



CITRIX PERFORMANCE MANAGEMENT

2016 Survey Report



Welcome to the 2016 Citrix Performance Management Survey Report.

Citrix Systems, Inc. (Citrix) is the market leader in securely delivering applications, desktops, data and services to any device, anywhere, any time. Its reach is in the several hundreds of thousands of customers, across every industry, and its revenue totals more than \$3 billion. Over the last decade, the Citrix portfolio of solutions has dramatically expanded to include Citrix XenApp, XenDesktop, XenServer, XenMobile, Sharefile, and Workspace Cloud. And the use cases for Citrix technologies have also expanded with the needs of the market. Flexwork and telework, BYOD, mobile workspaces, PC refresh alternatives and remote partner access are now common user paradigms that are all supported by Citrix technologies.

The key role that Citrix technologies plays makes performance management of these technologies and their supporting infrastructure critically important. To deliver the best possible user experience, Citrix environments need to be not only well architected but also well monitored and managed, in order to identify and diagnose problems early on and prevent issues from escalating and impacting end users and business processes.

For the second consecutive year, **DABCC** and **eG Innovations** have conducted a comprehensive survey to explore the state of Citrix performance management and to better understand current challenges, technology choices and best practices in our Citrix community. The survey results have been compiled into a data rich, easily digestible report to provide you with benchmarks and new insights into the best practices for Citrix performance management.

Thanks to everyone who contributed to this report.

Douglas Brown
Founder, DABCC, Inc.

Christine Ackley
Director of Marketing, eG Innovations, Inc.



Survey Highlights

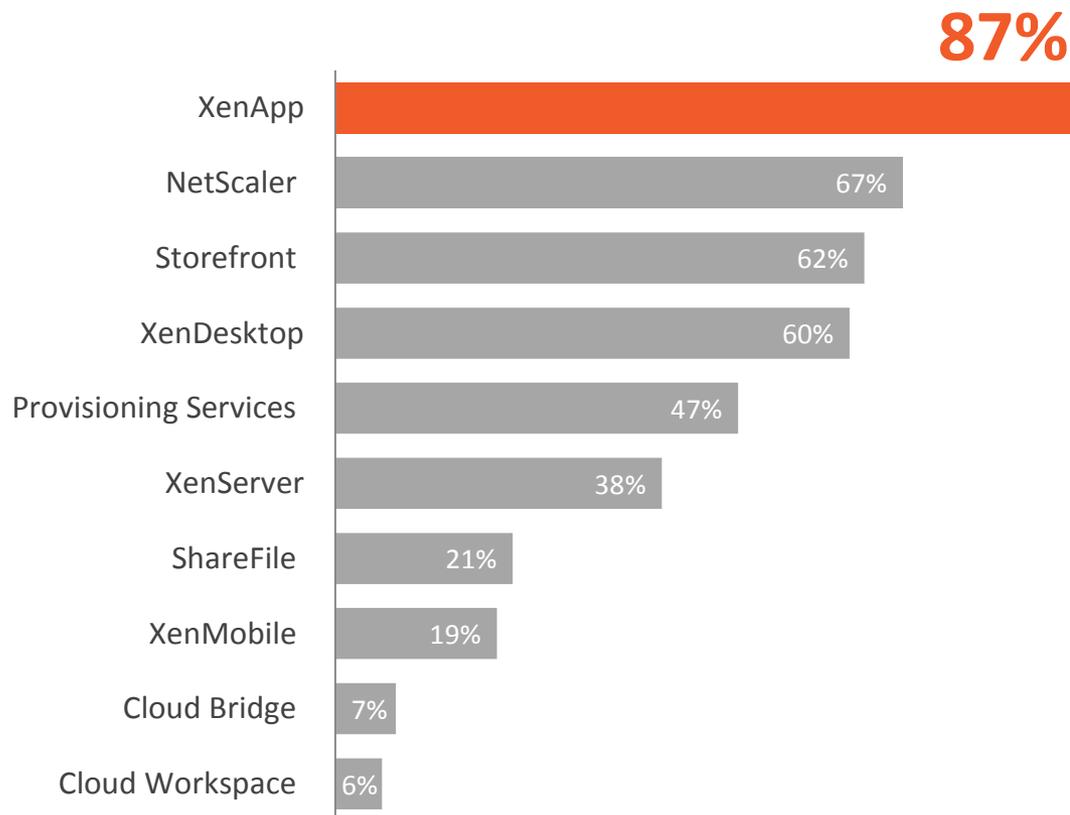
Key Findings

- 1** Performance management for Citrix has grown in importance as the use cases for Citrix technology have expanded. 96% of respondents see Citrix services as critical for their organization's business. Almost half consider Citrix to be the most performance-sensitive service in their organization.
- 2** 90% of respondents are not fully satisfied with the way they are managing their Citrix infrastructure. 67% need to use two to five tools to manage their Citrix infrastructure. 76% spend more than two days per week on troubleshooting.
- 3** 88% of respondents would like to use a single console for monitoring and managing all the Citrix tiers in the infrastructure. 80% are concerned about the lack of proactive, integrated monitoring capabilities in Citrix's product strategy.
- 4** User experience is top of mind for Citrix administrators. Not able to measure user experience is the top performance challenge for our respondents. 59% of respondents believe that at least half the time when Citrix is blamed for a slowdown, the problem ends up being in one of the other tiers.
- 5** A majority of respondents (72%) are looking to make Citrix performance management proactive by getting automatic alerts so they can fix issues before users notice.

Q1.

What Citrix products do you use in your infrastructure?

Not surprisingly, Citrix XenApp is the most widely deployed Citrix product. Citrix NetScaler is the second most popular product – 67% of respondents said they used NetScaler; this is 19% higher than what we had in our 2014 survey.

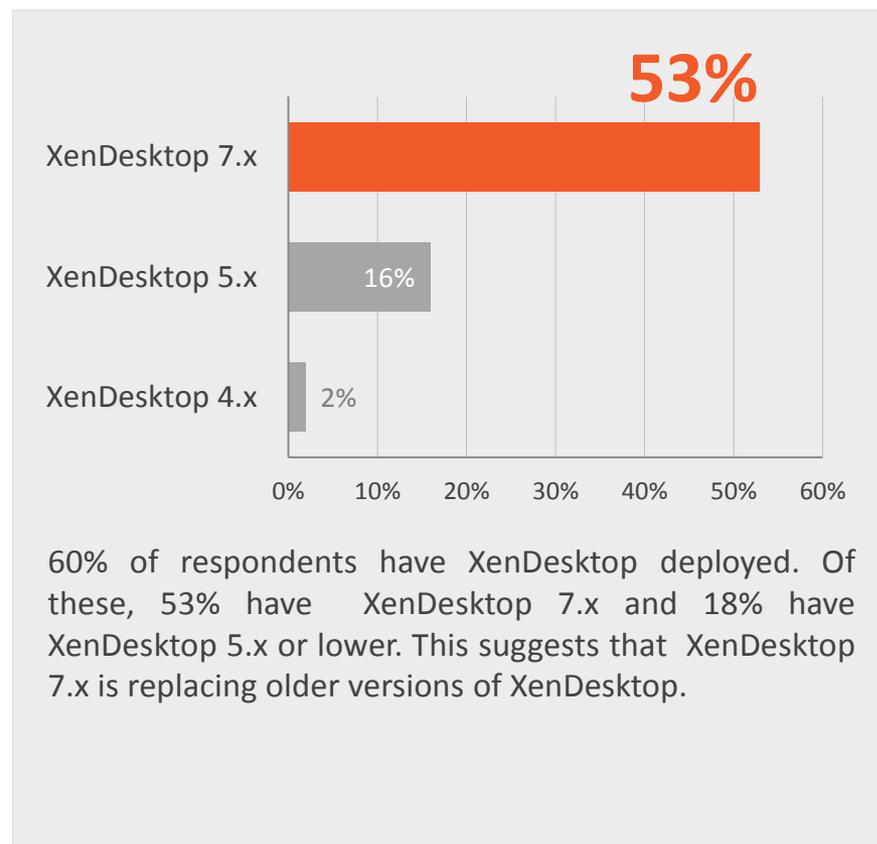
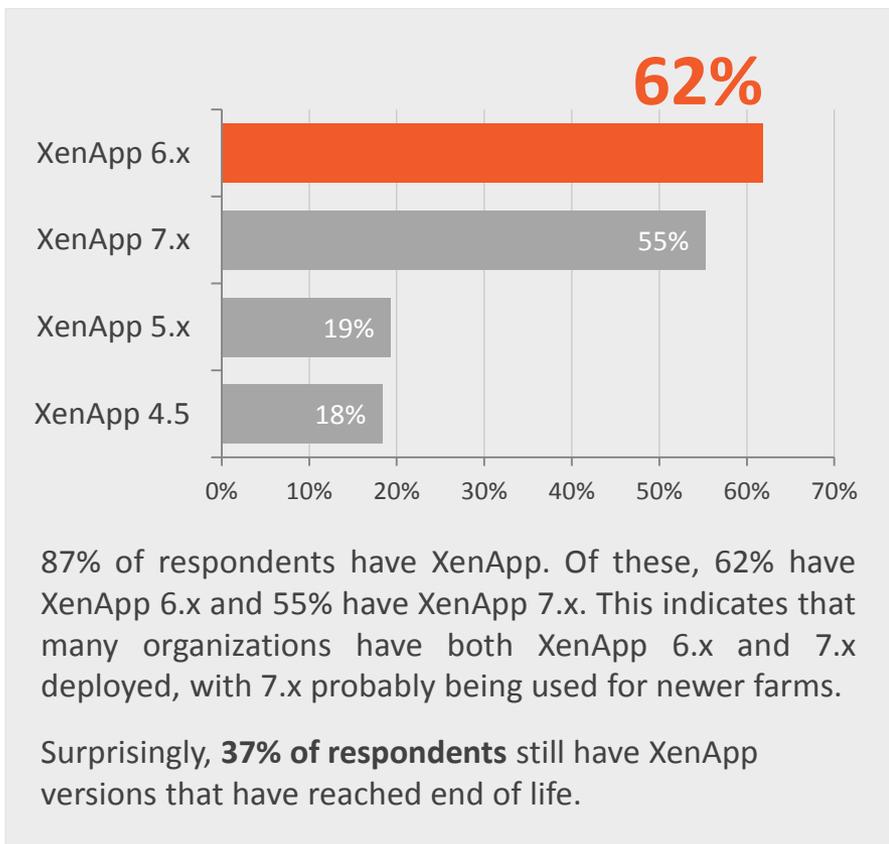


- In 2014, XenDesktop deployments were 1/3rd as popular as XenApp. This survey shows a rise in XenDesktop deployments. 60% of respondents have VDI deployed using XenDesktop. This trend indicates that VDI deployments are becoming more viable as a result of advances in storage, computing and desktop brokering technologies. At the same time, the relative numbers indicate that XenDesktop is being used in addition to XenApp – not as a replacement.
- Usage of Citrix XenServer and Provisioning services are also up compared to 2014 – by 10% and 9% respectively.
- Roughly, 1 in 5 respondents have Citrix XenMobile and ShareFile deployed. This is a growth of 50% from our last survey.
- Adoption of Citrix Cloud Workspace is low. The recent pricing changes could help increase adoption.

Q2.

What versions of Citrix XenApp and XenDesktop are deployed?

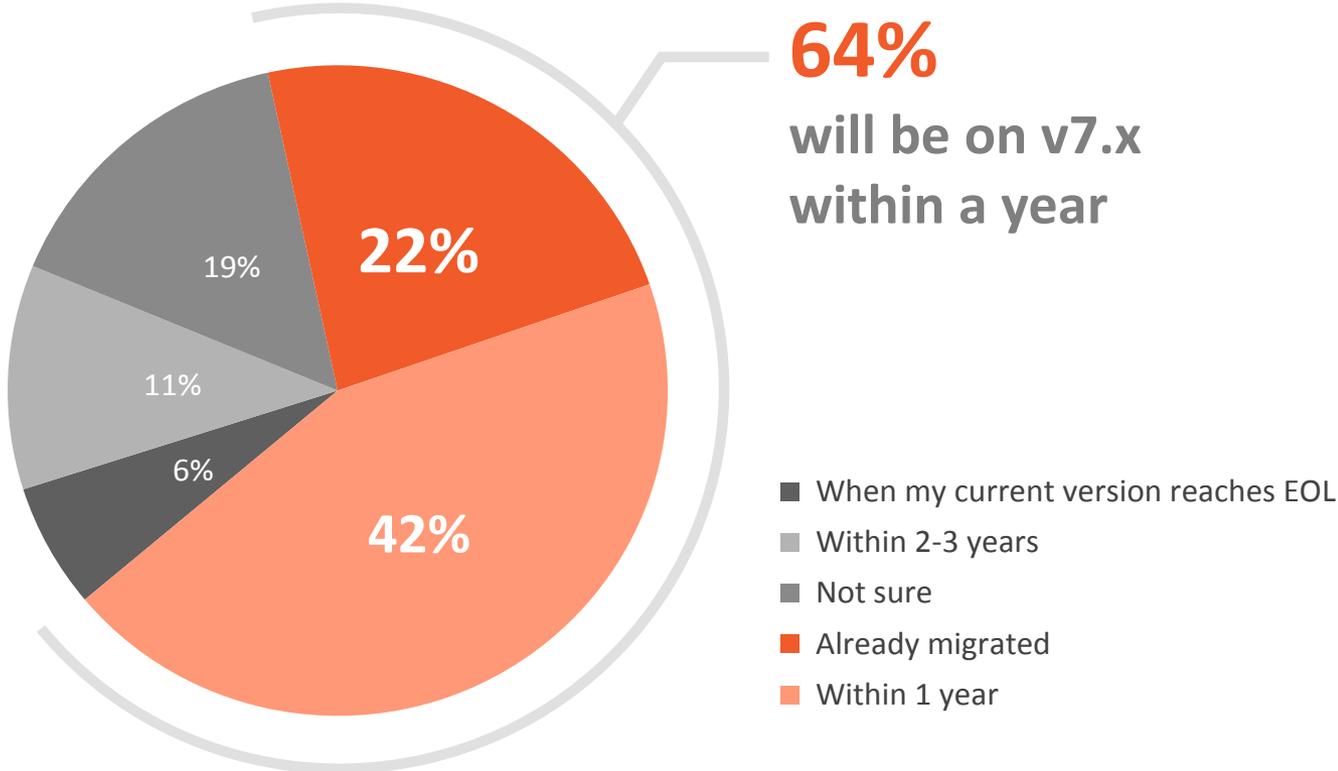
While many organizations still use XenApp 6.x, most of the XenDesktop deployments are on 7.x. This points to a maturing of virtual desktop technology using Citrix XenDesktop.



Q3.

How soon are you likely to migrate to the latest versions of Citrix XenApp and XenDesktop?

Migration from one version to another is a big event. User experience should improve, not get worse: All applications have to work correctly, and new functionalities must be enabled. Often Citrix migrations take a long time, so administrators wait for technology to mature and many only upgrade when they must.



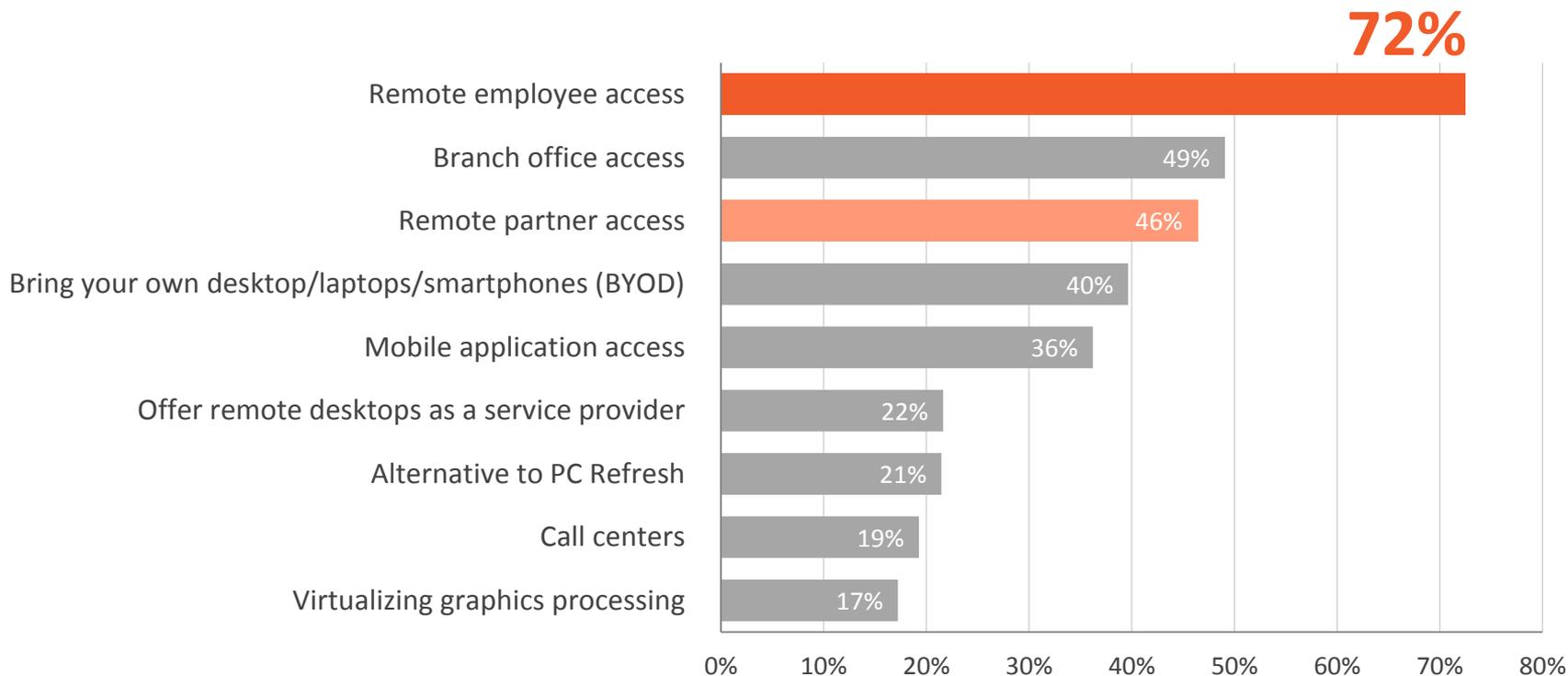
- 22% of respondents are already running the latest version. That's only 10% more than what we had in last year's survey.
- 42% expect to migrate in the next year.
- In 2014, 44% of respondents predicted they would migrate within a year to the 7.x version. Clearly, these predictions were not accurate.

Q4.

For what use cases are you using Citrix technologies?

Interestingly, despite having a bigger reach this year, the different use cases for Citrix technologies retained their relative positions when compared to last year's survey. The absolute values were within 5% of the 2014 numbers.

Remote access – to employees and to partners – accounts for two of the top 3 use cases.

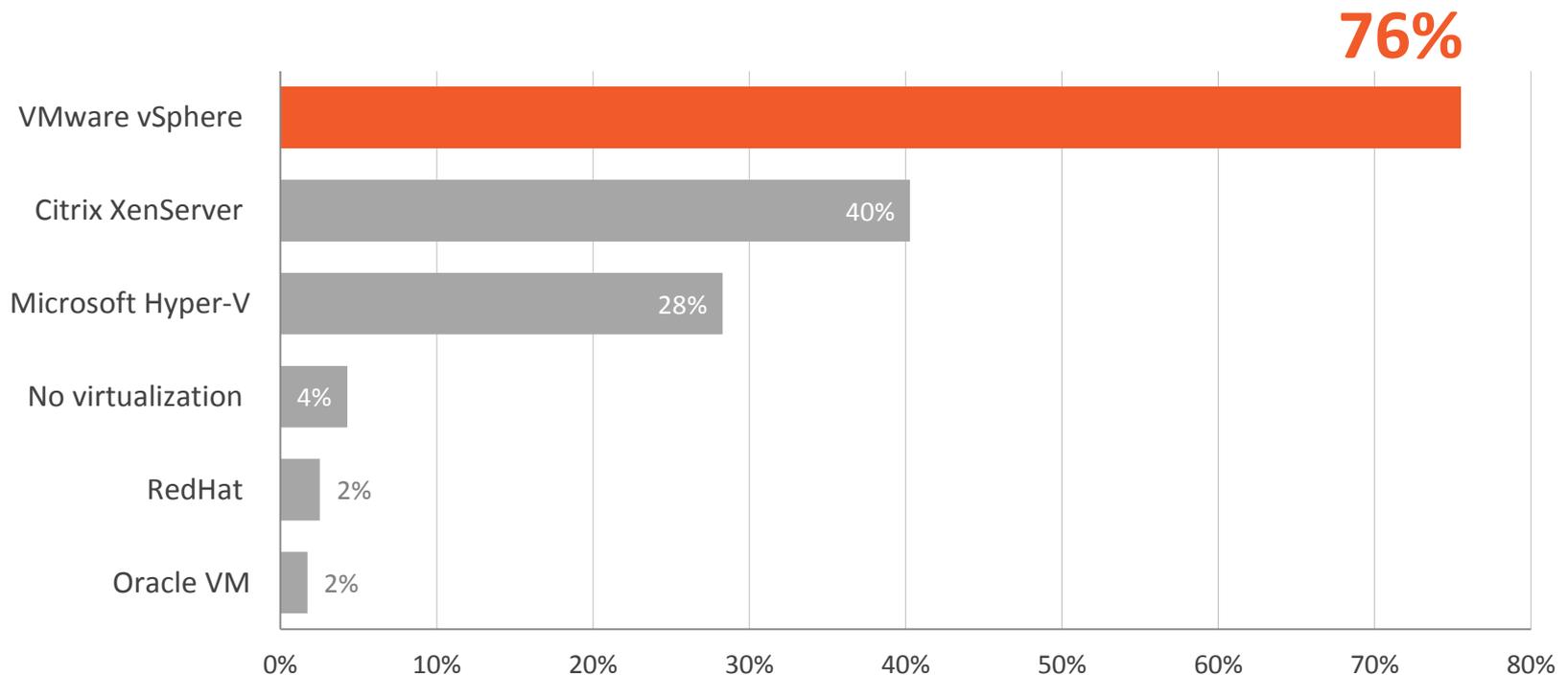


Q5.

What virtualization platform(s) do you use for your Citrix infrastructure?

It is not surprising that a majority of Citrix deployments happen on virtual infrastructures. VMware vSphere remains the popular hypervisor choice. Citrix XenServer ranked 2nd and Microsoft Hyper-V was 3rd.

A comparison with the numbers from 2014 reveals that VMware vSphere had the same market share. Citrix XenServer usage grew by 3%, Microsoft Hyper-V grew by 6%.

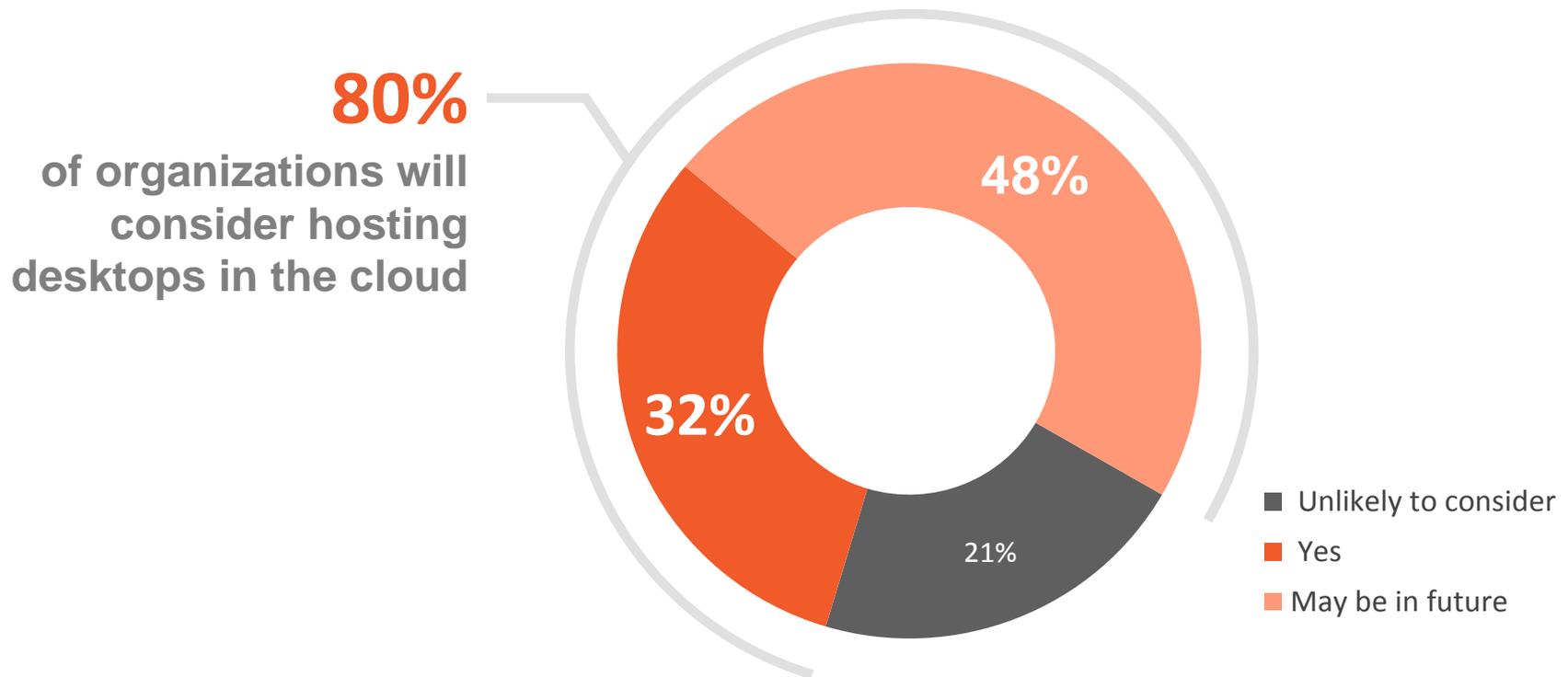


Q6.

Has your organization considered hosting virtual desktops and applications in the Cloud?

A number of service providers offer virtual desktops in the cloud. The Citrix Delivery Controller now allows organizations to broker desktops that are hosted on public cloud providers.

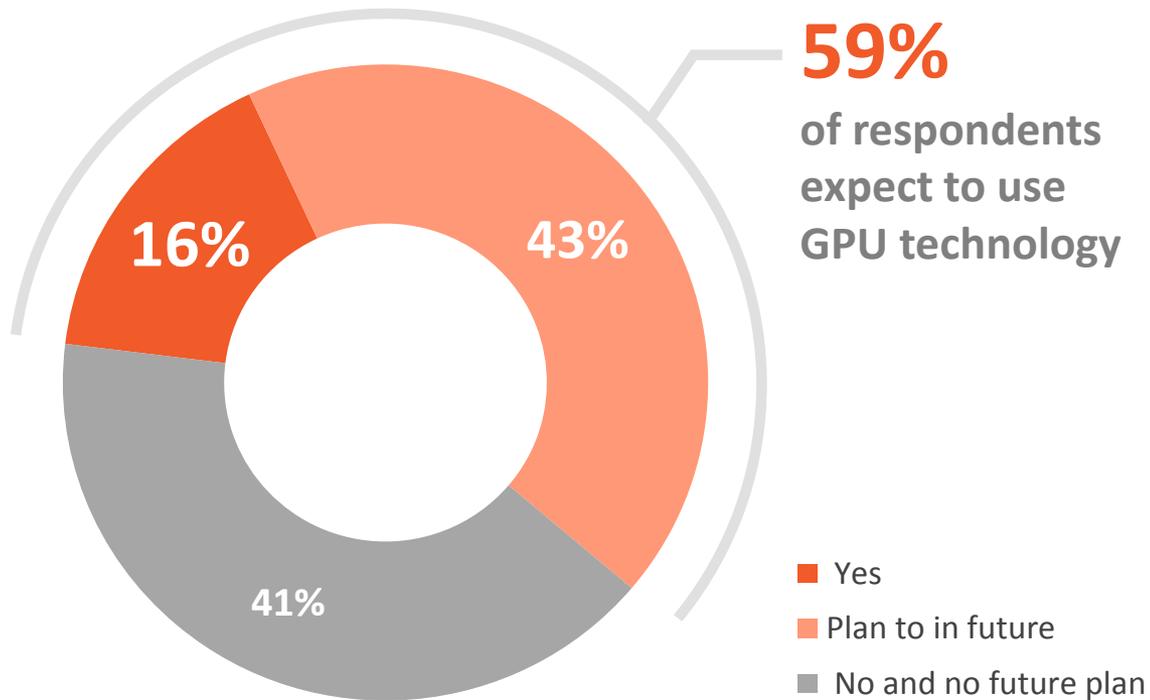
32% of organizations are using virtual desktops or virtualized applications in the cloud, while 48% believe they may consider this in the future.



Q7.

Do you make use of Graphics Processing Unit (GPU) technology today?

GPU technology being adopted for graphics intensive applications – in healthcare, manufacturing, designing, etc.

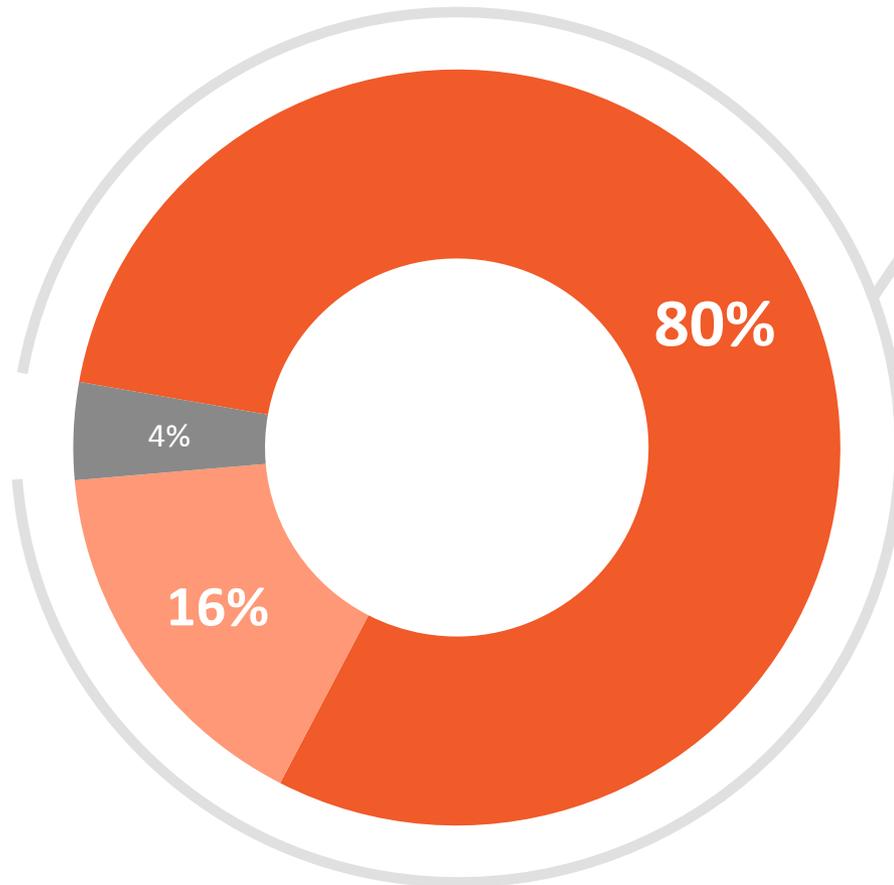


59%
of respondents
expect to use
GPU technology

- 59% of respondents expect to use GPU technology
- The implication for performance monitoring tools is that they must be GPU-aware.

Q8.

How important is the Citrix service to your organization's business?



96%

see Citrix as being
business critical

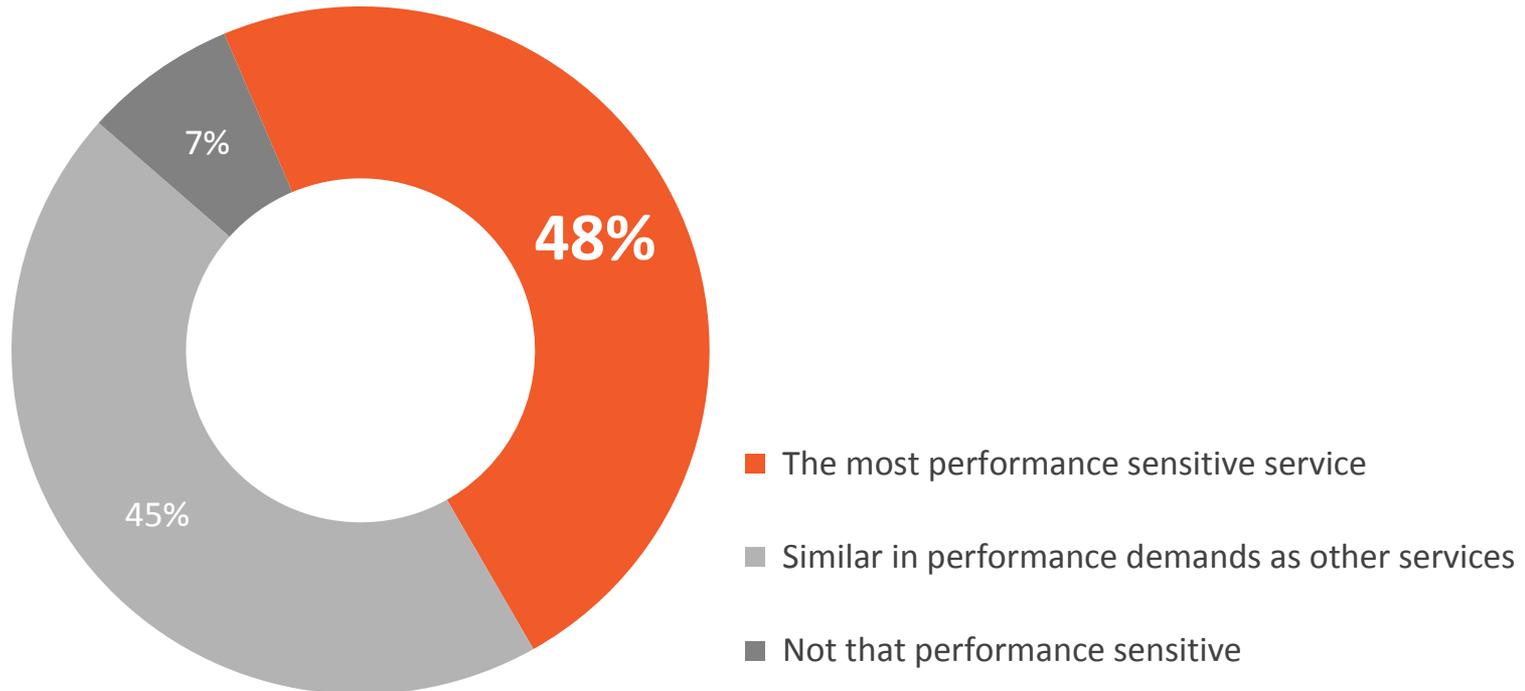
If the Citrix service slows down or has an outage, business is impacted.

- Very important
- Somewhat important
- Not that important

Q9.

Of all the IT services that your organization provides, is Citrix the most performance sensitive?

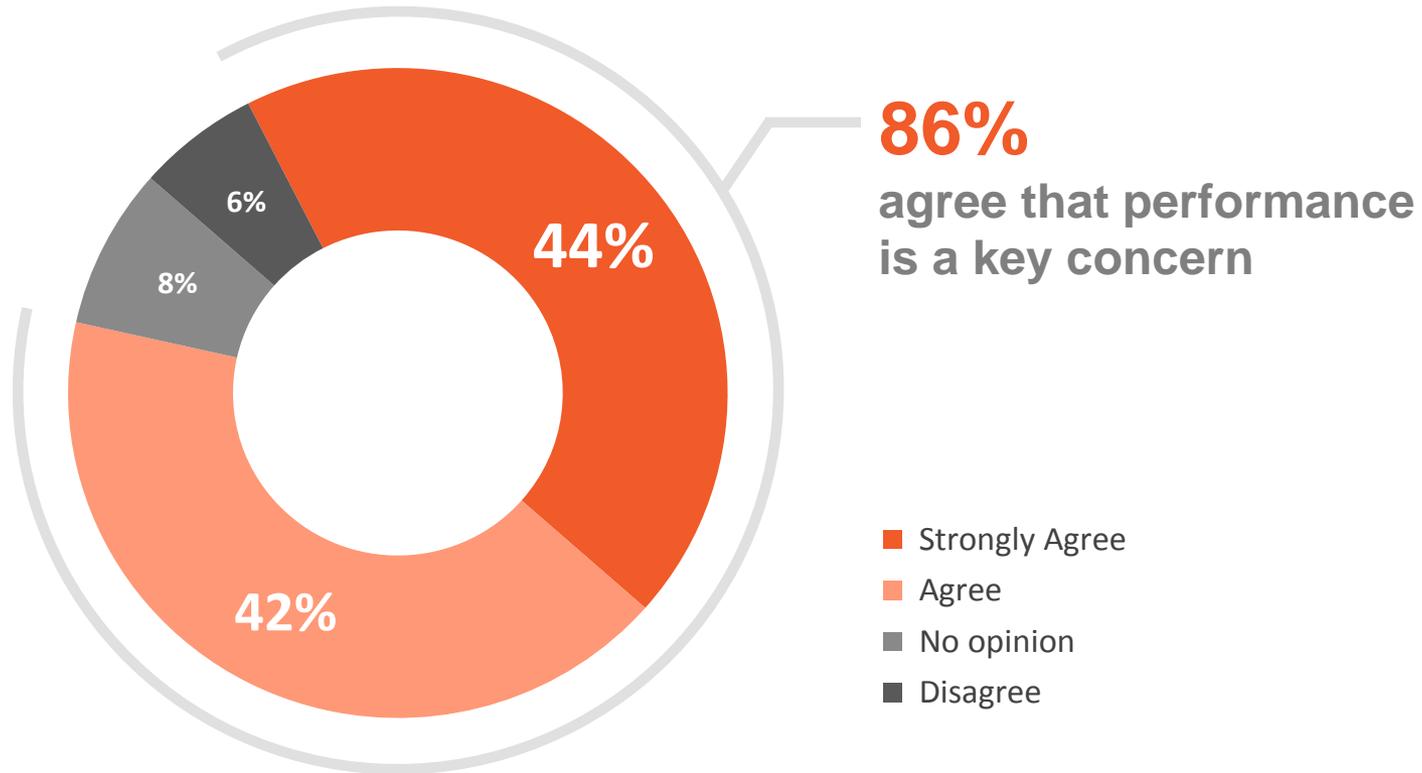
48% see Citrix as the most performance sensitive service in their organization. Citrix sessions are highly interactive. If there is a glitch, keystrokes don't show up on time, the screen refreshes slowly, user may get disconnected and lose their work, and in general productivity suffers.



Q10.

When migrating to new versions of Citrix XenApp or XenDesktop, is performance one of your key concerns?

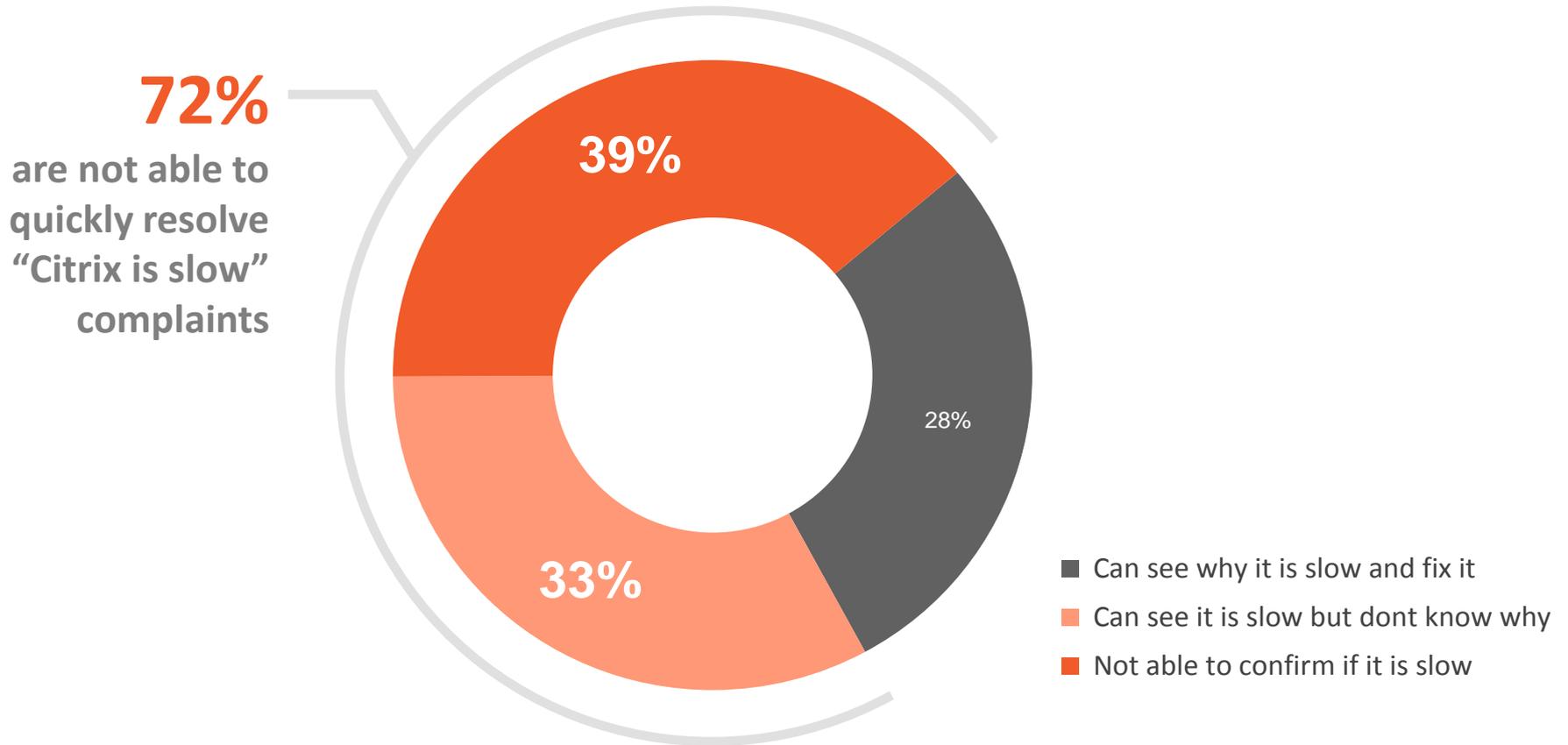
Migration between versions is driven by the need to deliver enhanced capabilities to users, to benefit from technology optimizations that improve ROI and to ensure ongoing support for issues. One of the biggest concerns that respondents have about migrations is performance. 86% agree that performance is a key concern during migration.



Q11.

When a user says “Citrix is slow”, are you able to fix it quickly?

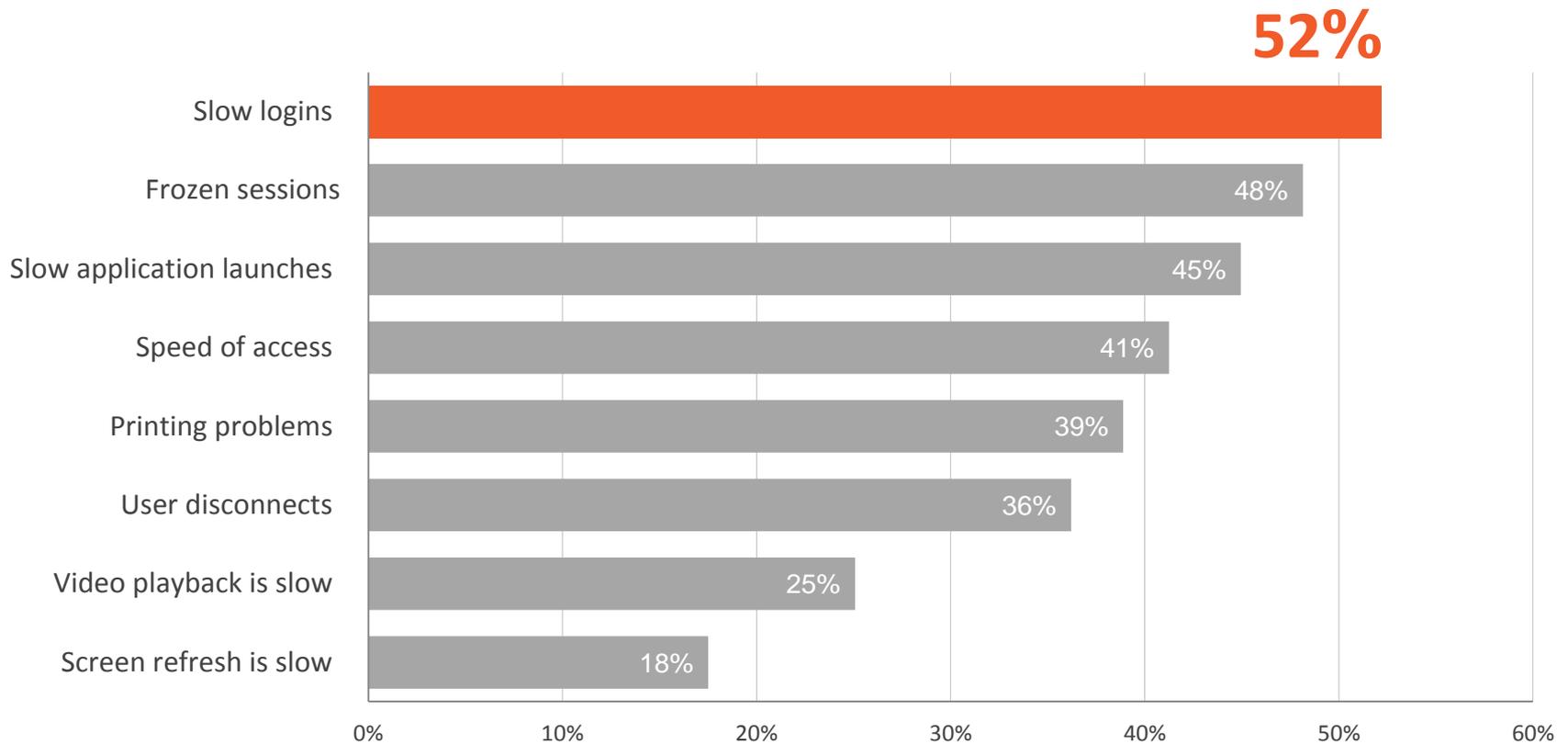
Only 28% of respondents believe that today they can see why the Citrix service is slow and can fix it quickly.



Q12.

What are some of the common complaints you receive about your Citrix infrastructure?

Slow logins are the most common complaints received by Citrix admins (52%). Frozen sessions (48%) and slow application launches (45%) are the other top complaints. Compared to our last survey, there was no change in the top three problems.

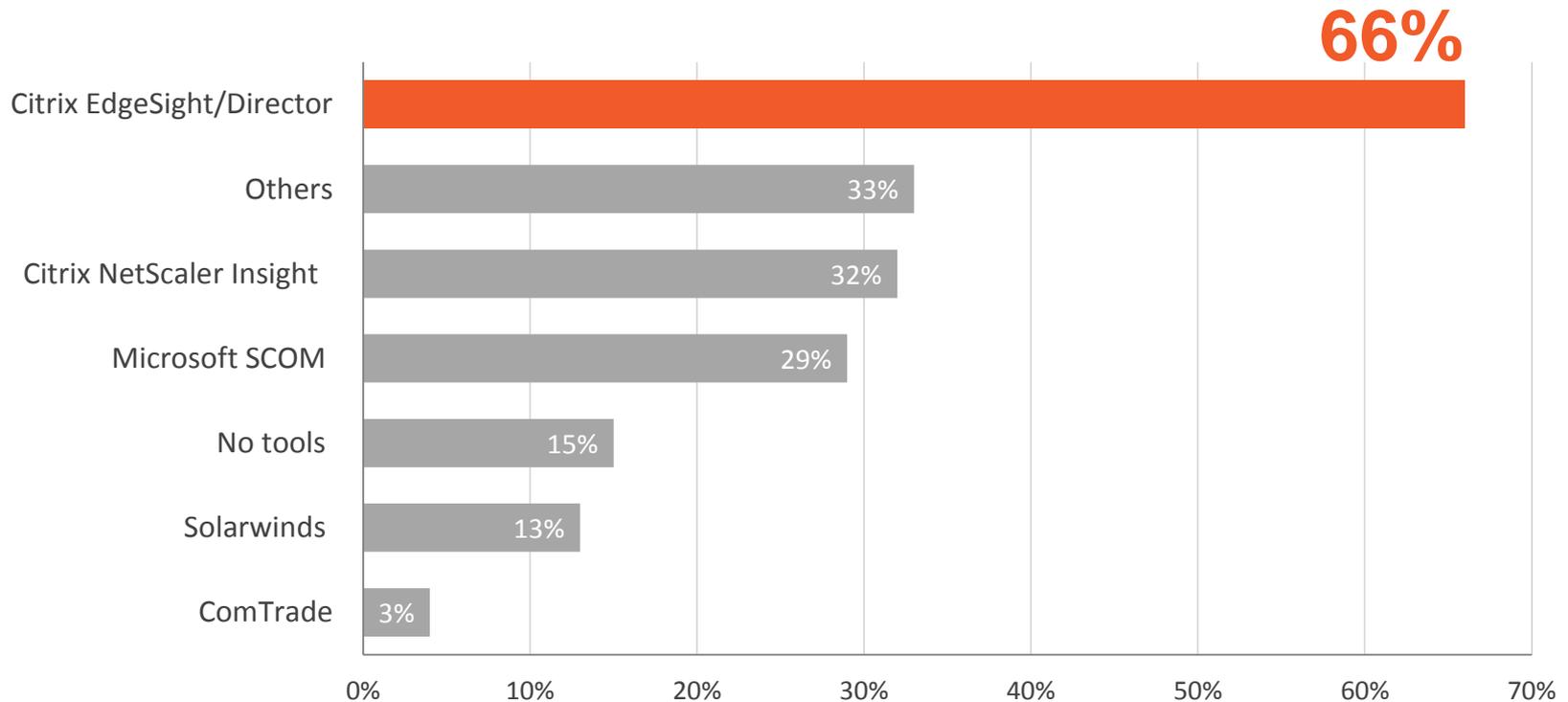


Q13.

What tool(s) do you use for managing your Citrix infrastructure?

A majority of organizations are using the built-in Citrix tools to monitor their Citrix infrastructure. Adoption of Citrix Director/EdgeSight and NetScaler Insight grew by about 10% each since 2014.

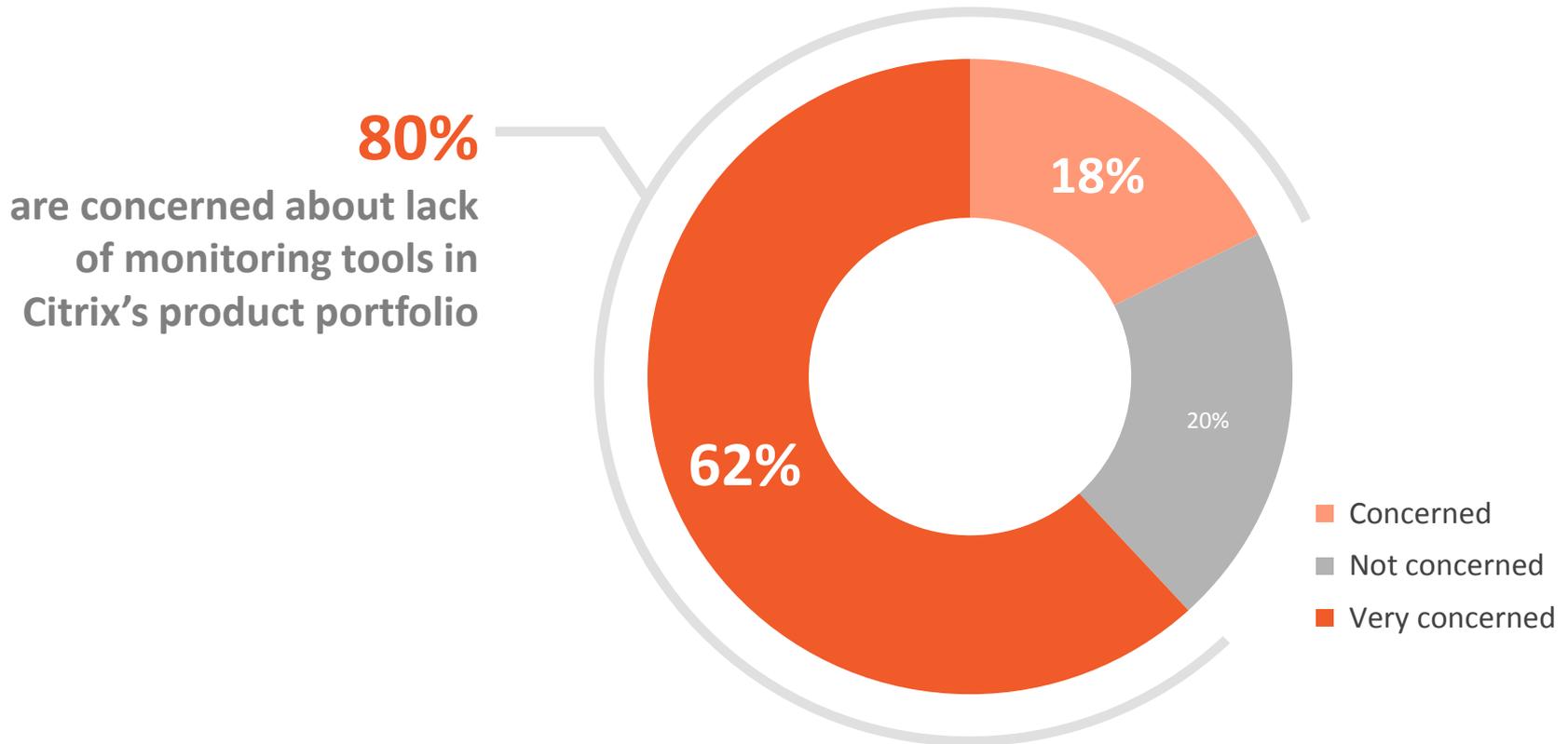
While 29% of respondents used Microsoft SCOM, only 3% had ComTrade management packs deployed.



Q14.

With Citrix Director being more of a helpdesk tool, how concerned are you about monitoring Citrix services?

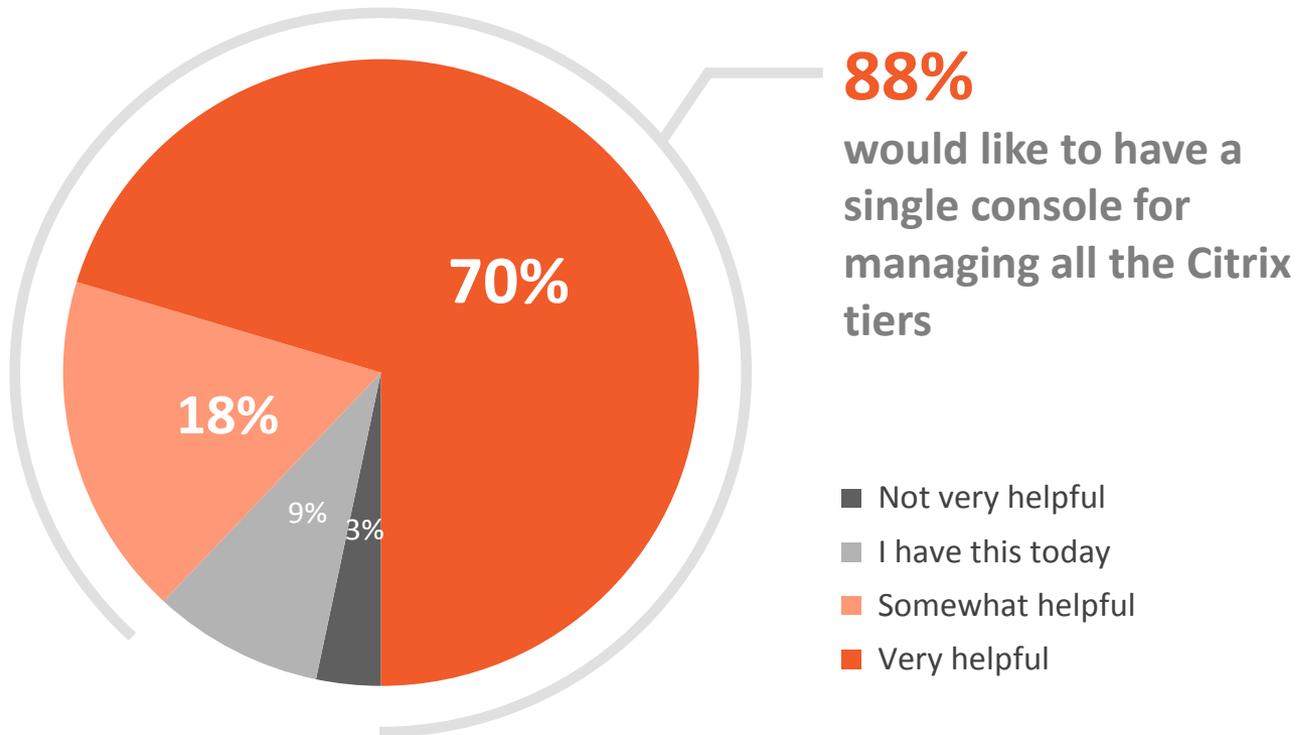
Over the last year, Citrix EdgeSight 5.4 has reached end of life. Citrix Director is more of a helpdesk tool than an automated monitoring tool. 80% of respondents are concerned about the lack of automated, unified monitoring and diagnosis capabilities in the Citrix product portfolio. The recent acquisition of the ComTrade SCOM management packs is a step in addressing these concerns.



Q15.

Would it be helpful to have a single console from which you can manage all your Citrix products/tiers?

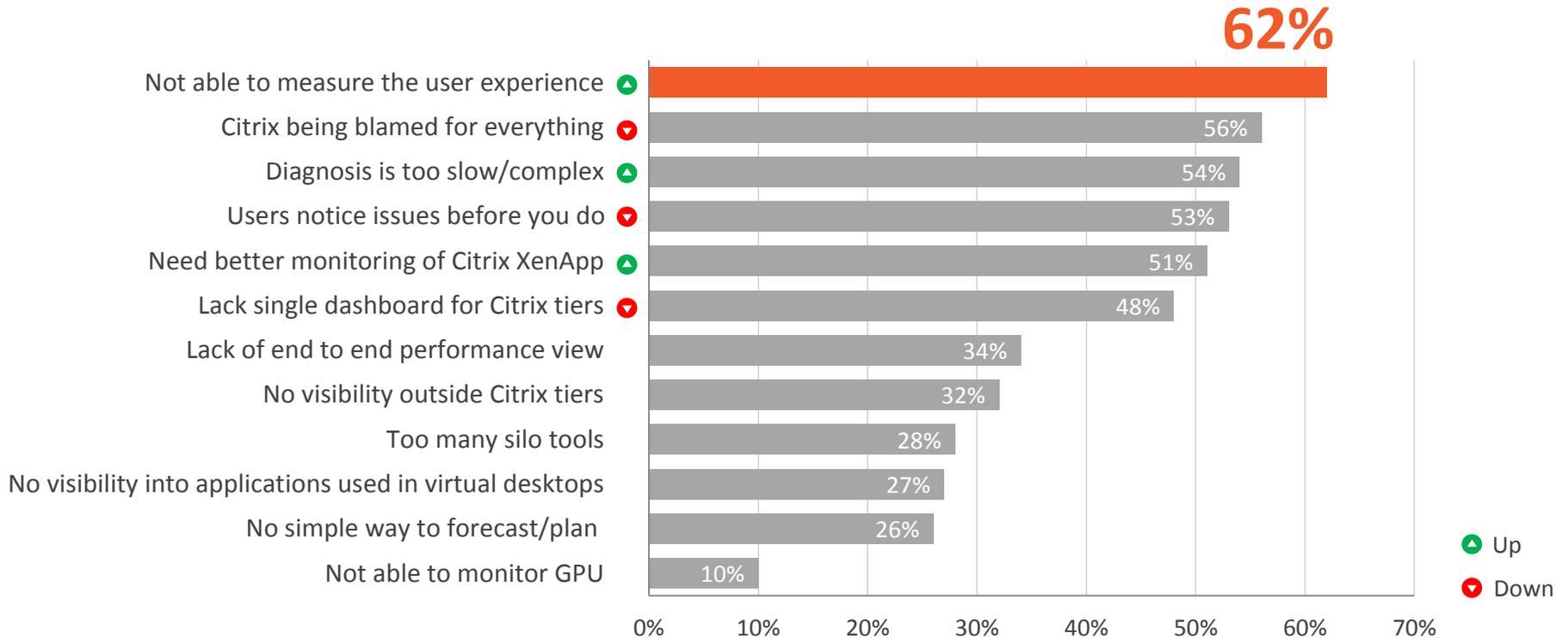
Over the years, Citrix’s product portfolio has grown significantly. Today, a Citrix admin has to handle Citrix NetScaler, XenApp, XenDesktop, XenMobile, XenServer, ShareFile, Provisioning services, StoreFront, etc. to name a few. All of these products have their own administration and monitoring console. So a Citrix admin or architect often has to review multiple consoles to get a handle on the usage and performance of their infrastructure.



Q16.

What are the biggest performance management challenges in your Citrix Infrastructure?

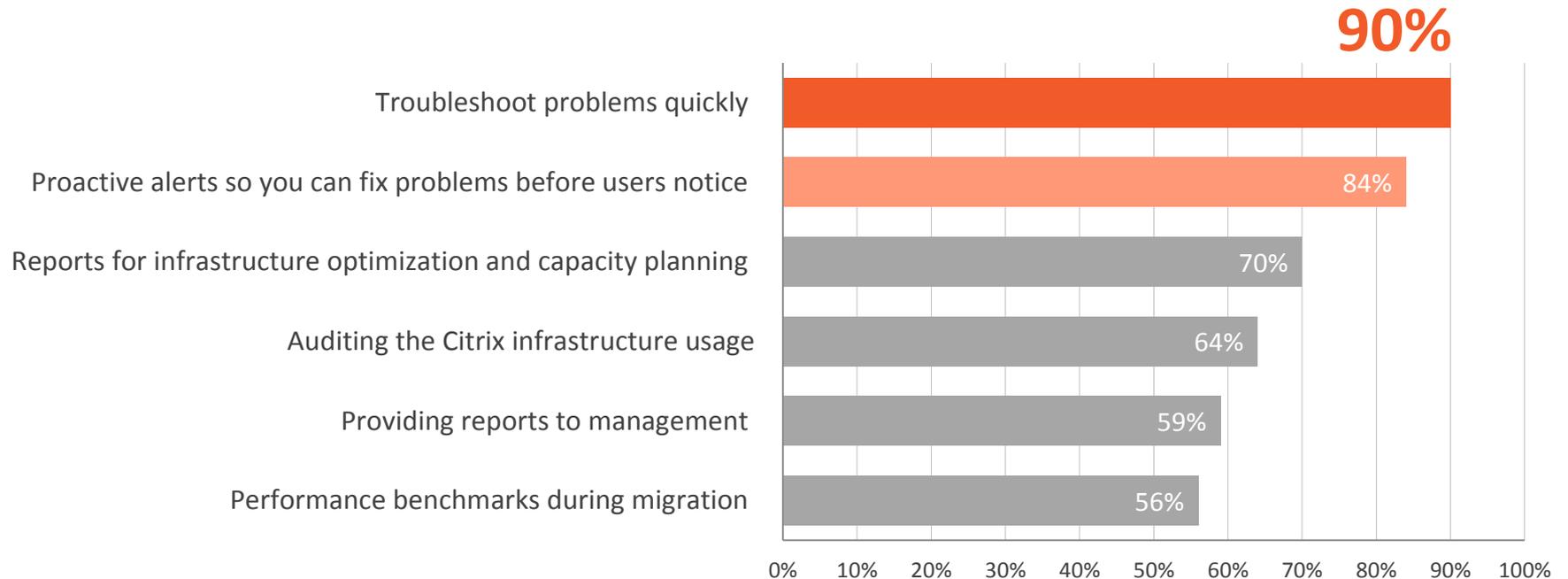
For years, Citrix admins have been saying that they are blamed for all issues. Interestingly, the biggest performance management challenge this year was not being able to measure the Citrix user experience. Citrix being blamed for everything was second, and slow and complex diagnosis was third. Despite 88% wanting a single dashboard for the Citrix tiers, this was not one of the top five challenges that Citrix admins face.



Q17. Why do you need Citrix performance management?

Citrix performance management has many uses – to detect and resolve problems, to be proactively alerted to issues, to generate compliance reports, for identifying opportunities for right-sizing and optimization, etc.

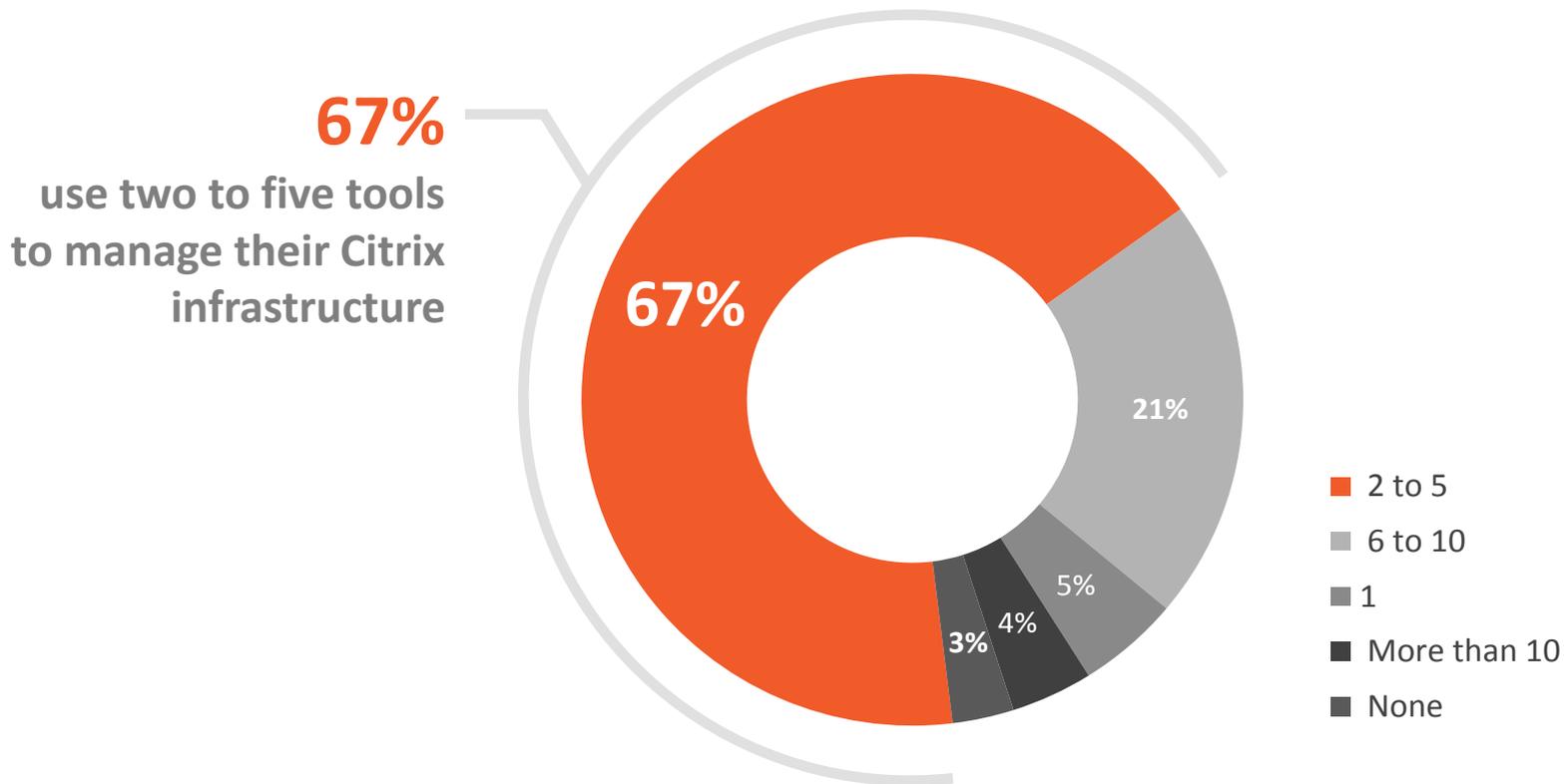
90% of respondents are using Citrix performance management tools to troubleshoot problems quickly. 84% are using them for proactive alerts. 70% are relying on these tools for reporting on the infrastructure.



Q18.

How many tools do you have to use to manage the performance of your Citrix infrastructure?

Lack of a unified console for monitoring the Citrix tiers means administrators have to use multiple tools for management. Furthermore, the performance of the non-Citrix tiers (virtualization, storage, Active Directory, etc.) can affect Citrix service performance. Hence, it is no surprise that our respondents have to use many tools for managing the performance of their Citrix infrastructure.

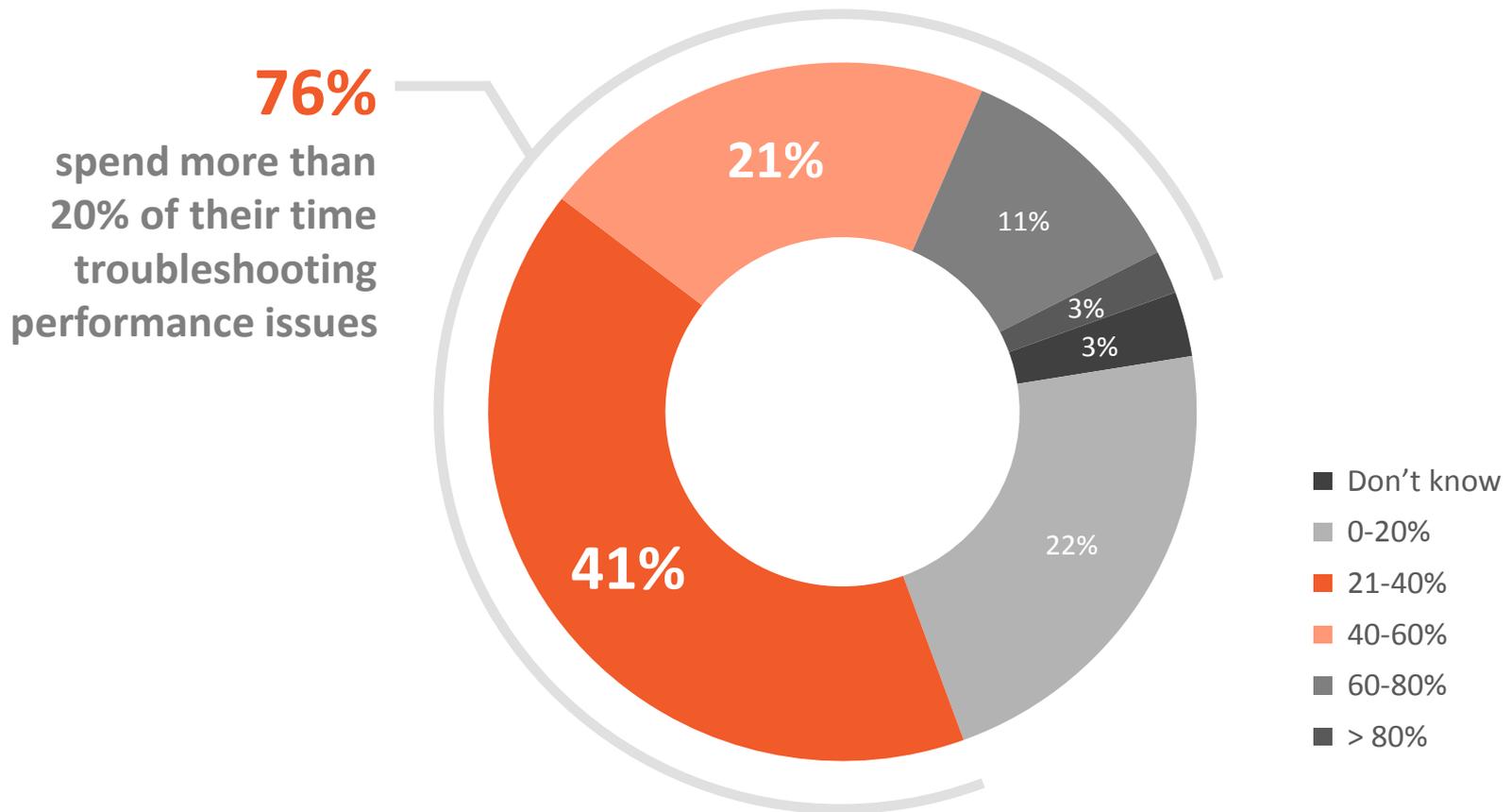


Q19.

What percentage of time do you spend on troubleshooting performance issues?

76% of respondents are spending more than 1 day a week troubleshooting performance issues.

35% of them are spending **more than 2 days a week** in troubleshooting.

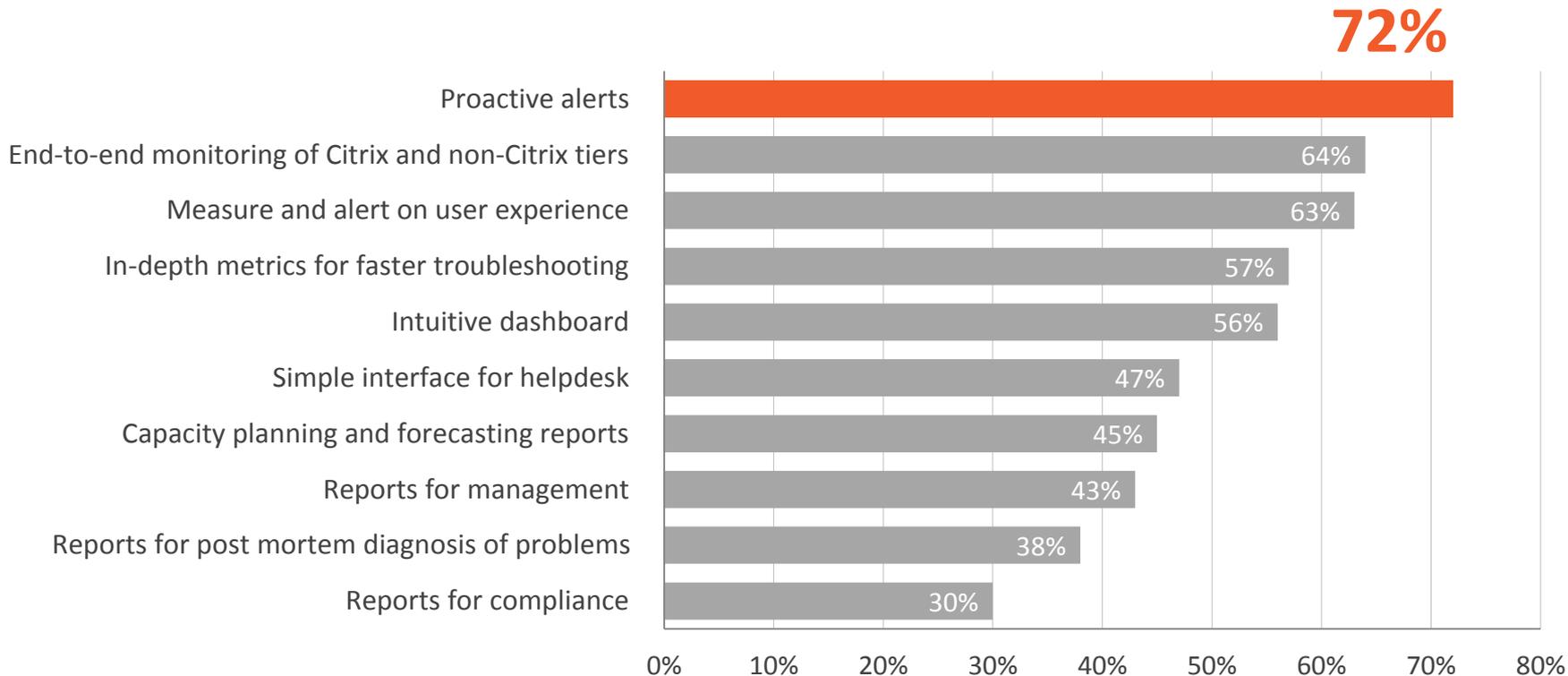


Q20.

What performance management features are most important for you?

72% of respondents want Citrix performance management to give them proactive alerts, so they can detect and address problems before users notice.

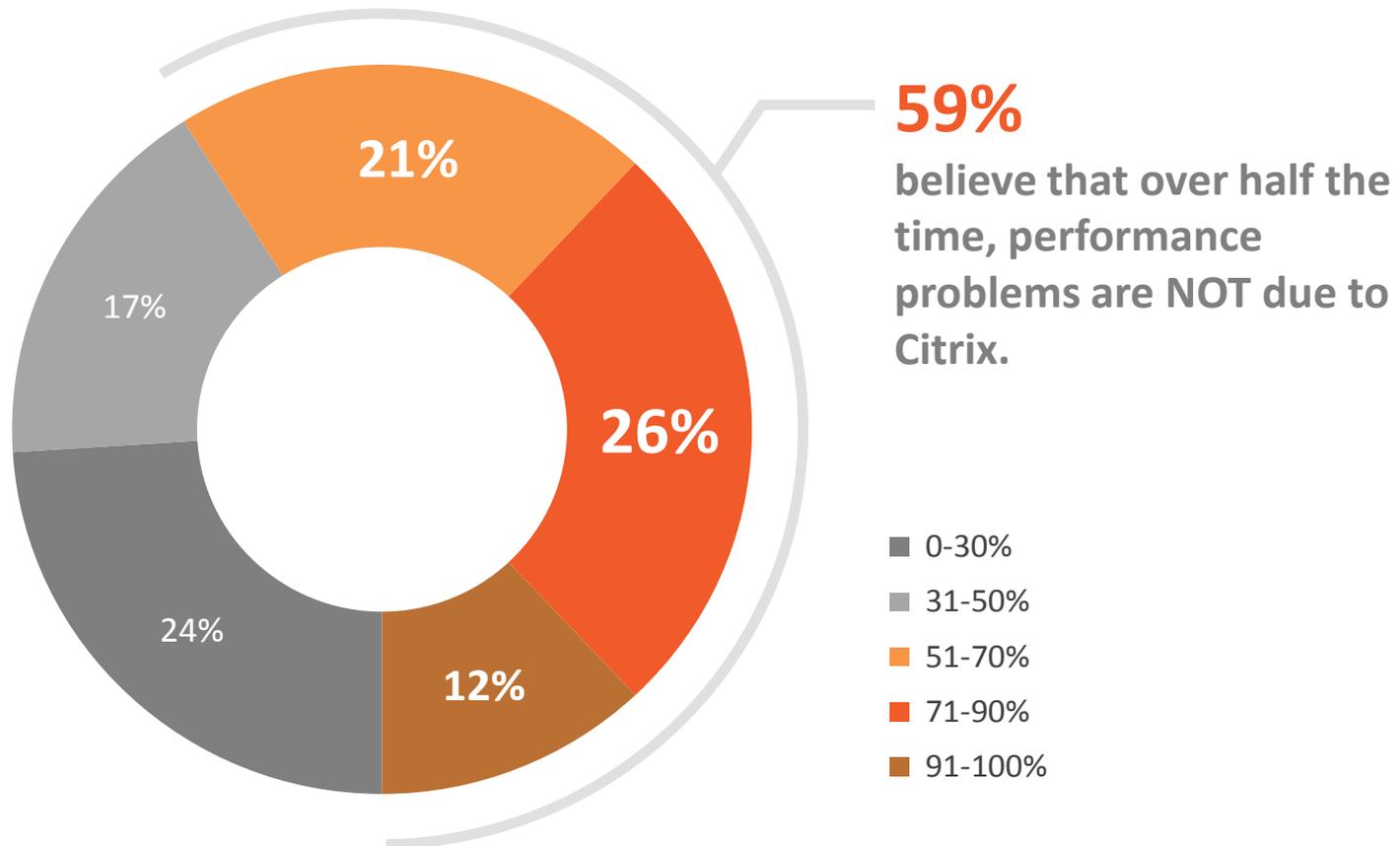
End-to-end visibility – of Citrix and non-Citrix tiers – is the second popular requirement. User experience monitoring is the third on the list.



Q21.

How often do users complain that “Citrix is slow” and you find out that the problem is not with Citrix but elsewhere?

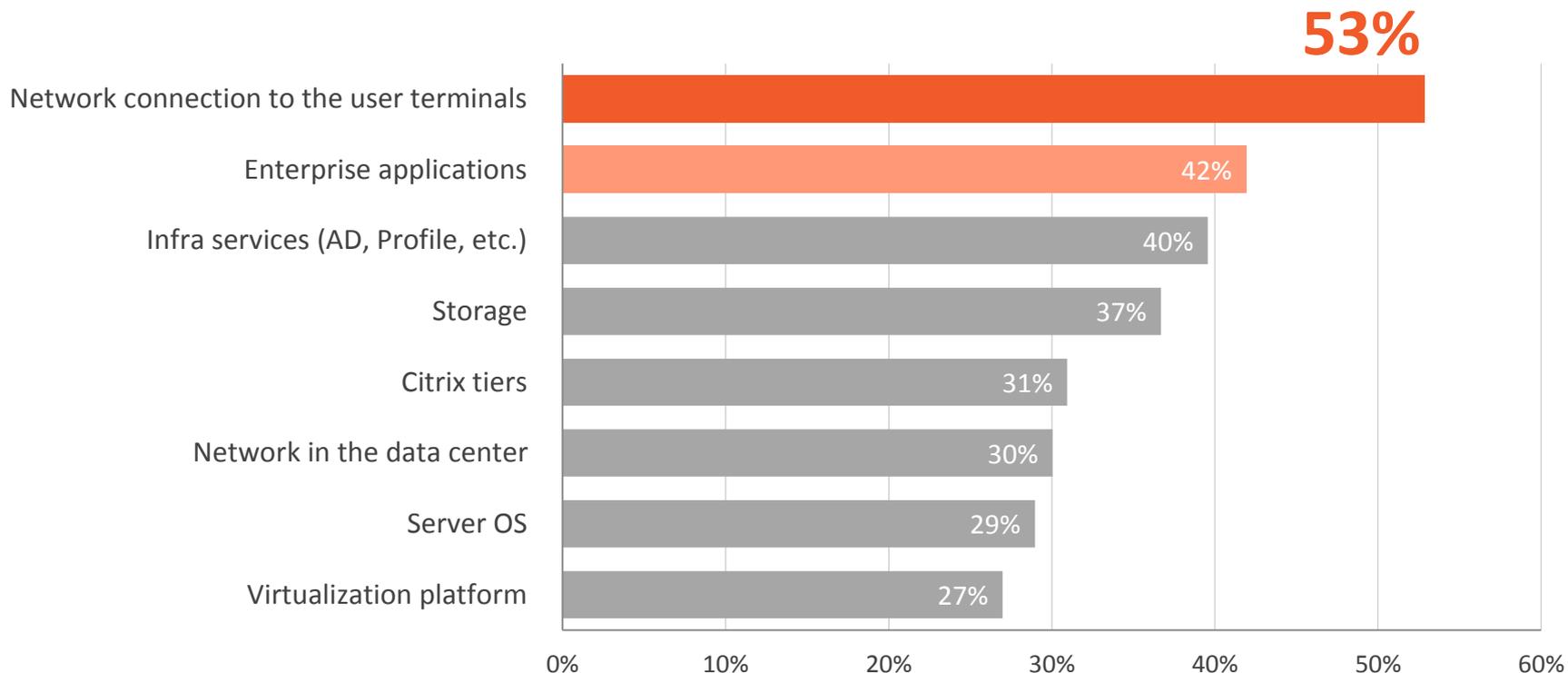
“It’s Not Citrix” is what most Citrix admins say when users complain that “Citrix is slow”. 59% of respondents feel that more than half the time, Citrix is not the cause of performance issues.



Q22.

When Citrix performance issues happen, where do most of these problems lie?

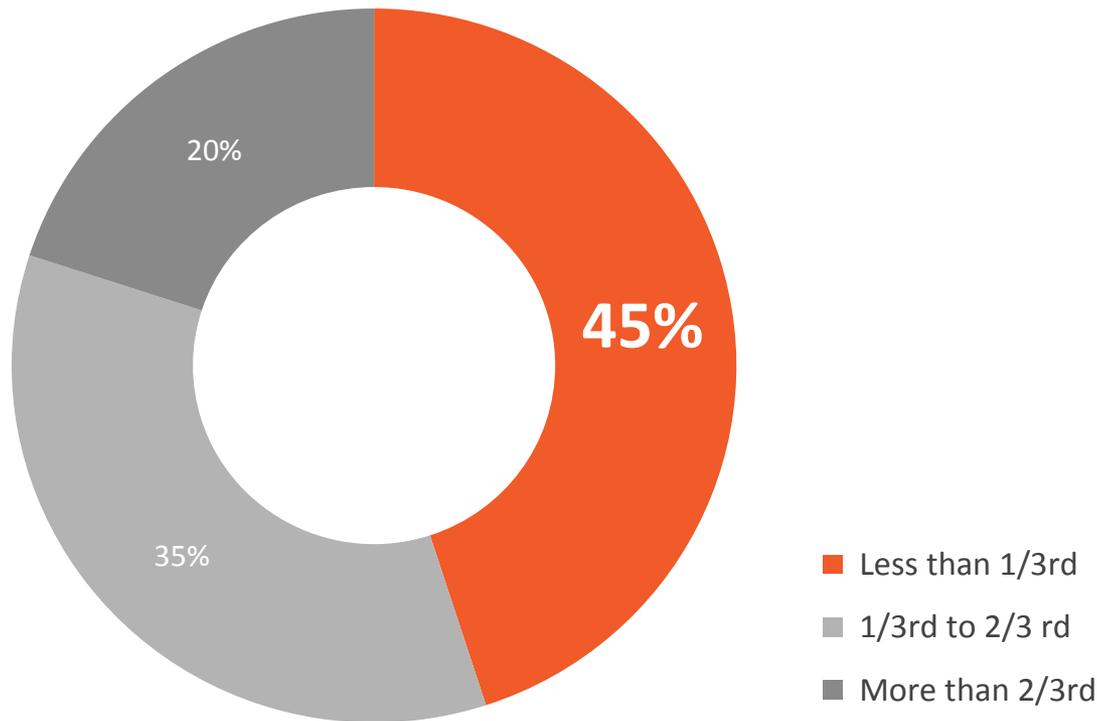
A user's network connection to the Citrix farm is the biggest reason for Citrix performance issues. Slowness with applications being accessed through Citrix is the second biggest reason, while infrastructure services like Active Directory and Profile services rank third. Our respondents believe that less than 1/3rd of the time, one of the Citrix tiers is responsible for performance issues.



Q23.

How often is your helpdesk able to resolve Citrix performance complaints or direct the problem to the right domain expert?

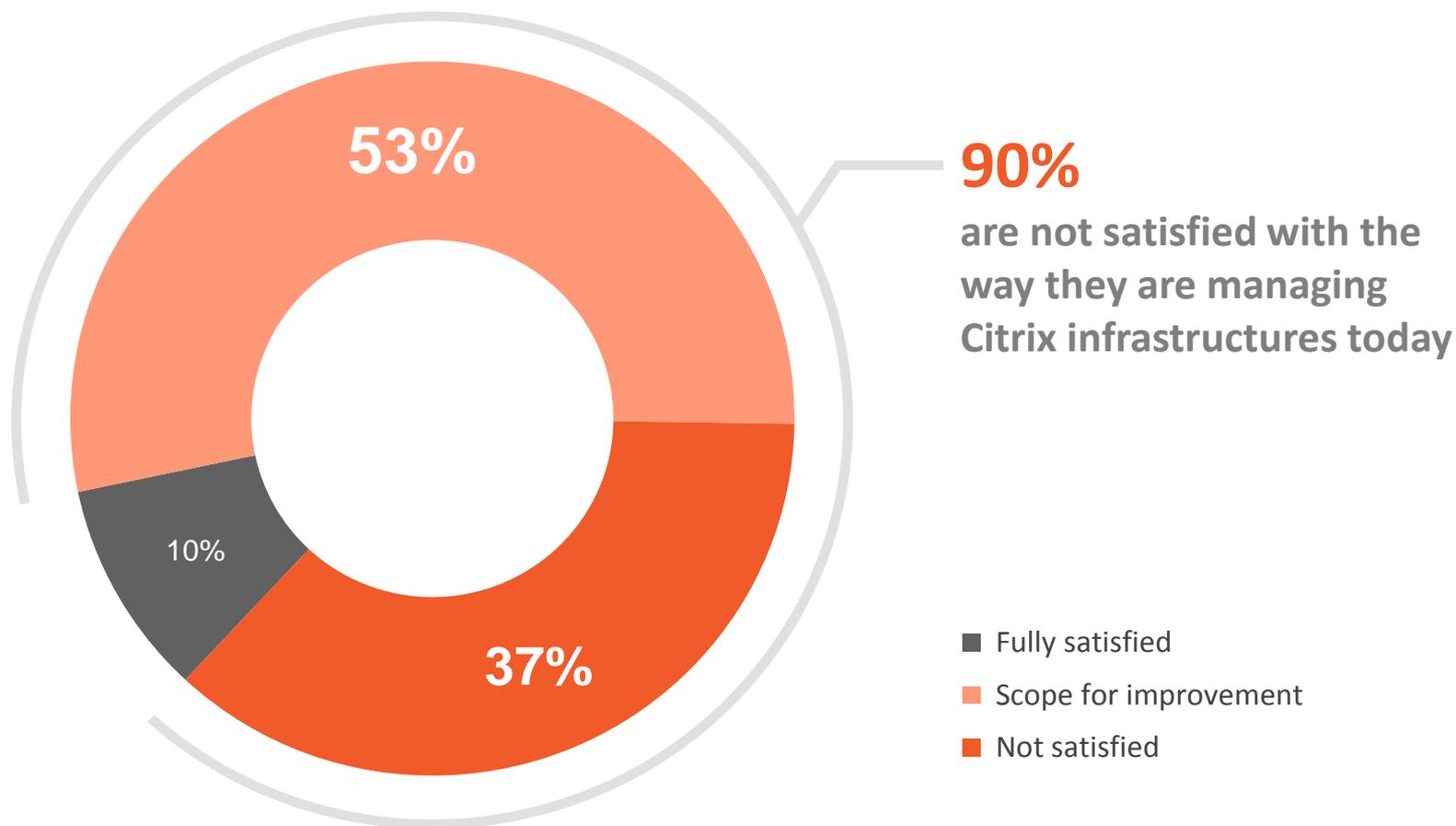
Enterprise helpdesks are often overwhelmed by the complexity of Citrix infrastructures. Almost half the respondents believe that less than 1/3 of the time, helpdesk staff are able to resolve problems or take the right action.



Q24.

Are you satisfied with the way your Citrix infrastructure is being monitored and managed?

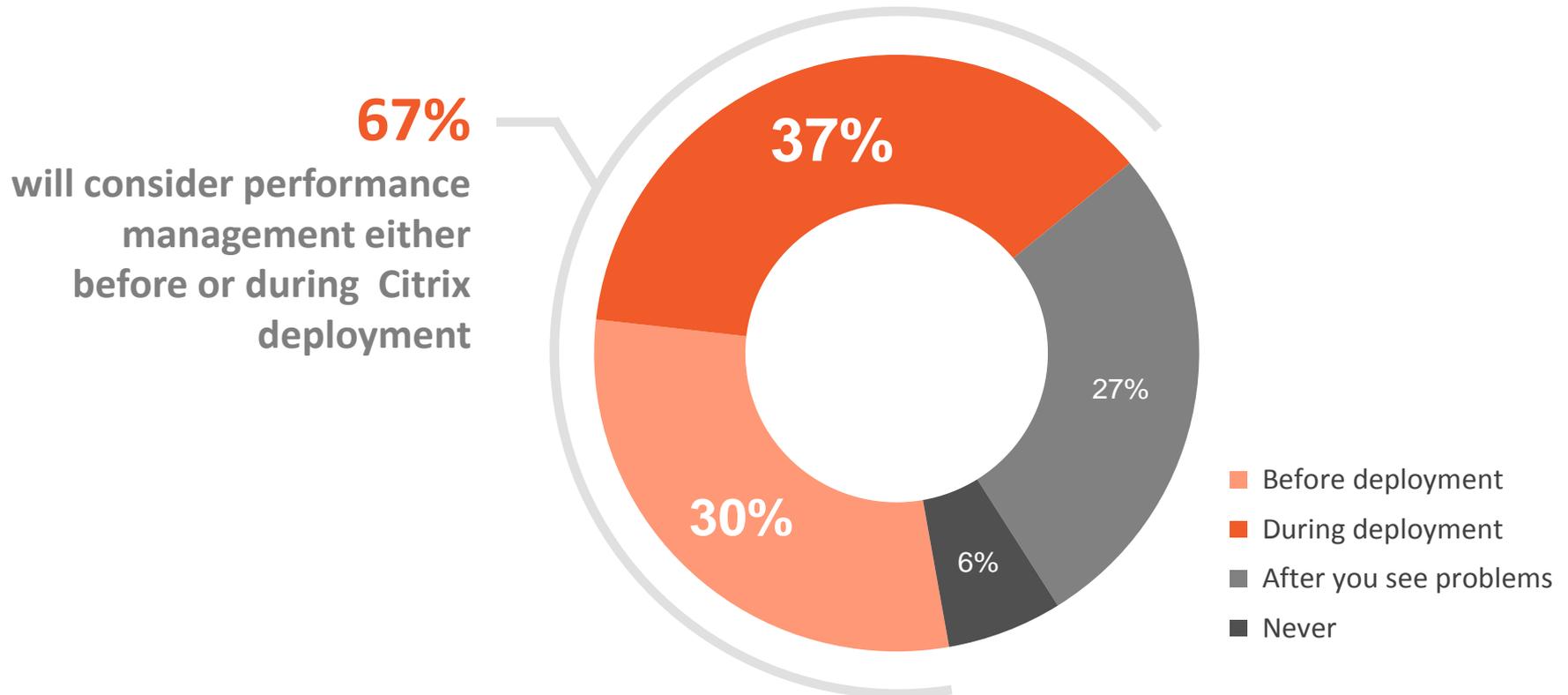
Only 10% of respondents are satisfied with the way their infrastructure is being managed today.



Q25.

When in the deployment lifecycle will you consider implementing a Citrix performance management solution?

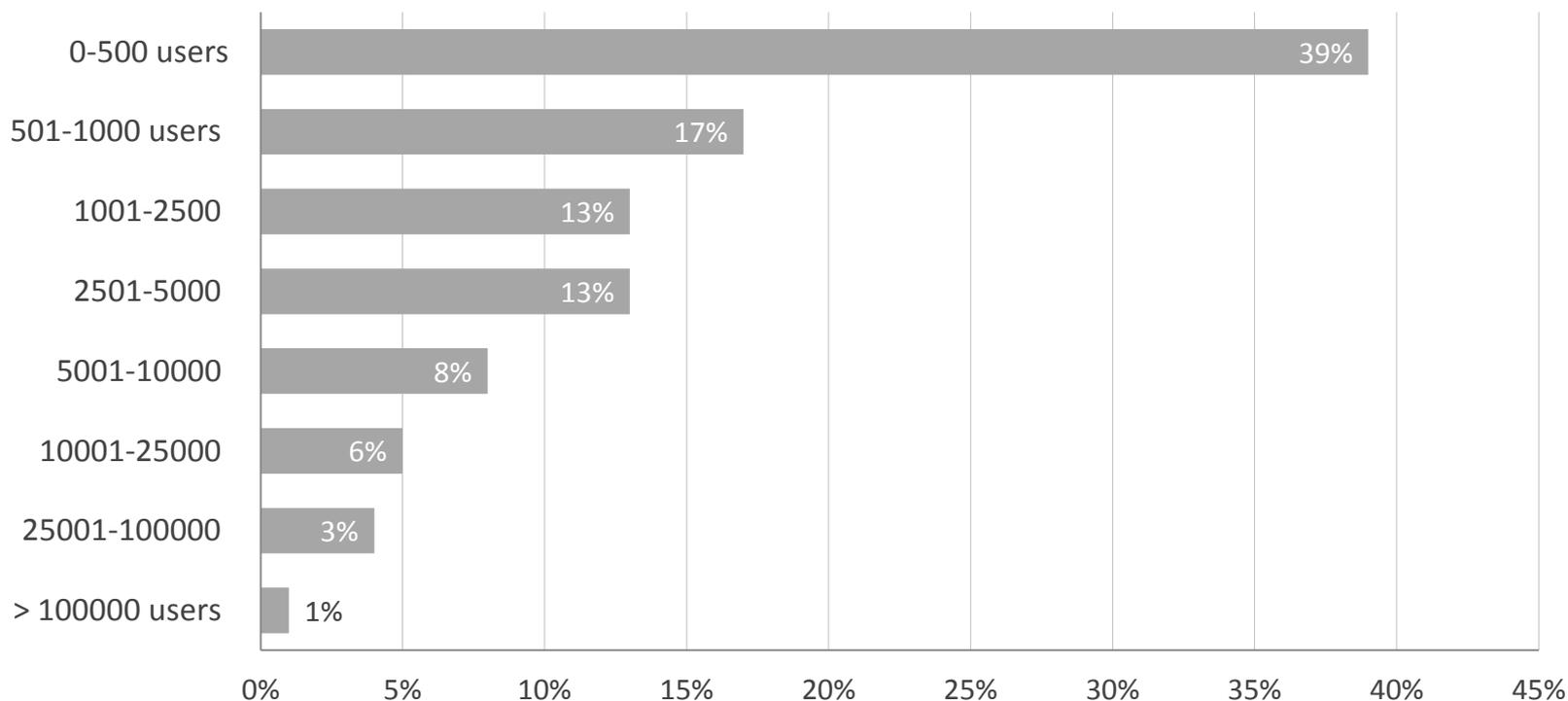
The growing awareness of the need for Citrix performance management is apparent from the answer to this question. 30% of respondents are proactive – they will choose a Citrix performance management solution before the deployment. 27% are reactive – they will look at performance management only after they see problems.



Q26.

How many concurrent Citrix XenApp/XenDesktop users do you support in your infrastructure?

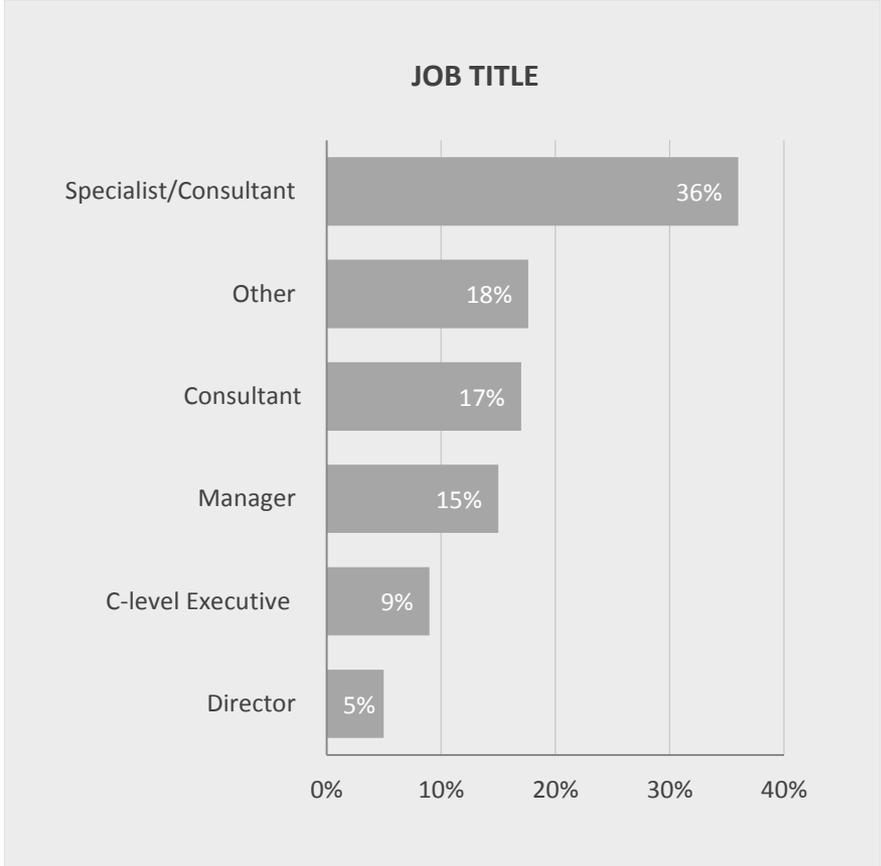
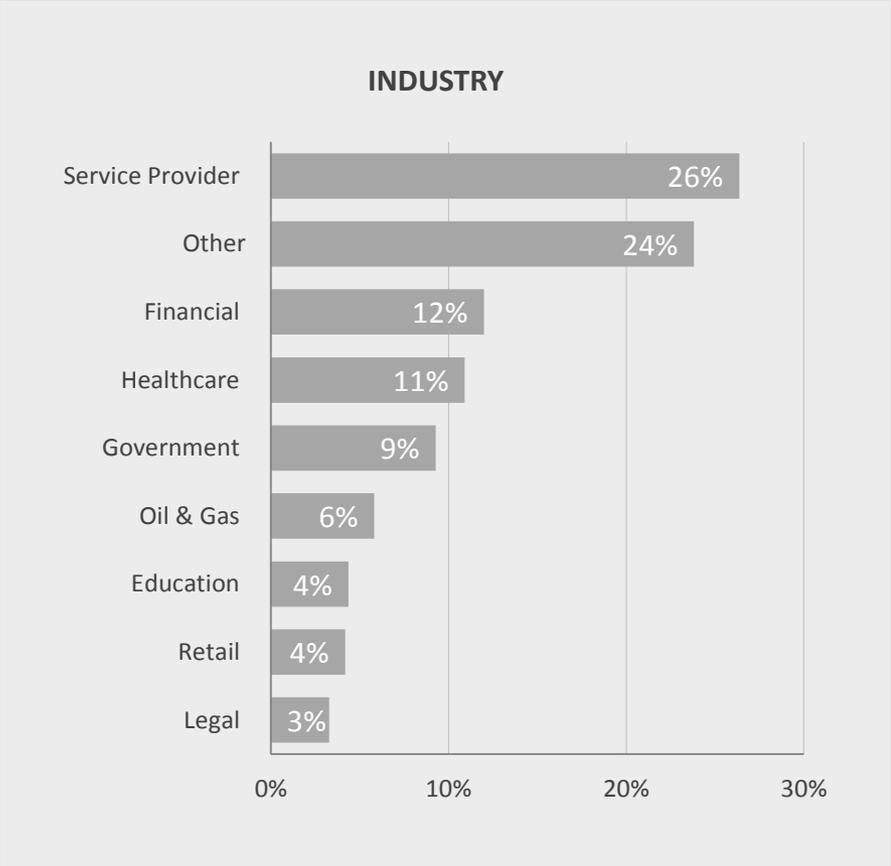
- 39% of our respondents support less than 500 concurrent Citrix users. The median is in the 501-1000 user band.
- 51% had between 501 and 10000 concurrent users
- 18% have large infrastructures with over 5000 concurrent users.





Demographics and Methodology

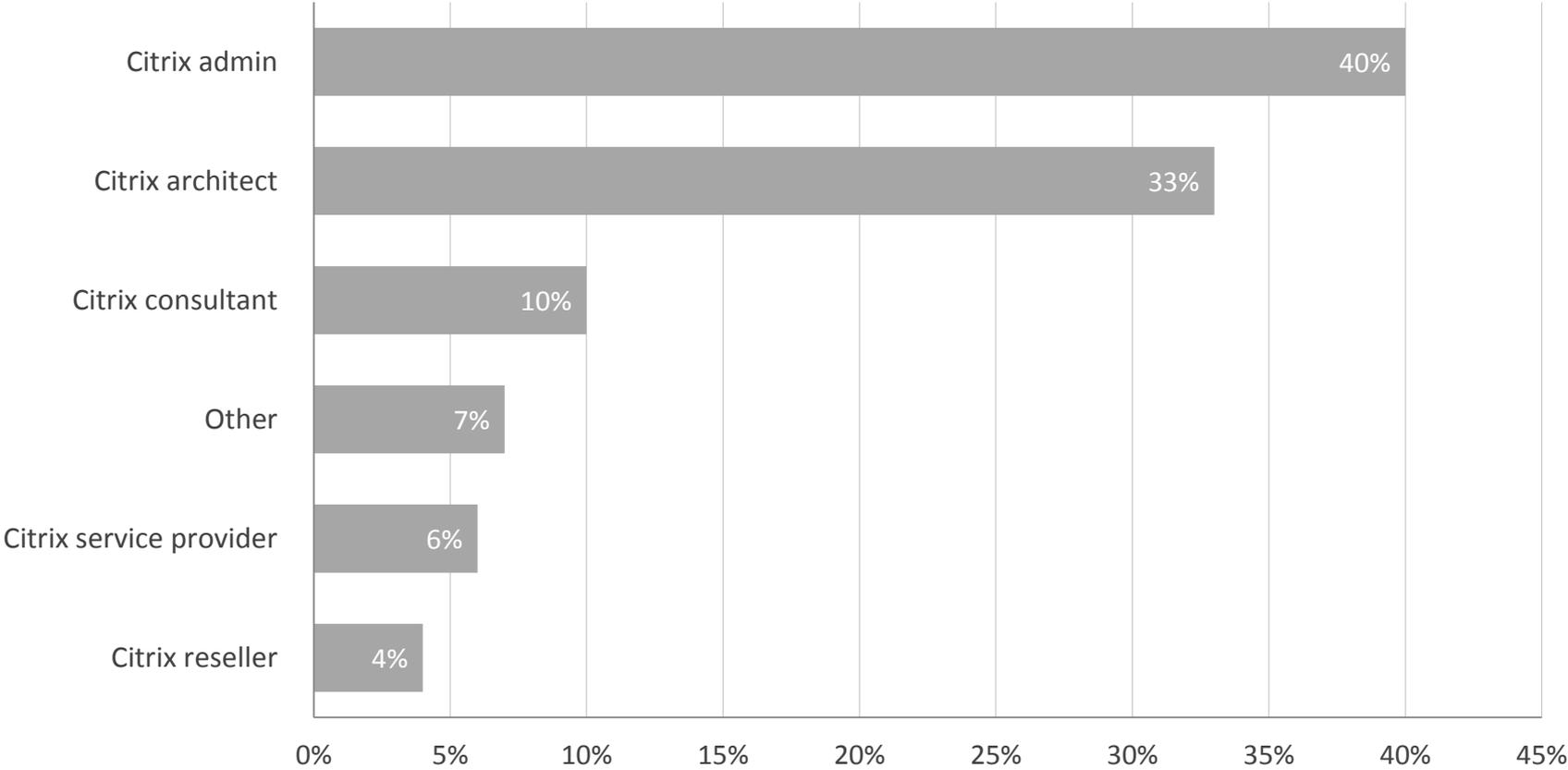
This survey was conducted from November 2015 to January 2016 and 750 Citrix professionals filled out this survey.





Respondent Profiles

Majority of our respondents were Citrix admins and architects.





About DABCC



DABCC.com was founded in 1999 with one driving goal, to provide IT professionals the web's best virtualization and cloud news and support resources, in one well organized place, so the IT pro is not required to spend hours finding it on their own. The history of the company actually begins on January 12, 1999 when DABCC's Founder, Douglas Brown brought online the DABCC.com web page focused on sharing Windows NT and early Citrix WinFrame resources to his friends and, in his words, "Anyone else who is as excited about all this stuff as I am!". Over the next 14 years, DABCC.com has grown to be one of the most popular sites on the web today, serving millions of visitors a year with pertinent information ranging from articles to white papers, software downloads, webinars, on-demand multimedia (videos and podcasts) and much more. DABCC focuses on serving the Citrix, VMware, Microsoft community and associated vendor ecosystem.

Our Mission:

"To create a, well organized, destination to allow IT Professionals and their management to easily find the web's very best virtualization and cloud computing industry resources, each and every day!"

For more information, visit www.dabcc.com.



About eG Innovations



eG Innovations provides end-to-end performance management for today's Citrix-driven enterprise, with the industry's only fully automated, virtualization-aware issue diagnosis and prevention solution, eG Enterprise. Through complete REACH across all tiers of the IT infrastructure, unequalled DEPTH of visibility into each layer of the virtualized and physical components, and superior SPEED to issue resolution via automated diagnoses, eG Enterprise is the definitive toolset for the successful management of mission-critical IT service delivery. Beyond just monitoring, eG Enterprise offers IT departments in any industry the power of infrastructure-wide performance intelligence that delivers immediate, actionable answers to user-experienced slowness, no matter where the issue originates. For more information, visit www.eginnovations.com.



LIVE DEMO

Request a personal walkthrough to learn first hand how [eG Enterprise](#) can help improve performance and operations in your business environment.



FREE TRIAL

15-days of free monitoring and diagnosis, in your own infrastructure. Try it and learn exactly how eG Enterprise helps you ensure a great end-user experience and improve IT operations.



VIDEO OVERVIEW

Watch this brief introductory video to learn about [3-D Citrix monitoring with eG Enterprise 6.1](#).



DATA SHEET

Learn what's new in [eG Enterprise 6.1 for Citrix](#): GPU resource monitoring, Citrix User Experience monitoring, NetScaler monitoring and more.



WHITE PAPER

Performance Monitoring for Your Citrix Infrastructure: Considerations and Checklist – The definitive resource for researching and comparing Citrix performance management solutions



CASE STUDY

Learn how [St. Charles Health System](#) has relied on eG Enterprise's unified performance management to ensure successful IT transformation projects and top Citrix performance for clinical users.

LEARN MORE ABOUT eG ENTERPRISE FOR CITRIX