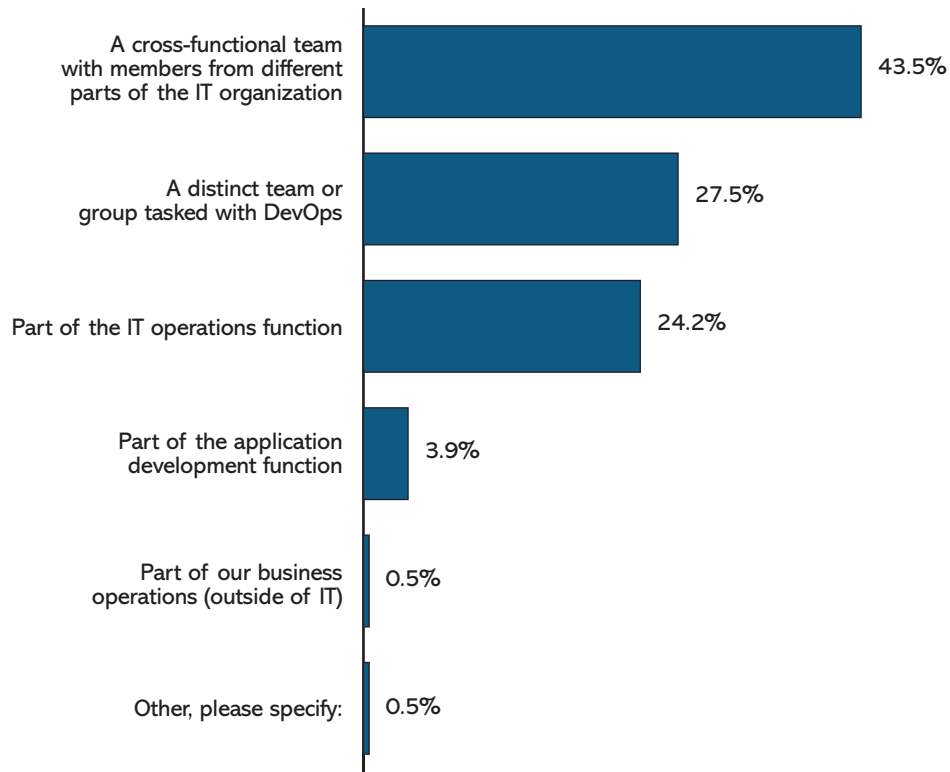
DevOps teams are by definition cross-functional, with good representation not only from developers and operators, but also from lines of business, and some early hints of top-down corporate involvement. We theorize that operations actually has a high level of influence and control over evolving DevOps processes, as opposed to DevOps being driven and defined purely by development.

In the current study, to profile the way that DevOps is manifesting itself, we asked several questions about how DevOps roles are playing out in enterprises. First, we asked all respondents "Is there a specific group or team within your company that is responsible for agile IT processes, whereby IT operations and developers work together – or as it is most commonly known, DevOps?" We wanted to find out if there were assigned teams that were responsible for establishing DevOps processes and practices. We are continually surprised by how far along study respondents are in this process: a full 87% said 'yes!'

We also asked the respondents to characterize this team to find out how the team is organized.

FIGURE 11: ORGANIZATION OF DEVOPS TEAMS

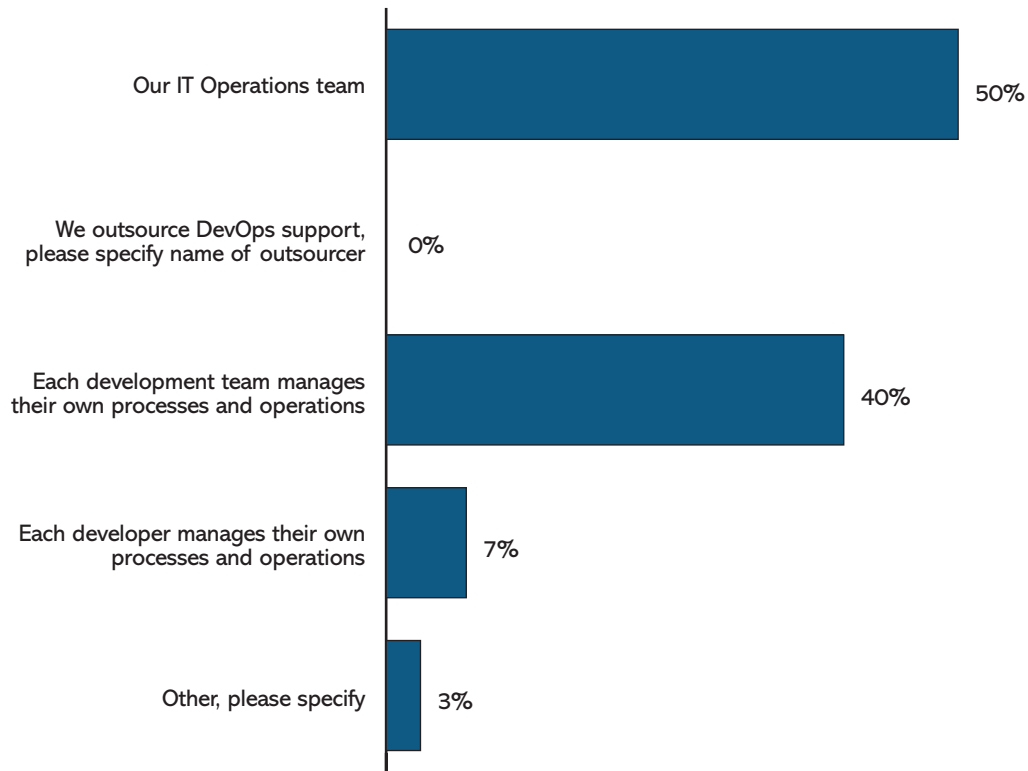
QM1a - How would you characterize this group or team?



To clarify where support comes from – who is responsible for the day-to-day running of DevOps processes – we asked an additional question about which group or team is responsible for DevOps support.

FIGURE 12: SUPPORT FOR DEVOPS TEAMS

QM1b - What group or team in your company is responsible for DevOps Support – meaning support for agile IT processes whereby IT operations and developers work together?



The most obvious conclusion from these responses is that operations is often involved, and is also fairly often (24% of the time) the primary driver for DevOps support. By contrast, development is rarely (only 4% of the time) the one group solely 'in charge.' However, the second question adds nuance to this theory – namely, that developers are often left to manage their own internal processes and procedures, selecting the methodologies and tools they use. This comports with what we would expect in an enterprise IT environment: operations still maintains a choke-hold on official and high-level decision-making – unlike the world of non-enterprise IT, where developers can command more of the decision process. However, once the 'sandbox' is established, development teams are free to choose the methodologies and tools that work within said sandbox.

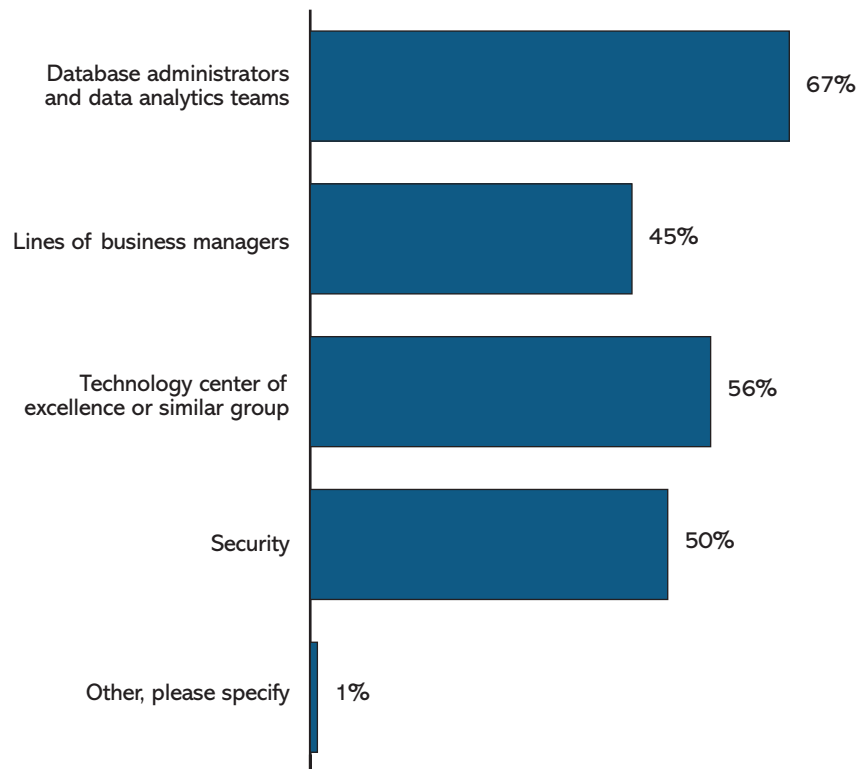
Notably, there was no outsourced DevOps support, which is not entirely surprising given how new DevOps is and how early we are in DevOps outsourcing. [*Rackspace's DevOps service*](#) is the only DevOps outsourcing service we've encountered thus far, having only recently launched. 'DevOps outsourcing,' as it were, is a nascent market. But on-premises and licensed software vendors should keep a close eye on this phenomenon to see if it displaces the traditional, packaged software approach to DevOps tooling.

We also asked directly if IT operations had to give approval for the use of emerging technologies like cloud, open-source tools and middleware: 80% of respondents said yes, leaving a comfortable and curious 20% saying no. The introduction of new tools and technologies was generally seen as favorable as long as proper process was wrapped around approval for these technologies.

Finally, in addition to development and operations, we wanted to understand what other stakeholders are involved in DevOps initiatives.

FIGURE 13: OTHER DEVOPS STAKEHOLDERS

QM6 - Beyond IT operations and developers, what stakeholders are involved in your modern IT management or DevOps initiatives and strategies?



This is similar to the stakeholder question in our Q1 DevOps study, and DBAs and security are often involved, and pleasantly so are line-of-business managers. As we concluded in our Q1 study, our current results show a healthy involvement of 'the business' in DevOps processes, which we are thrilled to see. While the involvement of business groups does not ensure the hallowed 'IT/business alignment,' it certainly is a necessary condition for ensuring that IT – in this case, DevOps – is valuable to the actual business.

The high involvement of 'centers of excellence' (CoEs) is also encouraging. These types of groups are often charged with introducing new methodologies and practices into organizations, so with 56% of respondents saying that CoEs are involved, we can further conclude that 'DevOps is a thing'¹ and is being taken seriously by enterprises.

1. While the effectiveness of CoEs can vary greatly, their involvement shows a good degree of conceptual commitment to the idea of DevOps for those companies who have CoE DevOps programs.

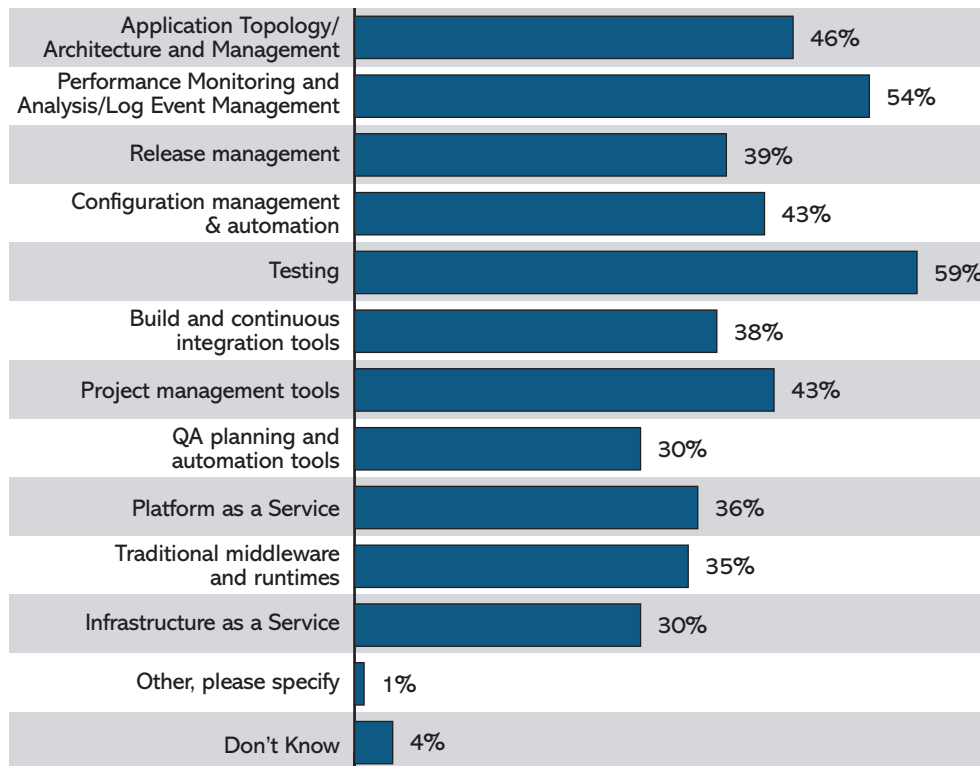
WHAT TOOLS ARE IN USE?

There are no runaway successes when it comes to tools and toolchains in DevOps. Our theory is that the tool landscape is evolving, and mainstream DevOps users are trying to employ their existing tools (which dominate among the tools named) but are open to the use of new tools that specifically target DevOps scenarios.

In our current study, we asked respondents to tell us what types of tools they had in use for development and operations. The results were similar to a related question in our Q1 study – namely, organizations tend to have many of the tools in use that we would expect.

FIGURE 14: DEVOPS TOOLS IN USE

QM7c1 - Which of the following development & operations tools do you currently use in your organization?

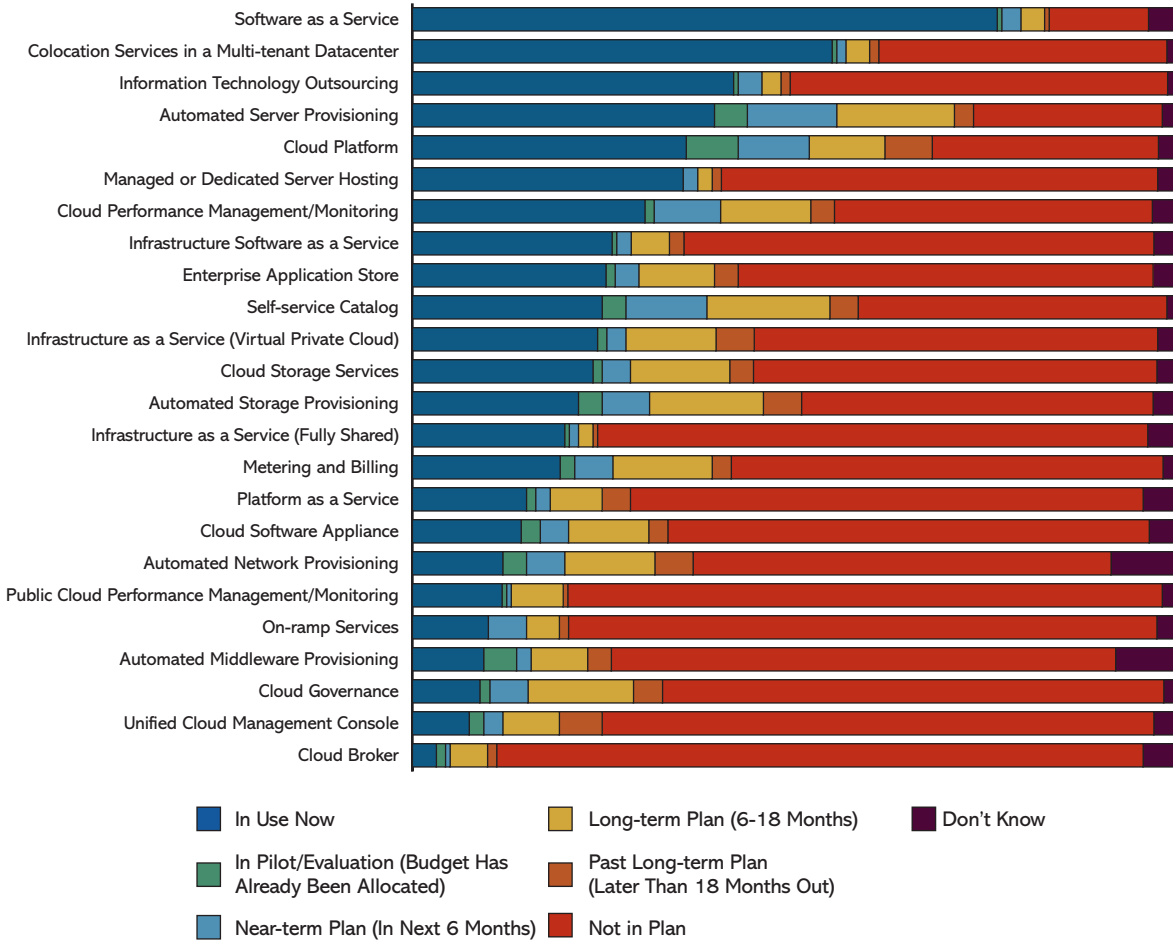


The most encouraging answer this time was the high rating for application topology and architecture, as well as build and continuous integration tools. Both of these categories had a distressingly low amount of usage in our previous survey. It's also notable that IaaS and PaaS are in use by 30% and 36% of respondents, respectively. Of course the group we targeted for DevOps would likely be users of such services.

To add context to this tools discussion, we've included [a slide from the recent TheInfoPro Cloud Wave 7 Study](#) that illustrates the total opportunity for various types of cloud technologies.

FIGURE 15: TOTAL CLOUD OPPORTUNITY

Q. What is your status of implementation for this technology or service?



Source: TheInfoPro - Cloud Computing Study Wave 7

From these responses, it's clear that offerings like automation, self-service catalogs and other technologies that are related to provisioning IT are in many enterprises' roadmaps over the next two years. These results match with what respondents in this DevOps study want IT to do – help them secure, provision and manage new tools for their DevOps programs.

Tools in Use by Vendor

We also asked respondents to *optionally* tell us what tools they were using. Most respondents did not answer, but looking at the vendors mentioned does provide an interesting view into the competitive landscape, and even the maturity of tools use in this market. These results should be treated as more directional than anything definitive due to the free-form nature of the responses².

2. A word of caution: Because these were Web-based interviews, the quality of answers cannot always be depended on, and thus should be treated as more directional. Respondents do not always know the exact name of the tool or fully understand the category of tools they're being asked about. And while we have sought to infer and clean up the responses, some can be odd. Also, to emphasize the point, answering these questions was optional, so they do not track what all respondents use. For example, 50 respondents could have been using Jenkins for build and continuous integration and simply chosen not to tell us.

As in our Q1 DevOps survey, 'traditional' vendors rank very high, with Microsoft, IBM, HP and others showing up frequently in each category. There is also a 'long tail' of usage in tools, including several uses of DIY, open-source and open-ended categories like 'Java.' Google appears in some interesting categories, such as release and configuration management, while Amazon is mentioned in logical places like IaaS but also pops up in release and configuration management.

Our primary conclusion from these charts is that there is a wide variety of tools in use, while at the same time the early DevOps market is using and depending on existing, incumbent tools. This position favors incumbents if they can keep up capability parity with startups... which is often a large IT company's most difficult task.

WHO DRIVES ASSESSMENT AND PURCHASING DECISIONS FOR TOOLS?

Does IT still have buying power in the world of DevOps? The answer is a solid 'yes,' based on our findings across 11 different categories of IT. IT is also heavily involved in most assessment and specification activity.

We asked respondents to tell us who – between operations, developers, or both (along with 'don't know') – was in charge of both specifying and then purchasing new tools across 11 categories: Application Topology/Architecture Management; Performance Monitoring and Log Management; Release Management; Configuration Management & Automation; Testing; Build and Continuous Integration; Project Management; QA Planning and Automation; PaaS; IaaS; and traditional middleware (to distinguish it from PaaS).

Operations Commands the Most Purchasing Power

IT operations is heavily involved in the purchasing of tools, and with rare exception is very involved in assessment and specification. This matches the findings from our Q1 DevOps study as well.

Combined Operations & Development Teams Command Much Control and Budget

IT operations had the highest purchasing power percentage in all categories except for IaaS and release management – combined teams had the highest purchasing power percentage in those categories. While IT ops' influence on specification seems to be lower than expected historically in many categories, IT ops does appear to retain buying power in most cases, except where it is superseded by a combined DevOps team.

The combined efforts of operations and development have a large amount of influence as well. This points to the 'dev' and the 'ops' of DevOps working well together, or at least having the potential to do so.

Developers Influence Is Growing, but Their Buying Power Is Weakest

Developers have their highest levels of purchasing power in QA Planning and Automation Tools and Performance Monitoring and Analysis/Log Event Management (with 29% for both categories). Configuration Management and Automation (27%), Build and Continuous Integration (24%) and Release Management (24%) were next highest in terms of developer purchasing power.

Developers appear to have growing influence on specifications, as we might expect, but that is not translating over to buying power, according to these results. Instead, it appears that the best way for developers to have buying influence is to be on combined DevOps teams, which consistently have strong buying power based on our results.

ARE CURRENT IT SERVICE PROCESSES AND TECHNOLOGIES ABLE TO SATISFY DEVOPS NEEDS? OR, WHAT CHALLENGES ARE HOLDING DEVOPS TEAMS BACK?

Centralized IT is doing a better job than expected. However, when it comes to providing the 'basics' – like compliance and data security – for new cloud platforms, there is much to be desired. Of course developers would like the procurement cycle to be faster, but at the same time respondents said IT was able to procure new tools in weeks or less.

While respondents tend to agree that IT could move faster (as highlighted in the study's *question about benefiting from speeding up release cycles*), this should not necessarily be interpreted as meaning that IT service processes are not satisfying DevOps needs. Everyone wants to move faster, or to get things faster. A more helpful way to rate centralized IT's ability to service DevOps, we believe, is to ask respondents what they're struggling with and seek to understand if IT can help. This is especially true for a new field like DevOps that has yet to mature enough in the mainstream to have 'normal' problems and 'normal' solutions that IT should know about.

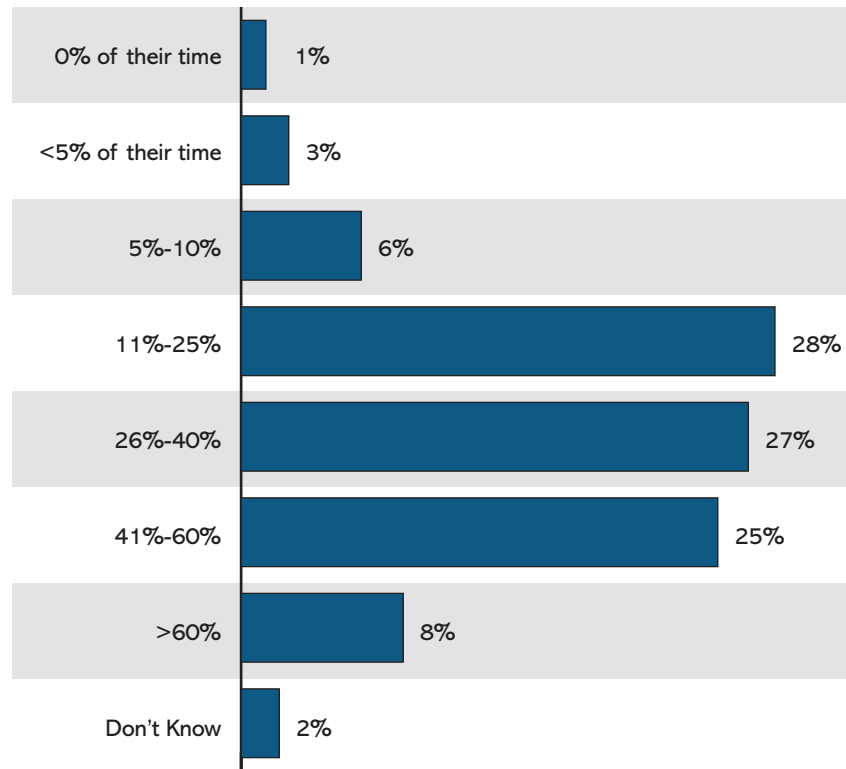
IT Should Be Helping DevOps Teams Deal With Cloud Technologies

To that end, one of our primary theories on DevOps is that the switchover to using cloud technologies is driving the opportunity to use DevOps. As we noted earlier, companies we survey regularly place moving to both public and private cloud high on their priority list. Additionally, many of the practices and tools in DevOps depend on the agility and speed afforded by cloud technologies.

Thus, several of our questions in this latest study investigated how well teams are coping with cloud. The hope was to find areas where centralized IT could help. We asked how much time developers spend dealing with and adapting to cloud technologies.

FIGURE 16: ADAPTING FOR CLOUD USE

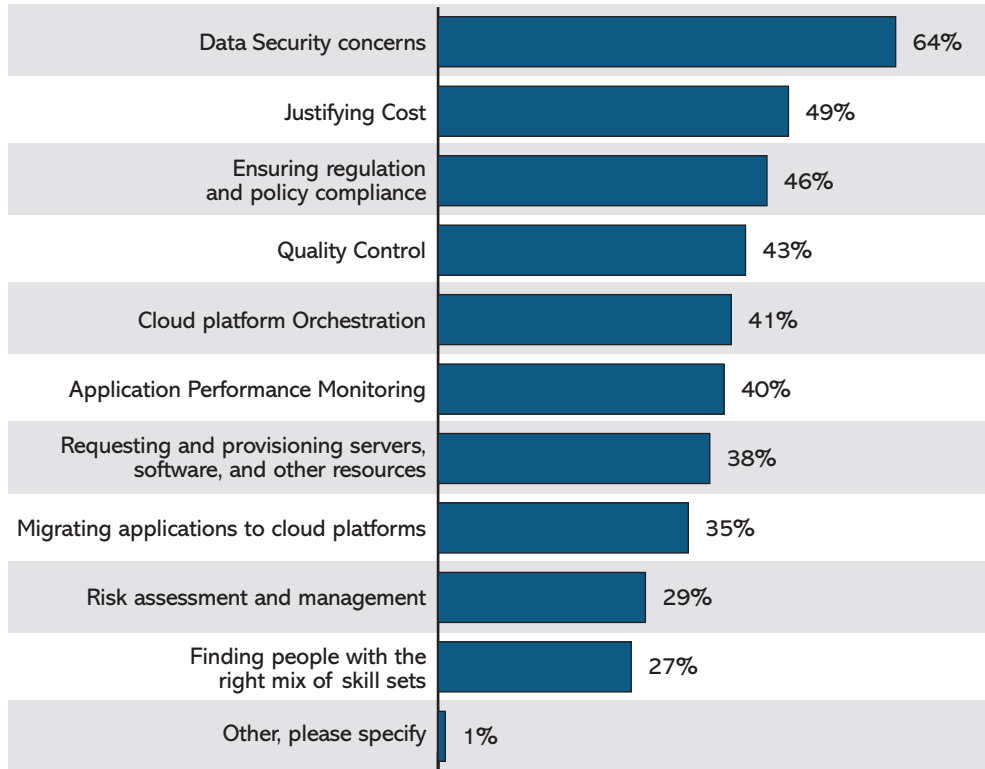
QM2 - How much time do your developers spend adapting your applications and processes to use public and private cloud services and platforms?



Clearly, a significant amount of time is spent dealing with cloud technologies that would most likely be better spent focusing on applications, features, more effective operations and other efforts that more directly contribute to customer value. We further asked what vexing problems respondents deal with in terms of cloud.

FIGURE 17: CHALLENGES IN CLOUD USE

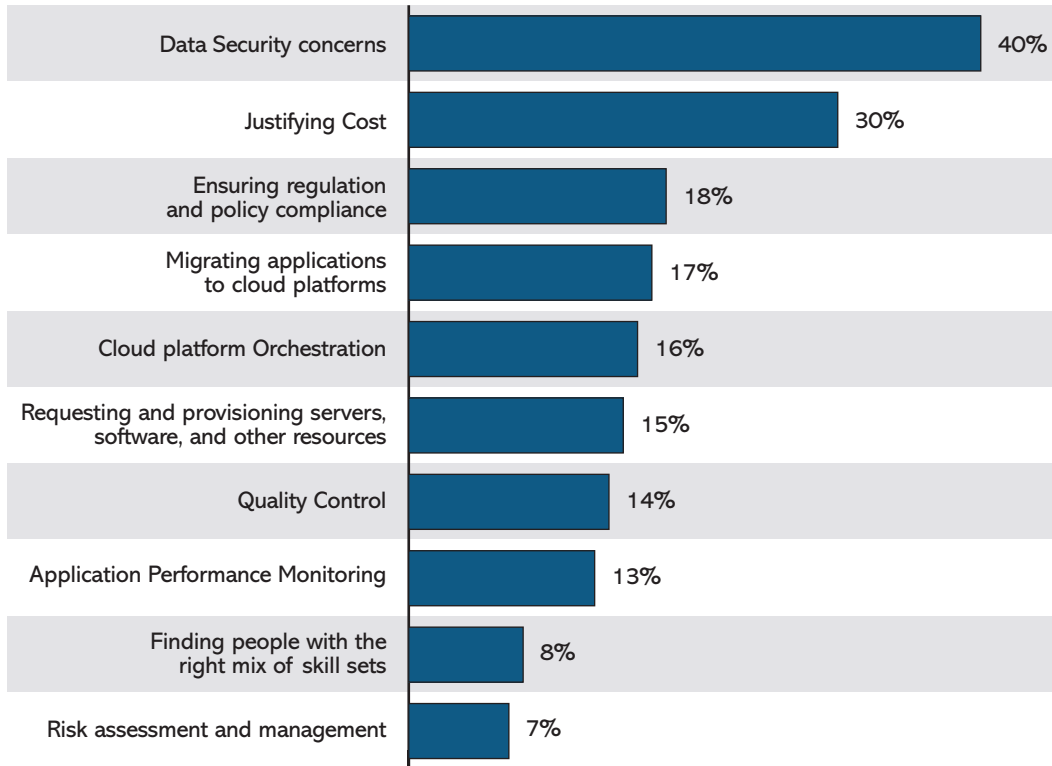
QM2a - What areas are your most vexing challenges with your transition to using cloud technologies?



These results are consistent with our other studies on cloud roadblocks: data control, security and compliance concerns tend to rank high, with a smattering of technological issues making up the rest. These takeaways were further highlighted when we asked respondents to narrow this down to their top two vexing problems, which highlights this point.

FIGURE 18: TOP TWO CHALLENGES IN CLOUD USE

QM2b - Considering your choices, what would you rank as the top two challenges you face transitioning to cloud technologies?



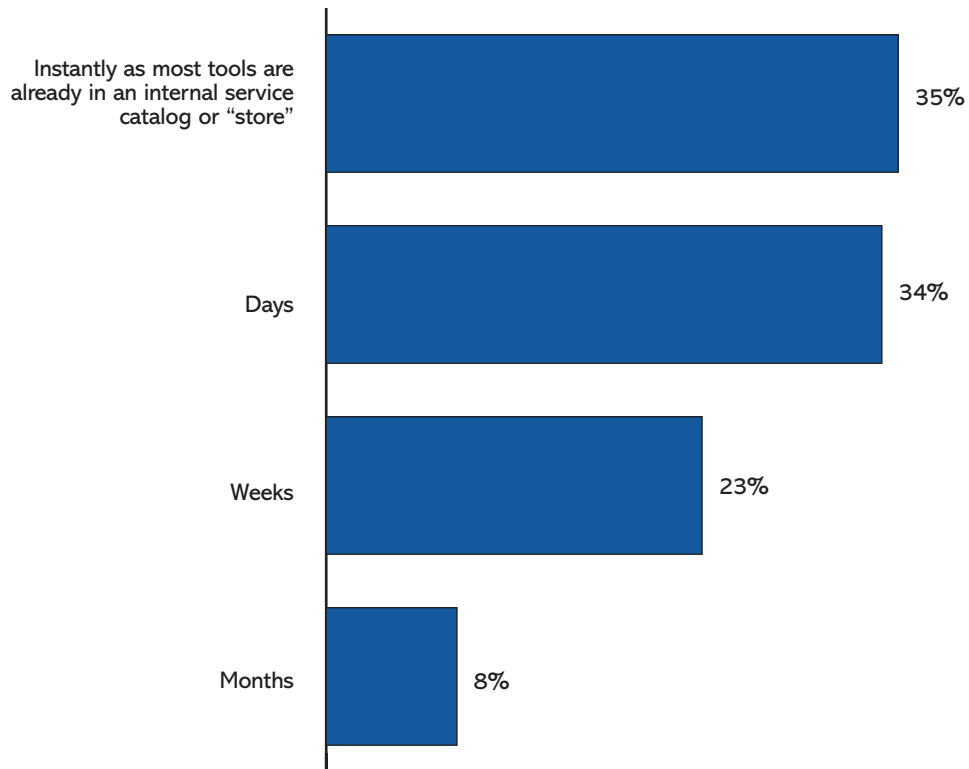
Clearly, these results show areas of opportunity for operations to help, especially when it comes to the 'sandboxing' that setting and enforcing policy and security can bring. We also note that cloud platform orchestration ranks high (at 41%), which is a common notion in the DevOps world, and an opportunity for vendors that have deep assets in this area.

Moving Faster When It Comes to Tools Procurement Will Always Be Desired

When it comes to sourcing tools, we did ask some direct questions about IT's involvement. First, we asked how long it typically takes to source a new tool from IT.

FIGURE 18: SOURCING TOOLS FROM IT OPS

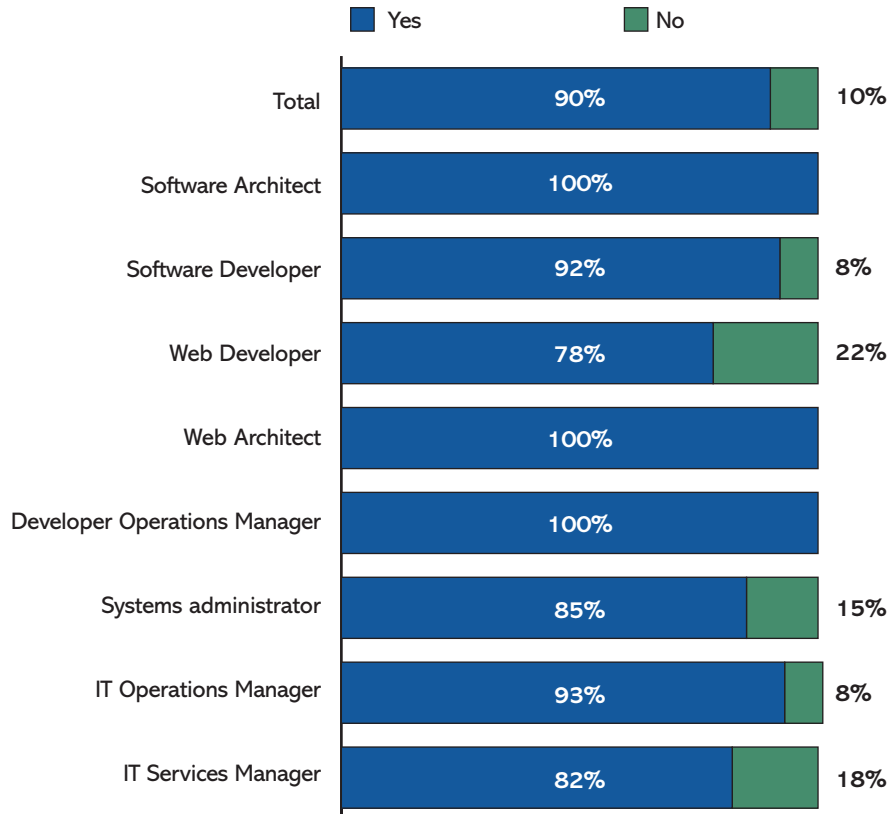
QM9 - When sourcing a new tool, how long does it typically take to get the tool from IT Operations?



These results are actually extremely encouraging. Popular DevOps lore would have us believe that centralized IT is asleep at the service-desk console, letting tickets pile up or gleefully closing them to meet close-quotas because they were filled out slightly wrong. Of course, back to the notion that everyone wants things faster, we asked respondents if speeding up this procurement cycle would be helpful. The answer was, of course, yes, with 90% wanting to move faster. Split by role, we can see more detail.

FIGURE 19: BENEFITS OF SPEED BY RESPONDENT ROLE

QS3 cross-tabbed to QM9a - Would your team benefit from speeding up this process?



All of these positive charts aside, it's clear that centralized IT can always do better and move faster. The vexing problems we identified earlier are the 'basics' of infrastructure management, and the transition to and use of cloud are clearly disruptive to the 'steady as she goes' approach of traditional IT. Also, the transition to public cloud, SaaS and open source – both now and in the recent past – shows that developers and individuals at companies are always eager for new sources of IT.

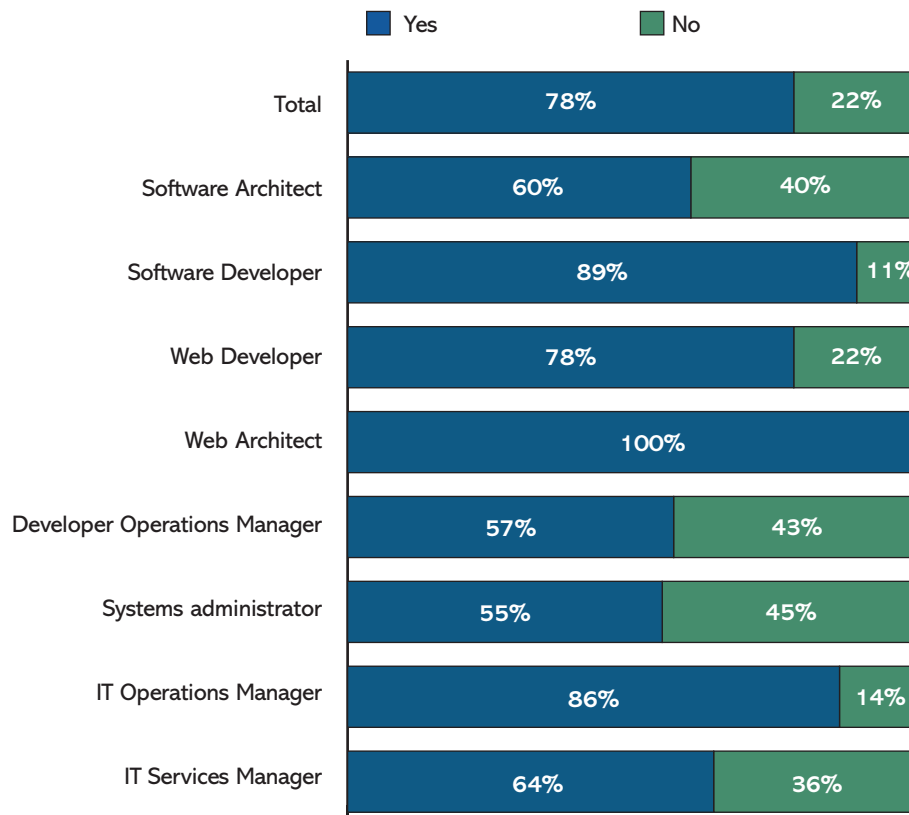
ARE EXISTING IT PROCESSES KEEPING UP WITH THE DEMANDS TO MOVE FASTER?

While everyone may want IT operations to speed up, the good news is that many respondents believe IT could indeed keep up.

We asked specifically about the topic of IT 'keeping up.' The results show a belief in IT that is mixed by role – curiously, with IT operations itself (systems administrators and IT ops directors) being the most doubtful.

FIGURE 20: CAN IT OPS MEET NEW DEMANDS?

QM4 cross-tabbed by QS3 - In your opinion, can your traditional IT Operations group or team keep up with the demands of shortened release times and the challenges of developing and deploying on the cloud?



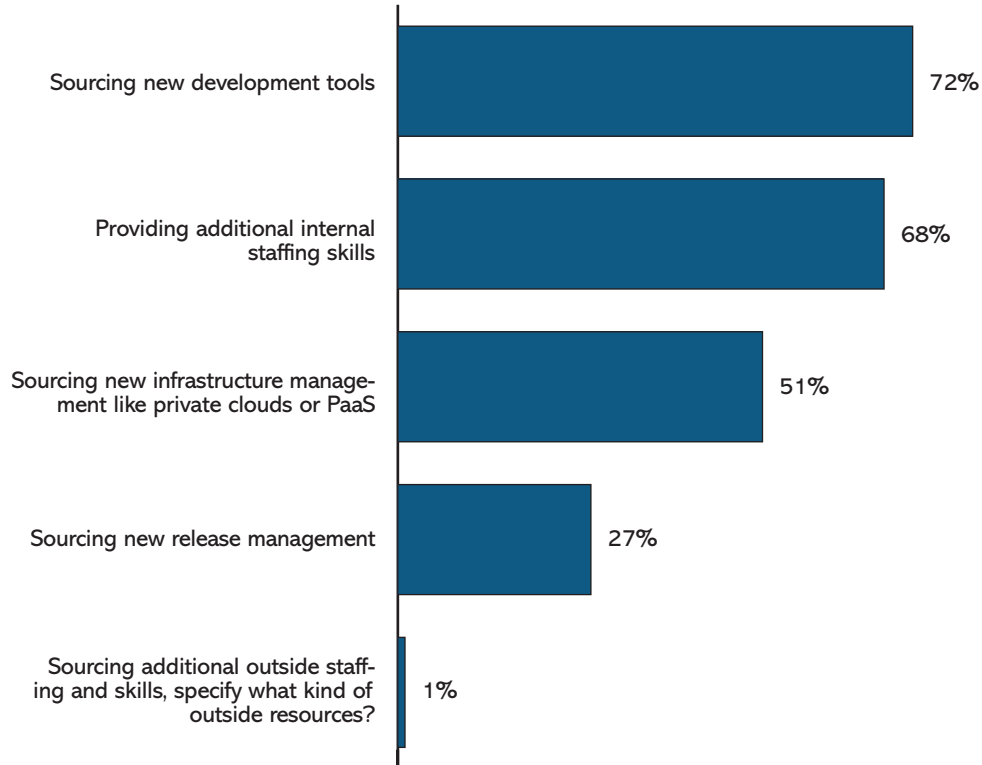
Reading too much into the specific roles is dangerous, since the sample set is low (for example, there were 20 systems administrator respondents). However, at least for the respondents in this study, it appears that the actual IT operations practitioners (sysadmins) feel the most distressed about keeping up, while their management seems to have a rosier view. By contrast, the managers in development – architects and development operations managers – have a lower view than the developers themselves. However you choose to interpret (or over-interpret!) these responses, it's clear that (a) there's room for improvement, and (b) there is a high degree of faith (more than we would have expected) that IT is up to the job.

What Is IT Doing Well?

To explore what centralized IT is doing well, we asked respondents specifically what IT is doing now that's helping.

FIGURE 21: CURRENT IT SUPPORT

QM4a - What is it that your IT Operations team is doing that is helping?



IT is involved in sourcing across the board, and has even been able to actually add staff, which is often one of the more difficult tasks. Following the heuristic that the best predictor of the future is the past, one could conclude that IT can continue to show value to their organizations through these activities. This is further validation that centralized IT has a place when it comes to providing the tools used in DevOps.

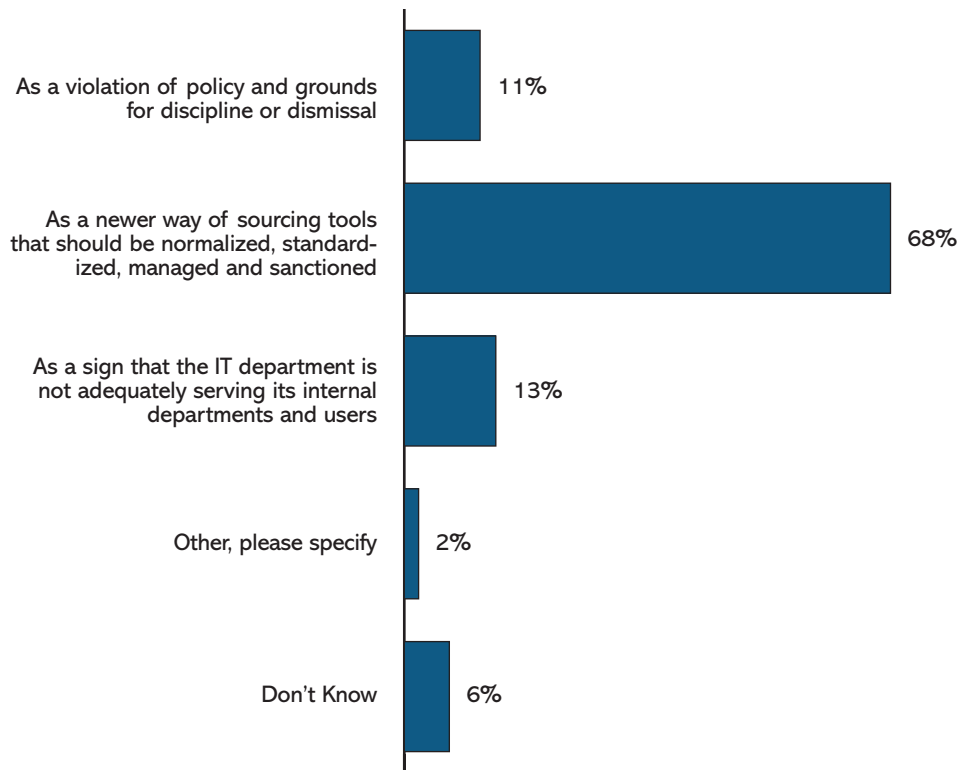
Is IT's Current Process Helping or Hindering the Introduction of New Tools?

So, if centralized IT should be seen as the 'loading dock' for introducing new tools, how is this process viewed? First of all, as we've cited, 80% of respondents said that IT had to give approval for emerging technologies used by developers and line-of-business tools.

When these new technologies come up, it seems that IT generally thinks of them favorably – far different than the common 'Dr. No' vision of centralized IT. In response to the question of how IT ops views these one-off technology uses, we saw the following answers.

FIGURE 22: IT'S VIEW OF NEW TECHNOLOGIES

QM7b - How does IT operations view these one-off technology uses by developers, lines of business, productivity teams and others?



With 68% of respondents answering “As a newer way of sourcing tools that should be normalized, standardized, managed and sanctioned,” things look good regarding one of the more difficult issues with DevOps – ‘culture’ change. That is, changing the process used by the stakeholders involved to comport with the new tools and processes used in DevOps. This points toward a willingness in IT departments to accept new tools and methods such as DevOps into their processes, and to use the introduction of these tools as an ‘excuse’ to transform IT, or at least come up with new ‘IT services.’³

HOW CAN IT OPS HELP DEVOPS PROGRAMS AND TEAMS?

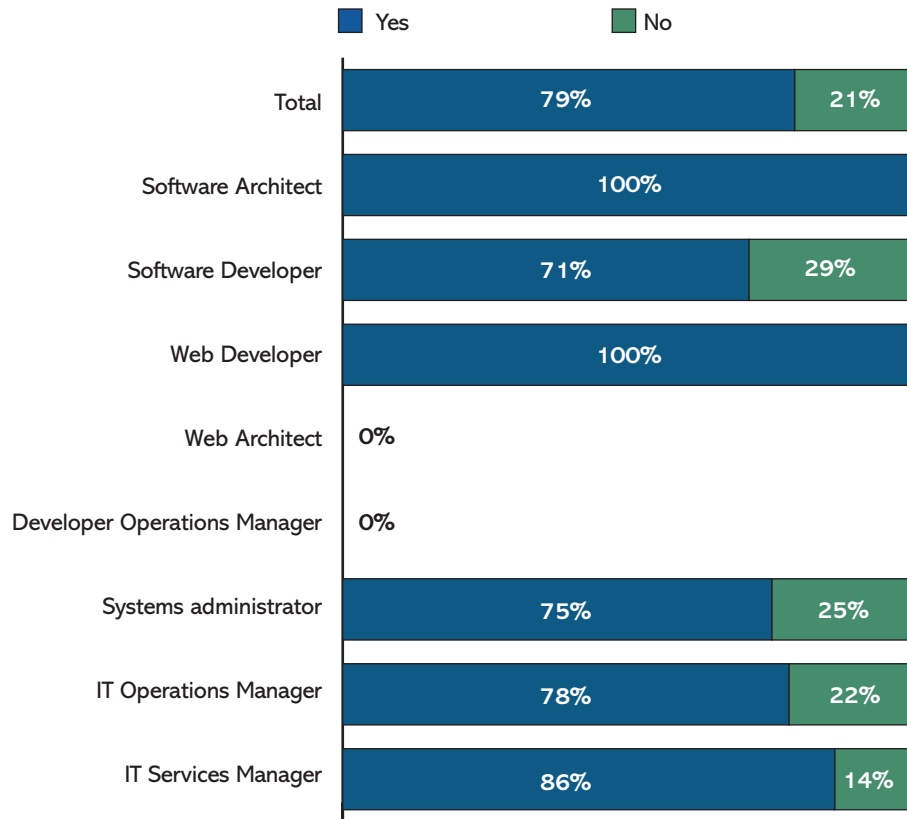
IT still matters for DevOps and, in fact, needs to up its game. Study results indicate that IT operations has an increasingly significant role to play in handling specs and continued buying power, even in DevOps scenarios.

To further check on the involvement of operations in core development streams, we asked: “Do IT Operations staff participate in development processes like Scrum, planning on each project, or even on the same team in a DevOps fashion?” The answer was resounding ‘yes’ by 82% of respondents. As a follow-on question, we asked respondents if it would be helpful if IT ops staff managed these methodologies.

3. A word of caution: the sample set here is small as only 47 answers were provided for this question, so the other 190 respondents might have a dimmer view if they had cared to share.

FIGURE 23: MERGING METHODOLOGIES

QM5a cross tabbed to QS3 - Would it be helpful if IT Operations were to manage these methodologies?

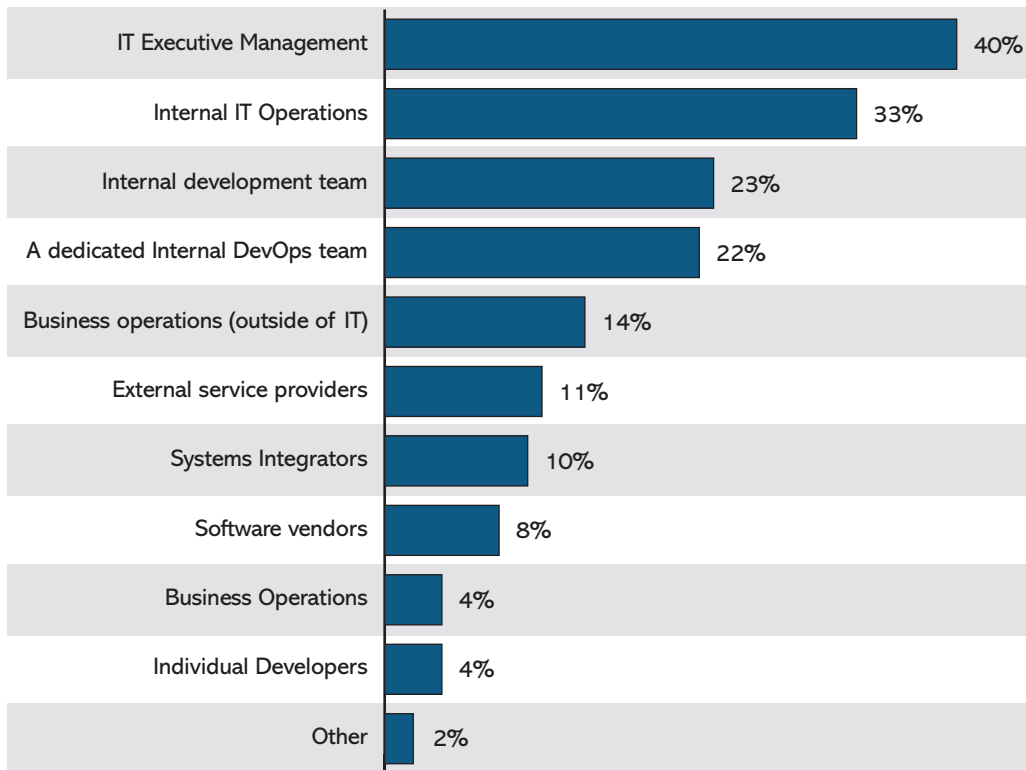


While responses here were low – just 42 out of a possible 237 – these answers do provide directional input that IT operations is ‘welcome to the party’ when it comes to managing DevOps and other Agile development processes.

The sentiment that IT operations should be heavily involved is reflected in one of our other questions related to which group should help in addressing cloud challenges.

FIGURE 24: TOP GROUPS FOR ADDRESSING CLOUD CHALLENGES

QM2d - Considering your choices, which two groups do you think are best positioned to help you with your cloud challenges?

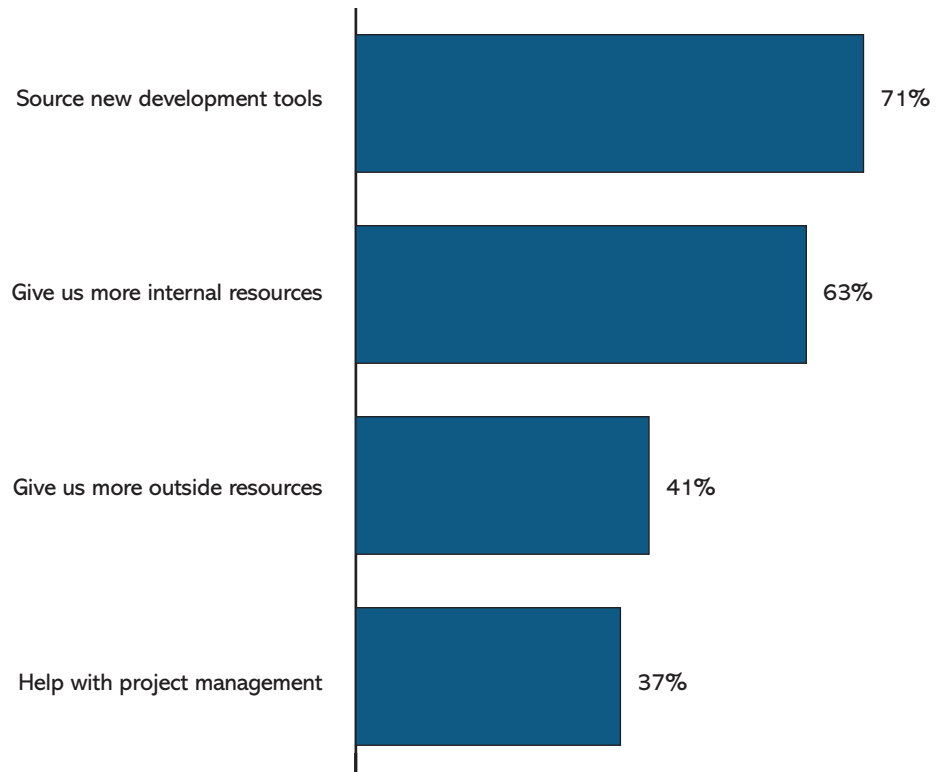


While this question does not directly address DevOps, we believe it's a good proxy for asking which group should help out with new technologies like DevOps. Clearly, as we see consistently in our research, IT executives are key for providing top-down 'air cover.' But we also note that even when accounting for margin of error, IT operations ranks higher than development. When allowed to pick more than one, respondents chose the internal development team and a dedicated internal DevOps team as the third and fourth most important groups, respectively.

We also asked our study respondents directly what IT operations could do better.

FIGURE 25: IMPROVING IT OPS

QM4b - What could the IT Operations team do better?



Once again, helping with procurement and providing tools and services seems to be the prevailing sentiment here, according to our results.

SUMMARY ANALYSIS

ORGANIZATION OF DEVOPS

DevOps teams are by definition cross-functional, with good representation not only from developers and operators, but also from lines of business, and some early hints of top-down corporate involvement. We theorize that operations actually has a high level of influence and control over evolving DevOps processes, as opposed to DevOps being driven and defined purely by development teams.

DEVOPS TOOLS

There are no runaway successes when it comes to tools and toolchains in DevOps. Our theory is that the tool landscape is evolving, and mainstream DevOps users are trying to employ their existing tools (which dominate among the tools named) but are open to the use of new tools that specifically target DevOps scenarios.

IT'S ROLE IN DEVOPS

Does IT still have buying power in the world of DevOps? The answer is a solid 'yes,' based on our findings across 11 different categories of IT. The IT organization is also heavily involved in most assessment and specification activity.

WHAT CAN 'TRADITIONAL' CENTRALIZED IT OPS DO TO HELP?

Centralized IT is doing a better job than expected. However, when it comes to providing the 'basics' – like compliance and data security – for new cloud platforms, there is much to be desired. Of course developers would like the procurement cycle to be faster, but at the same time respondents said IT was able to procure new tools in weeks or less.