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ENABLING TODAY'S DIGITAL WORKFORCE WITH DESKTOP-AS-A-SERVICE

The Benefits of Cloud Desktops as Part of a Modern End-user Computing Strategy

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Executive Summary

As traditional desktop challenges continue to linger, ESG continues to see a healthy adoption of DaaS. Given these dynamics, ESG research further explored:

- The current and planned usage and benefits of DaaS.
- Challenges associated with managing traditional, full-featured desktop devices.
- Challenges organizations have experienced with respect to their VDI deployments.
- The comparison of the security of DaaS and cloud desktops with traditional desktop security.
- The benefits organizations expected to achieve with VDI that haven't materialized or haven't materialized to the degree expected.

The ESG research results validate that businesses want a modern and secure desktop, application, and data delivery strategy that reflects the reality of how users work and can keep up with the rapid change of business applications and devices, without amplifying the management and security burden that already weighs heavily on IT shoulders. The research also exposes that DaaS possesses the unique combination of attributes that appeals to businesses across industries: improved time to value, cost reduction, and enhanced security.

Supporting the Past While Embracing the Future

Businesses across industries are striving to achieve a long-standing goal of securely delivering applications and data to their users. At times, this can seem daunting since organizations are in a constant state of flux as mobile devices and SaaS applications are pushing outward to expand the security perimeter. The only constant that IT professionals and business leaders can predict is change itself.

The ubiquitous, predictable desktop landscape of the past is transforming into a dynamic end-user computing environment shaped by, and incorporating, intelligent voice assistants, artificial intelligence, and mixed reality technologies, all of which are proving to be viable in the workplace. However, legacy applications and firmly entrenched business processes are not about to disappear with the flip of a switch. Given this current state of change, organizations must modernize based on a realistic mindset that includes the understanding that the business is not going to become fully SaaS or fully mobile overnight, but which acknowledges that end-users' computing environments must begin to take advantage of the benefits of the cloud.

So how can businesses embrace modern workstyles, mobile applications, and unending device proliferation while maintaining a strong security posture and highly productive user environment? This ESG Research Insights Report will explore the challenges of traditional desktops, examine the ongoing attempts to employ VDI as "the" solution, and the value of Desktop-as-a-service (DaaS).

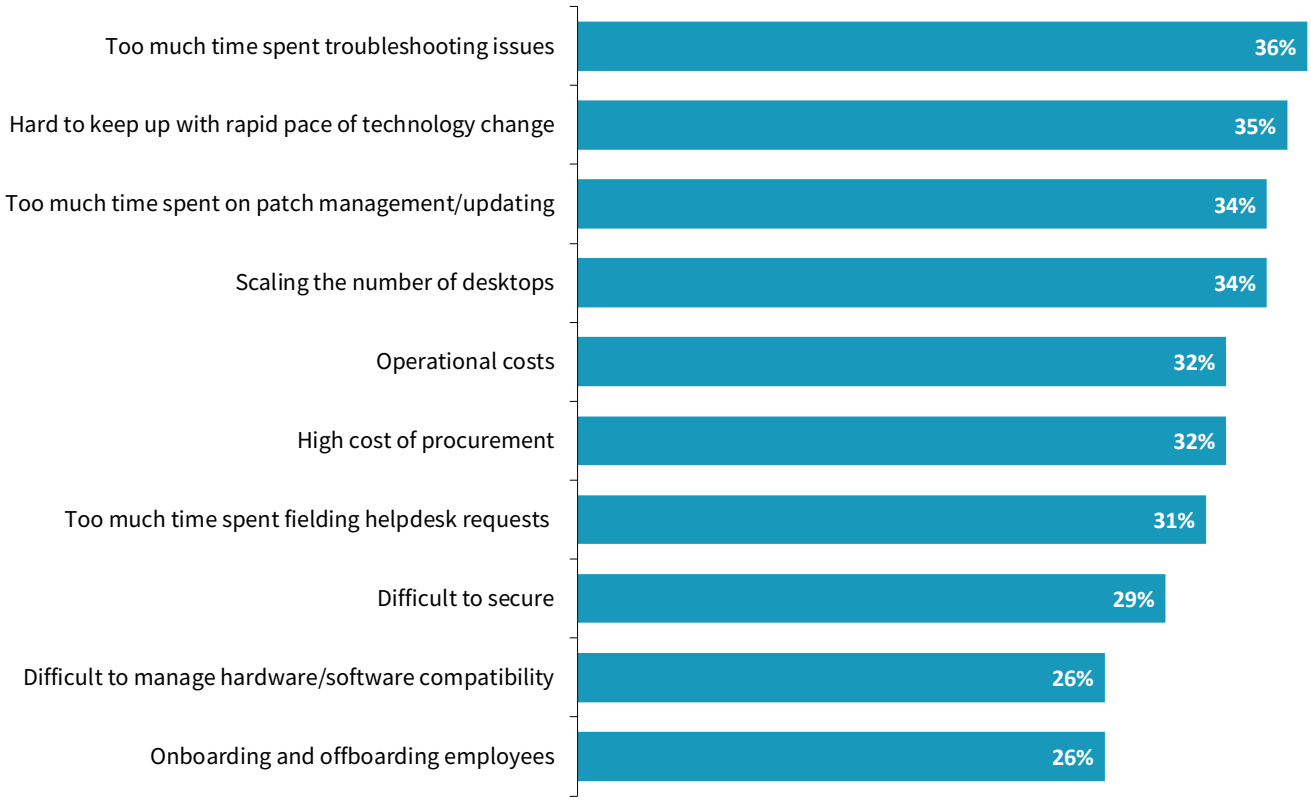
Acute Anguish with Traditional Desktops

Traditional desktop delivery and management has been a thorn in the side of businesses for many years. Teams of IT professionals have been in a continuous chase to keep up with application compatibility issues, software updates, security patches, performance concerns, and scores of helpdesk requests from its users. The results, as evidenced by ESG research (see Figure 1), show that too much time is expended by IT professionals supporting and managing the environment; keeping up with the rapid pace of change is difficult; and IT professionals are struggling to lower operational costs and effectively manage the high costs of procurement.[1] As a result, managing traditional desktops has been focused more on keeping the lights on, rather than creating value-add services for end-users. The means and methods of supporting these traditional environments has been less than ideal, creating a sense of urgency to search for a better way.

Traditional methods are less than ideal as IT attempts to keep pace with application compatibility issues, software updates, security patches, performance concerns, and scores of helpdesk requests from its users a better way

Figure 1. Managing Traditional Desktops is Time Consuming, Expensive, and Doesn't Add Value

Which of the following challenges do you associate with managing traditional, full-featured desktop devices? (Percent of respondents, N=250, multiple responses accepted)



Source: Enterprise Strategy Group

[1]All data represented in this report is from ESG Custom Research Conducted on behalf of AWS in August 2018, unless otherwise noted.

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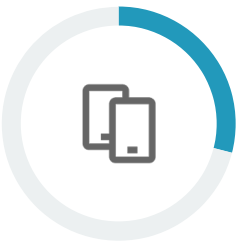
While some in the industry continue to predict that "this is the year of VDI," this prediction has never come to fruition for a number of reasons, including:

37%

report VDI has resulted in complex image management

34%

cite poor user experience with VDI



29%

noted user dissatisfaction with device/application flexibility/privacy

Source: Enterprise Strategy Group

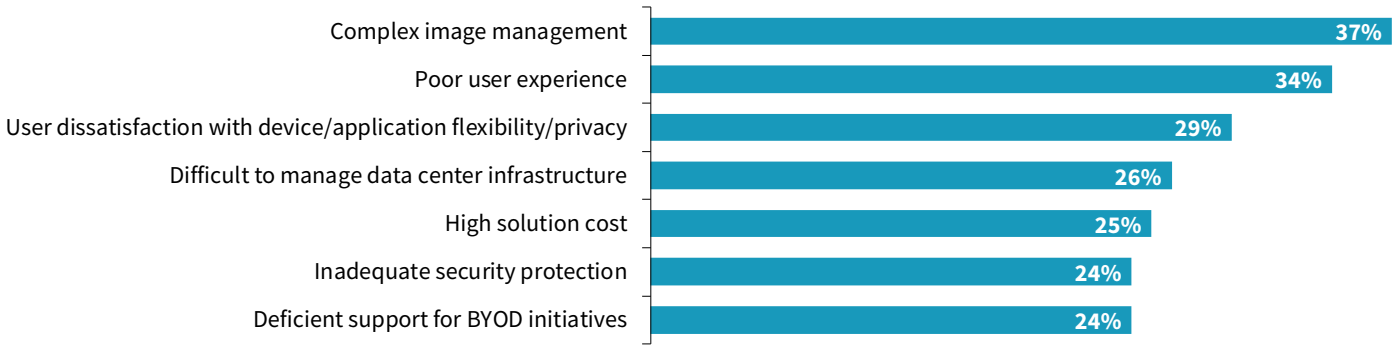
The Limited Success of VDI

Many businesses have experimented with and deployed VDI for niche use cases to help squelch some of the pain and bring predictability to the end-user computing environment—but these attempts have been met with new challenges created by VDI. While some in the industry continue to predict that "this is the year of VDI," this prediction has never come to fruition for a number of reasons. Based on ESG research, 37% of VDI users report VDI has resulted in complex image management, while 34% cite poor user experience, and 29% noted user dissatisfaction with device/application flexibility/privacy (see Figure 2). It is worth noting that all of the VDI users ESG surveyed reported at least one significant challenge.

Essentially, VDI has become a temporary band-aid for some businesses but has not achieved broad adoption. Ultimately, IT must still own and operate a complex, costly solution that brings a host of challenges with it, limiting the technology's value to businesses.

Figure 2. VDI Users Report a Variety of Challenges

Which of the following challenges has your organization experienced with respect to its VDI deployment?
(Percent of respondents, N=160, multiple responses accepted)



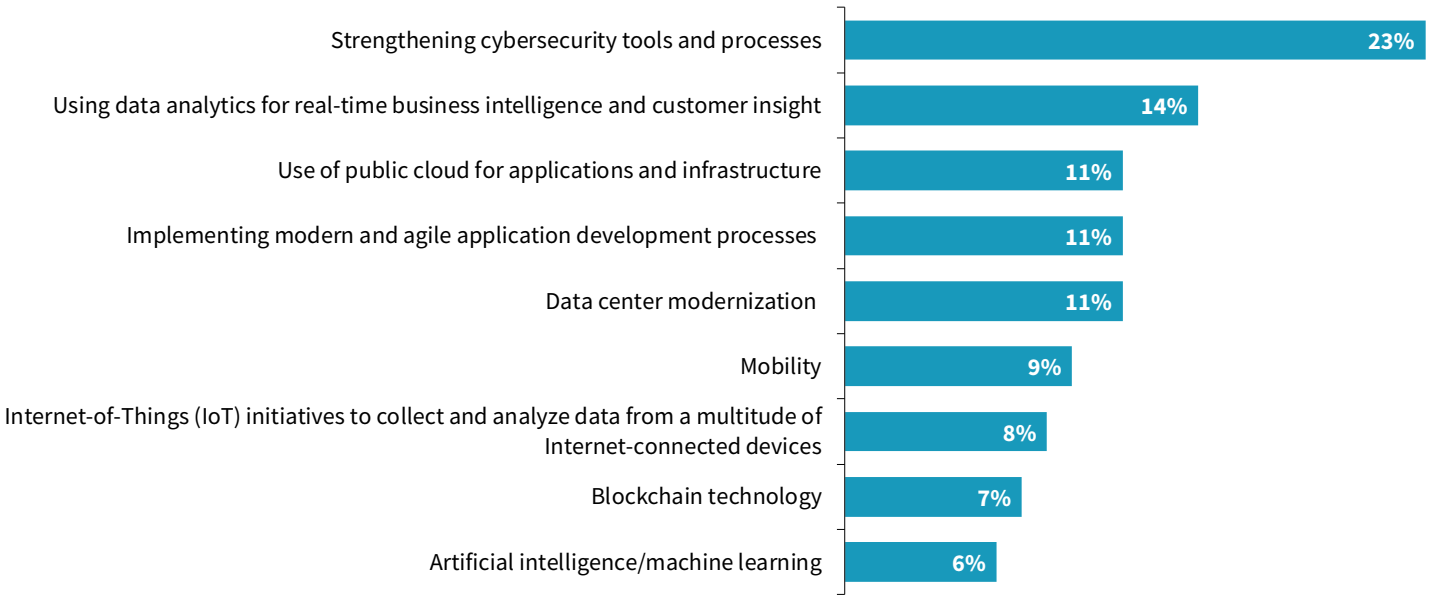
Source: Enterprise Strategy Group

Intensified Security Priorities Amplify the Opportunity for a Modernized Approach

ESG's research also shows that strengthening cybersecurity is most frequently cited as the IT initiative that is most important for organizations today. In fact, 2018 is the fourth consecutive year that cybersecurity has garnered this much focus from organizations (see Figure 3). This should come as no surprise given the thousands of data breaches reported by U.S. companies and government agencies in 2017, as well as the alarming rate of attempted ransomware attacks over the last 12 months.[2]

Figure 3. Strengthening Security is the Most Important Initiative for 2018

Which of these initiatives will be the most important for your organization over the course of 2018? (Percent of respondents, N=651)



Source: Enterprise Strategy Group

[2]Source: ESG Research Report, *2018 IT Spending Intentions Survey*, February 2018.

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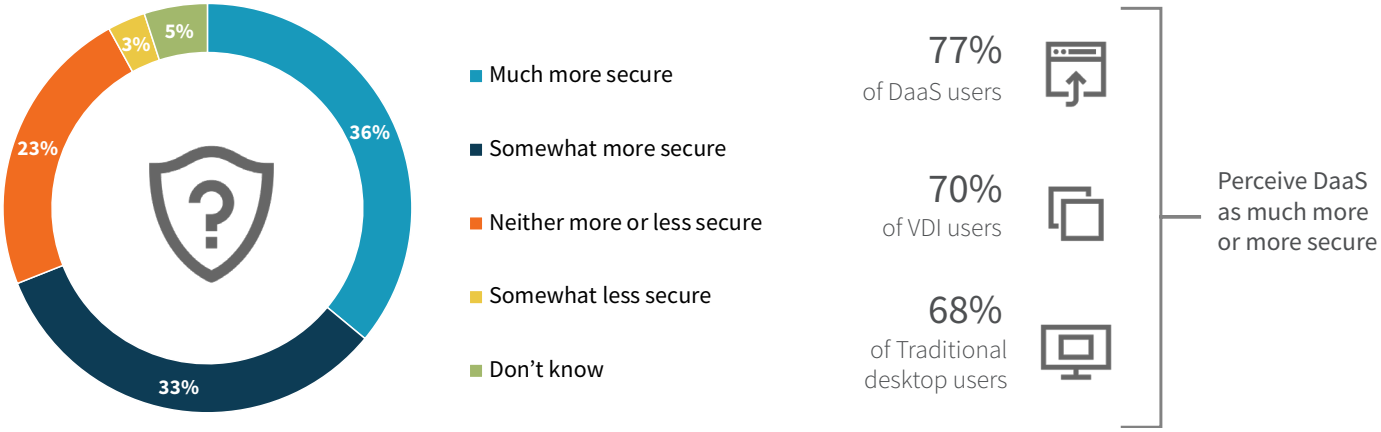
Desktop-as-a-service (DaaS) Viewed as Fundamentally More Secure

With security a top concern and investment area for businesses, ESG believes it is important to note that a large proportion of respondents (69%) view DaaS (a scenario where desktops are outsourced to a third-party and delivered as a cloud service along with their associated apps) as a fundamentally more secure desktop delivery method compared with traditional desktops. Moreover, respondents who actually use DaaS today are much more apt to hold that belief (77%). This overwhelming response provides evidence that businesses needing to establish more control of their end-user computing environment, while also capitalizing on the benefits of cloud services, should explore DaaS offerings (see Figure 4).

Figure 4. DaaS is Viewed as a More Secure Desktop Delivery Method

Based on either your own usage, or what you know about DaaS/hosted desktops, how would you compare the security of DaaS/hosted desktops to traditional desktops? (Percent of respondents, N=250)



Source: Enterprise Strategy Group

Given that DaaS offerings are being mapped to a more secure security posture, businesses have the opportunity to explore where existing traditional desktop delivery methods may be exposing risk. Additionally, there is an opportunity to create a tapestry with existing VDI and DaaS offerings to craft a modernized delivery approach while addressing security priorities.

VDI Fails to Deliver on Cost, Manageability, and Flexibility Promises

For a modernization effort to succeed, it's imperative to address management strategy and cost profile. For example, organizations may need to manage a global deployment of many thousands of user environments as they rapidly provision and deprovision desktops as the workforce changes. VDI has attempted to target improved management and drive down costs but has fallen short on its expectations.

Nearly one-third (31%) of VDI users shared that the top benefit they expected to receive but have not yet been able to achieve is reduced IT operational expenses associated with supporting end-users/endpoint devices. The disappointment continues with respondents sharing that reduced capital expenses, simplified deployments/upgrades, and simplified desktop provisioning are all areas that fell short of their expectations (see Figure 5). To summarize, many VDI users report user support is still time consuming and the burden of operating the solution's underlying infrastructure is still a source of pain.

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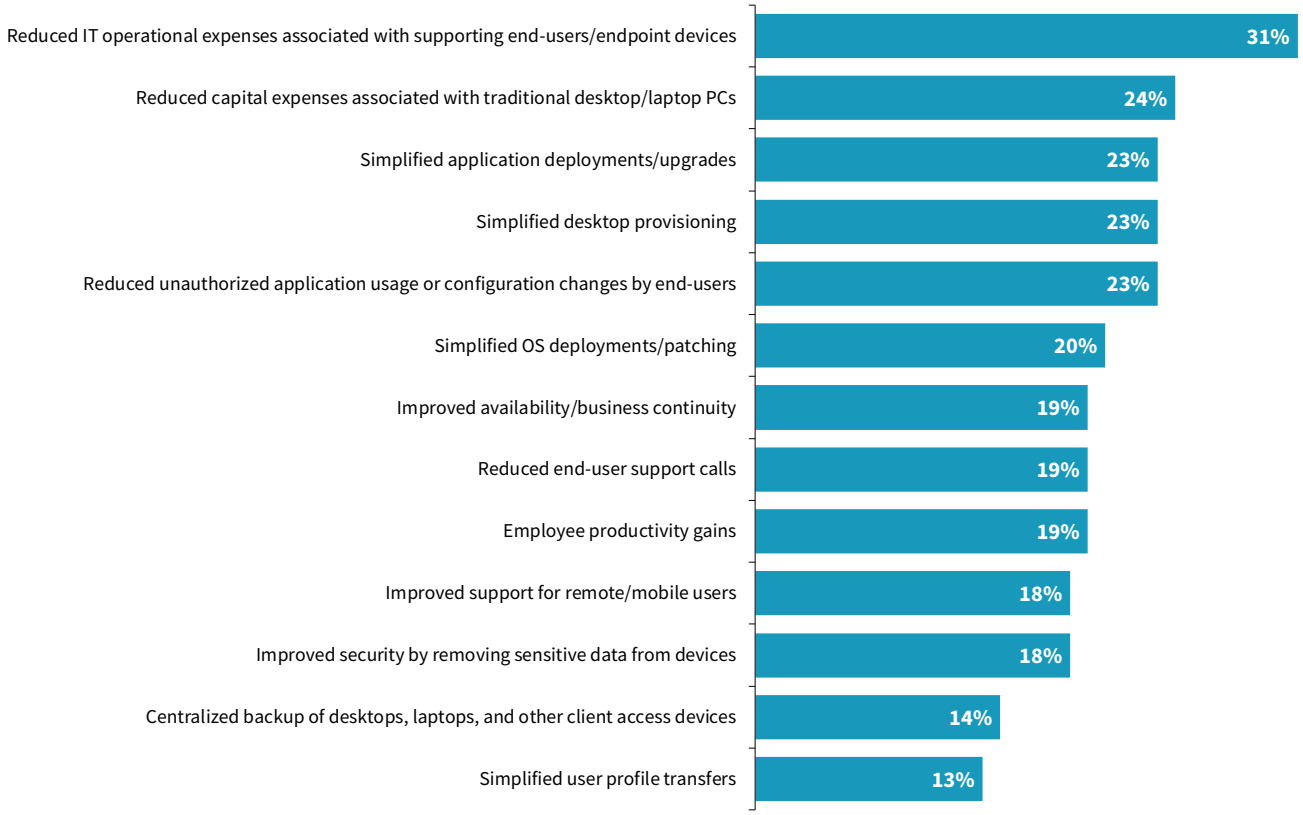
Figure 5. Where VDI Benefits Fall Short of Expectations

Regardless of any benefits achieved via VDI, are there any benefits your organization expected to achieve that it hasn't, or hasn't to the degree expected? (Percent of respondents, N=160, multiple responses accepted)



Source: Enterprise Strategy Group

The results? Businesses want the flexibility to support the current state of end-user computing while maintaining optimal user experience and a productive setting in which to work. Traditional desktop methods have fallen short of expectations, while VDI has tried to help mitigate some of the pain on a limited basis. The failure and limited success of both VDI and traditional desktop environments have ultimately paved the way for the budding success of DaaS.

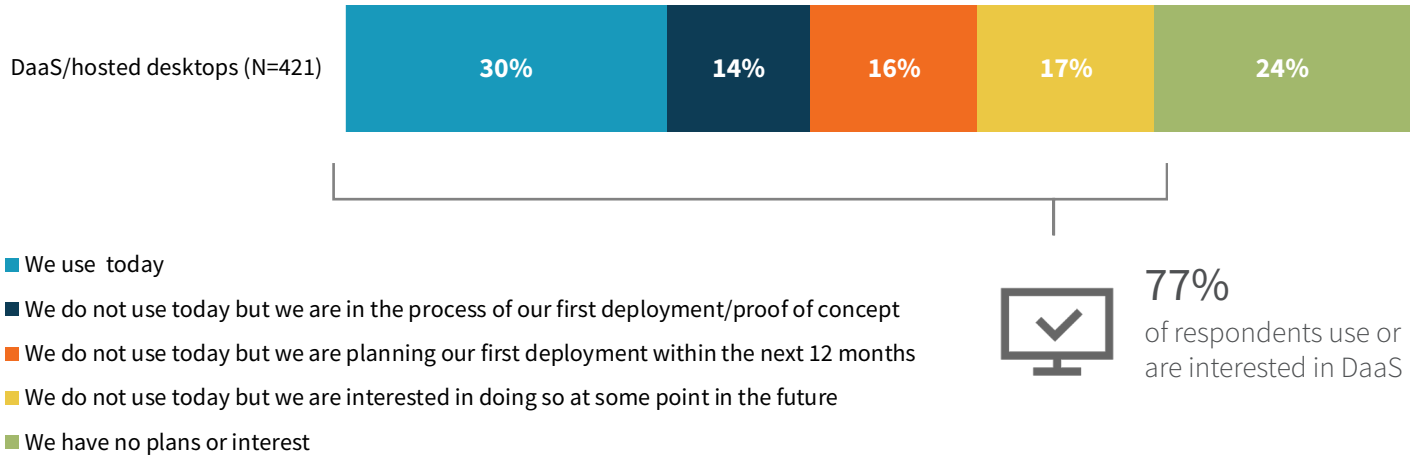
Businesses want the flexibility to support the current state of end-user computing while maintaining optimal user experience and a productive setting in which to work.

DaaS: A Modern Approach with Broad Business Applicability

The momentum of DaaS is healthy, and the growing adoption and interest in DaaS is difficult to ignore. In fact, ESG research shows that more than three quarters (76%) of organizations currently use or are interested in DaaS. Given the aforementioned challenges with traditional desktops and VDI, as well as organizational prioritization of cloud technologies, DaaS has presented itself as viable means to deliver the utility of an end-user computing environment with a modern approach (see Figure 6).

Figure 6. DaaS Captures Significant Market Interest

Which of the following best describes your organization's use of DaaS? (Percent of respondents, excludes respondents reporting "Don't know")



Source: Enterprise Strategy Group

Top benefits of DaaS:


Lower costs


Simplified management


Improved productivity

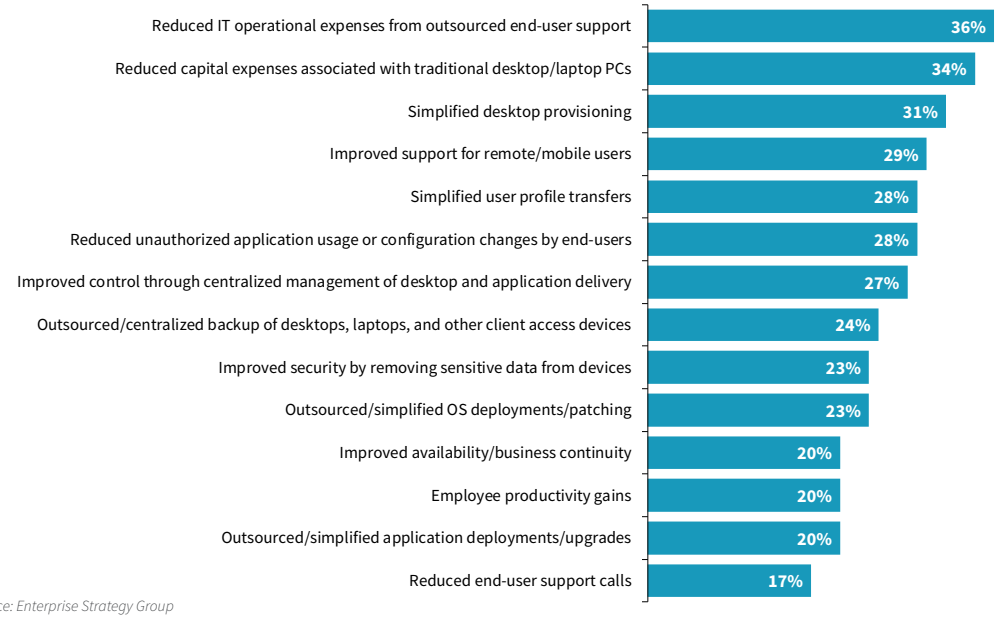

Improved security

Further inspection of the research reveals that respondents are achieving benefits from DaaS that are well aligned to the current challenges organizations are experiencing with traditional desktop devices. For example, more than half (55%) of DaaS users cite one or more benefits directly related to productivity. This data point is critical for IT decision makers. In recent research[3] , ESG asked respondents what considerations will be the most important when justifying IT investments to their businesses' management teams. While improved security was most often cited (36%), increased employee productivity was cited second most frequently (31%). Given that employee productivity, along with improved security, are critical to building the business case for new IT investments, it's clear that the benefits of DaaS are exceptionally well-aligned to the needs and desires of business leaders.

It is also worth noting that the two most frequently cited individual benefits, improvements in user support OpEx and device CapEx, directly align with the two most frequently cited areas where VDI has disappointed (see Figures 5 and 7). Organizations frustrated by VDI's mediocre cost reduction impact would be well-served to explore how DaaS may be able to deliver more impactful results.

Figure 7. Frequently Experienced Benefits of DaaS

Which of the following benefits has your organization achieved due to its use of DaaS? (Percent of respondents, N=127, multiple responses accepted)



55%

report one or more benefits directly tied to productivity[4]

Source: Enterprise Strategy Group

Perhaps one of the most telling discoveries in the research is the importance and validation of broad applicability of DaaS, particularly compared with VDI. The limited success of VDI has resulted in limited use cases, while DaaS appears to have far-reaching business applicability across a broad spectrum of users and use cases. Specifically, DaaS users are more apt than VDI users to report the technology is supporting mobile workers (55% versus 49%), office workers (51% versus 44%), and executives (43% versus 28%). These are precisely the end-users who demand a modern computing experience, requiring secure access to existing applications and data, as well as modernized SaaS access from the device "du jour".

[3]Ibid.
[4]Defined as users selecting at least one of the following benefits: Improved support for remote/mobile users, Improved availability/business continuity, Employee productivity gains, or reduced end-user support calls.

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The Bigger Truth

Ever-increasing numbers of organizations are in the midst of strengthening security across traditional desktops, SaaS, and mobile. Traditional desktop challenges continue to linger, so alternate means of delivery are of value to the business, IT, and end-users. The opportunity for each of the three delivery methods (desktop, SaaS, and mobile) can have a significant positive impact on businesses across the board.

With healthy market adoption, DaaS is showing its strength among ESG research respondents, delivering on its benefits and addressing a broad spectrum of users. Organizations have become comfortable with, and in many cases prefer, cloud services and cloud consumption economics. While VDI has attempted to address desktop delivery and management challenges, it has also presented complexity and high infrastructure costs, which vanish with DaaS. DaaS allows IT to focus on providing a productive environment for its end-users, quickly adapt to change, and recapture control in an effort to improve security.

Businesses want a modern and secure desktop, application, and data delivery strategy that reflects the reality of how users work as well as the ability to keep up with the rapid change of business applications and devices, without amplifying the management and security burden that already weighs heavily on IT shoulders. In parallel, end-users want a simplified experience with access to both old and new applications across devices, maximizing their productivity. DaaS possesses the unique combination of attributes that appeals to businesses across industries: improved time to value, cost reduction, and enhanced security.

Appendix: Research Methodology and Demographics

To gather data for this report, ESG conducted a comprehensive online survey of IT decision makers from private- and public-sector organizations in North America (United States and Canada) between August 10, 2018 and August 31, 2018. To qualify for this survey, respondents were required to have significant involvement in their organization's productivity application and/or endpoint device purchase decisions All respondents were provided an incentive to complete the survey in the form of cash awards and/or cash equivalents.

After filtering out unqualified respondents, removing duplicate responses, and screening the remaining completed responses (on several criteria) for data integrity, a final sample of 250 respondents remained.

The figures that follow detail the demographics of the respondent base, including individual respondents' current job responsibilities, as well as respondent organizations' total number of employees, primary industry, and annual revenue. Note: Totals in figures and tables throughout this report may not add up to 100% due to rounding.

Figure 8. Survey Respondents, by Job Responsibility

Which of the following best describes your current area of responsibility within your organization? (Percent of respondents, N=250)

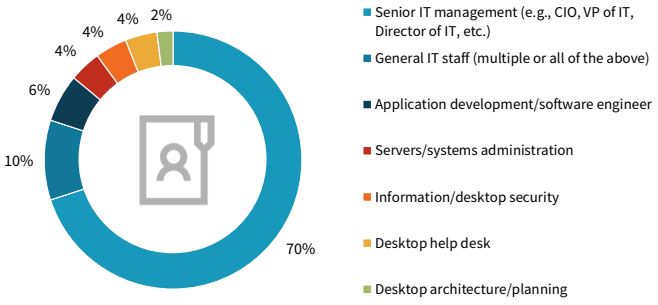


Figure 9. Survey Respondents, by Number of Employees

How many total employees does your company have worldwide? (Percent of respondents, N=250)

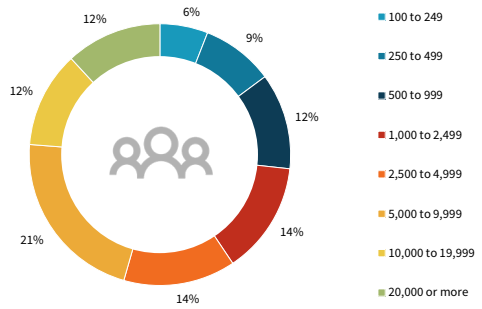
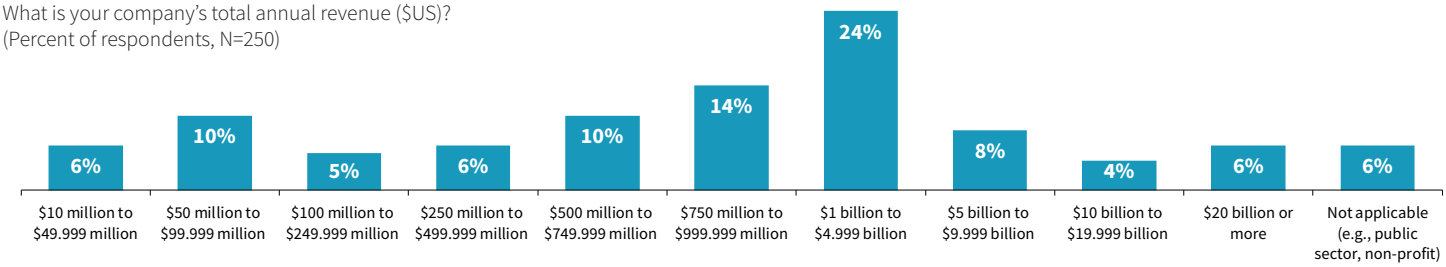


Figure 10. Survey Respondents, by Annual Revenue

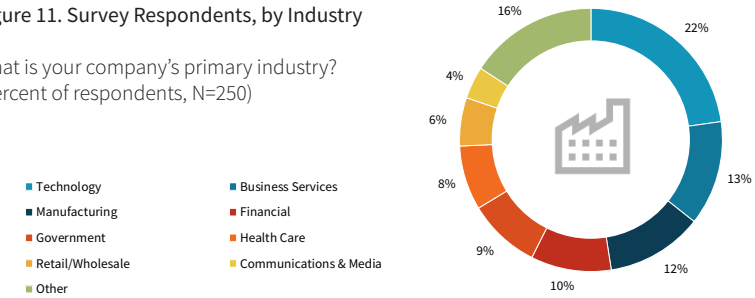
What is your company's total annual revenue ($US)? (Percent of respondents, N=250)



Respondents were asked to identify their organization's primary industry. In total, ESG received completed, qualified responses from individuals in 22 distinct vertical industries, plus an "Other" category. Respondents were then grouped into the broader categories shown in Figure 11.

Figure 11. Survey Respondents, by Industry

What is your company's primary industry? (Percent of respondents, N=250)



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