

A Forrester Consulting
Thought Leadership Spotlight
Commissioned By Google

July 2018

Rethink Technology In The Age Of The Cloud Worker: A Spotlight On The Employee

Workforce Results From The June 2018
Thought Leadership Paper, "Rethink Workforce
Technology In The Age Of The Cloud Worker"

Executive Summary

Nearly 20 years ago, Peter Drucker declared that increasing the productivity of knowledge workers is “the most important contribution management needs to make in the 21st century.”¹ This notion still holds true even as expectations of knowledge workers, also known as information workers, have evolved. In the age of information overload, the information worker’s value rests not on their intrinsic knowledge, but on their ability to distill vast amounts of information into action. Game-changing technologies like cloud computing have enabled workers to access information, analyze data, collaborate with colleagues, and serve customers in real time, from anywhere. To support worker productivity, IT organizations must rethink their workforce technology strategies for a cloud-first world.



Cloud Workers represent a new class of information workers who embrace cloud apps to serve their mobility and collaboration needs.

In February 2018, Google commissioned Forrester Consulting to understand how cloud computing has transformed employee technology needs, behaviors, and enterprise strategies for meeting these needs. Forrester conducted two global online surveys with respondents at enterprise companies using cloud services: one with 1,060 enterprise technology decision makers who oversee workforce devices and another with 468 information workers who use cloud apps at least weekly.² This spotlight focuses on the employee’s perspective gathered from the worker survey. We found that a new type of worker, the Cloud Worker, is at the forefront of a shift toward remote workspaces, real-time collaboration, and connected global communities. To serve their needs, IT organizations must support devices and browsers that foster continuous productivity, flexibility, and convenience.

KEY FINDINGS

- › **A new class of Cloud Workers is shaping the future of the workplace.** Technology innovation, changing employee preferences and needs, and evolving business expectations have propelled one in four information workers (26%) to become Cloud Workers. Cloud Workers spend much of their day using browser-based business apps across various devices and feel that the ability to access company resources from any location is crucial to their work/life balance.
- › **Employees are embracing the browser as a central resource for their work day.** Two-thirds of employees say they rely more heavily on web browsers today than two years ago, and a decisive 94% feel that browser-based business apps are equally easy, if not easier than desktop apps.
- › **Cloud-native devices have emerged as a viable and valuable option for serving Cloud Workers.** Workers — especially Cloud Workers — value devices and browsers that foster productivity, flexibility, and convenience. IT organizations seek reliable, versatile devices that are easy to manage and secure, fast, highly compatible browsers to meet employee and business needs. Cloud-native devices can serve both sets of goals. As a result, 79% of decision makers are interested in adopting, planning to implement, or currently using cloud-based computers for the workforce.

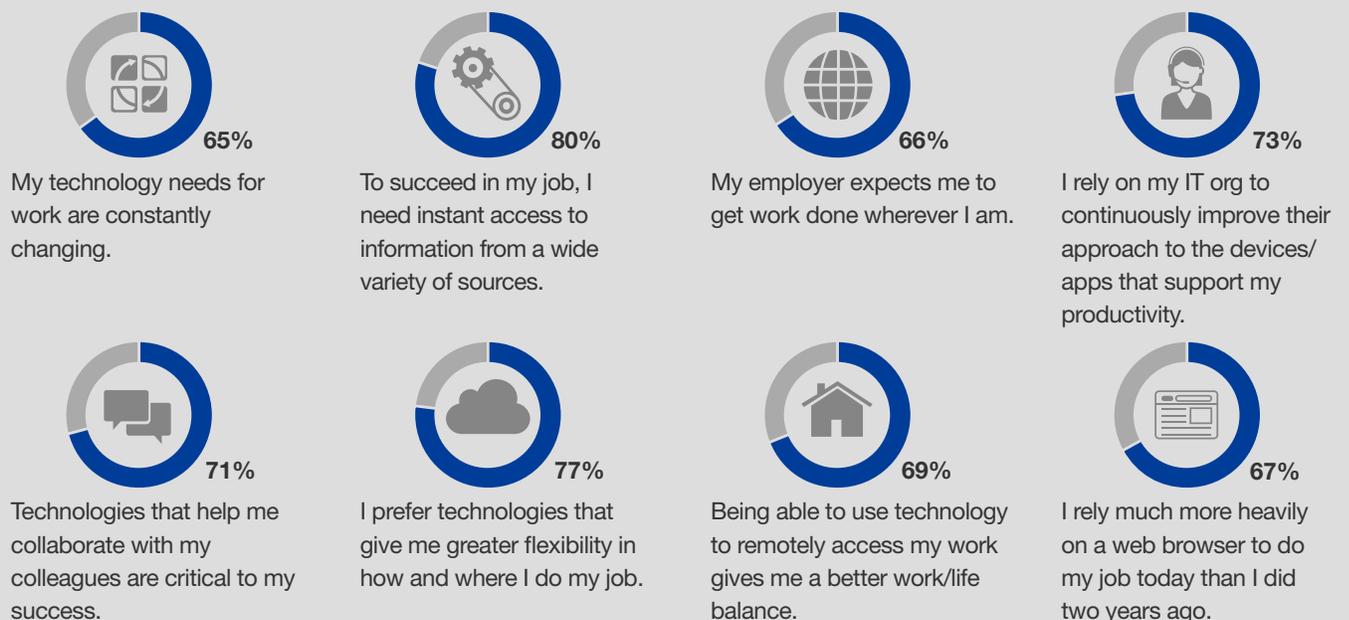
A New Type Of Worker Has Emerged: The Cloud Worker

The future of the workplace has started to take shape. Today's (and tomorrow's) business environments are more virtual, more connected, and thrive on real-time collaboration. Gone are the days of workers tethered to their desks: now workers can — and must — collaborate anytime, anywhere, and on any device to keep up with business demands. Cloud computing has played a huge role in enabling these shifts. In surveying 468 information workers, we found that:

- › **Employees see their responsibilities changing and demand flexible, collaborative, data-rich work environments in return.** Four in five employees (80%) agree that they need instant access to information to succeed in their jobs. Two-thirds (66%) also say that their employers expect them to get work done wherever they are. However, modern workers see this as an opportunity rather than a burden; 77% prefer technologies that provide flexibility in where they can do their jobs and 69% say that being able to access company resources gives them a better work/life balance. The ability to collaborate with colleagues in-person or remotely is still key, and 71% of workers agree that technologies which help them do this are critical to success (see Figure 1).
- › **Employees rely on IT to support these needs.** Seventy-three percent of workforce respondents agreed that they rely on their IT organization to continuously improve their approach to devices and applications that support employee productivity (see Figure 1).

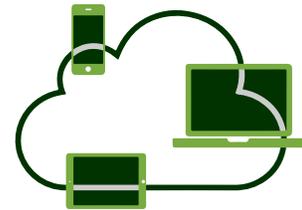
Figure 1

“In reflecting on the technologies that support your current job role, to what extent do you agree with the following statements?”



Base: 468 global information workers who use cloud apps at least weekly for work
Source: A commissioned study conducted by Forrester Consulting on behalf of Google, February 2018

- › **The cloud — and by extension, the browser — has risen in prominence as anytime, anywhere work becomes the norm.** The browser has become a central access point for communication and collaboration in the cloud. Employees now spend a third of the work day — 2.7 hours on average — completing tasks on a web browser. This reflects an upward trend that is likely to continue; in fact, 67% of workers rely more heavily on web browsers today than two years ago, and a decisive 94% of respondents consider browser-based apps as easy, if not easier to use than desktop apps. Browsers, apps, and operating systems that preserve employee credentials across devices make anytime, anywhere, any device work seamless. This convenience is crucial because a whopping 94% of employees in our survey get work done while commuting, traveling, or at home.
- › **Cloud Workers are at the forefront of these shifts.** For the purposes of the study, we defined Cloud Workers as laptop and tablet users who use cloud apps on a daily basis and spend at least 3 hours a day in the browser — 4.6 hours per day, on average. These Cloud Workers already comprise 26% of today’s information workers and are likely to be a high growth segment as enterprises increase their use of cloud-based business apps. Cloud Workers are propelling the shift toward remote workspaces, real-time collaboration, and connected global communities. At rates at least 15 percentage points higher than traditional information workers, Cloud Workers say: they need to get work done wherever they are; they like to switch between devices to do their work; and they feel that remote work options give them a better work/life balance (see Figure 2).



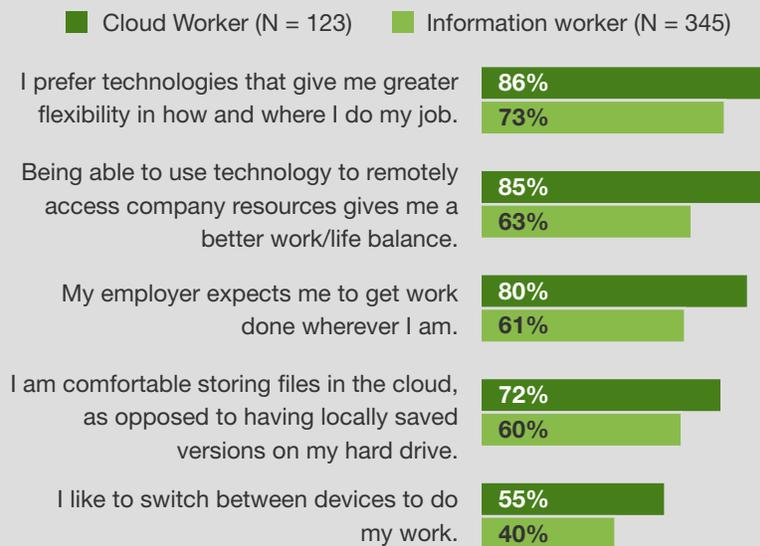
One in four of the information workers we surveyed (26%) qualify as Cloud Workers.

What defines a Cloud Worker?

- Uses a laptop and/or tablet for work purposes
- Uses cloud apps daily
- Spends 3 or more hours per work day using a web browser

Figure 2

Respondents who “somewhat” or “strongly agree” with each statement:



Base: 468 global information workers who use cloud apps at least weekly for work.
 Source: A commissioned study conducted by Forrester Consulting on behalf of Google, February 2018

Cloud Workers see flexible, anywhere work as essential and embrace technologies that help them do that.

Employees, And Especially Cloud Workers, Need Devices And Tools That Support Flexibility And Collaboration

How can enterprises cater to evolving employee needs and support the emerging Cloud Worker? IT organizations are already on the right track: 81% of decision makers described their strategy for deploying new business applications as cloud-first or prioritizing cloud. In a cloud-first world, employees need cloud-first devices and tools to match. In further exploring employee's device and browser needs, we found that:

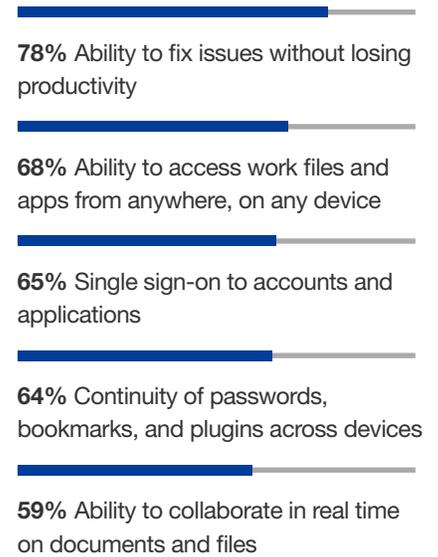
- › **Employees value devices and browsers that foster productivity, flexibility, and convenience.** Above all, employees want devices that enable continuous productivity; they can't afford to wait around for an issue to be fixed before continuing their work. Flexibility and easy, cross-device experiences are another must. The majority of workers consider: the ability to access files and apps from any location or device; the continuity of passwords and single sign-on across devices; and the ability to collaborate with colleagues in real time as "very important" or "critical" capabilities (see Figure 3).
- › **Cloud Workers place even greater emphasis on collaboration and cross-device flexibility.** At rates 12 to 18 percentage points higher than traditional information workers, Cloud Workers feel they need technology that enables real-time collaboration, the flexibility to work from any location or device, and browser extensions that support their productivity. These preferences will shape the future of workforce technology as the Cloud Worker segment continues to grow.
- › **Cloud-native devices support many of the features and capabilities that Cloud Workers — and IT organizations — need.** Cloud-native devices are designed to be cloud-first, with most applications and files living in the cloud as opposed to on the device's local drives. Cloud-native devices are a viable and valuable option for Cloud Workers who spend more of their time in a web browser, who need the ability to collaborate in real-time with colleagues, and who need to be able to access their files from any device. Employees who share a device with their colleagues can also benefit from this form factor because they can use their universal account information to log into any device. Information technology decision makers (ITDMs) appreciate the security and management implications of this feature; they save time on PC imaging and gain peace of mind that company data won't be compromised if a device is lost. For these reasons, 79% of enterprise technology decision makers reported interest, plans, or current use of cloud-based computers for a portion of the workforce.



Figure 3

Most important capabilities in devices used for work:

(Showing percent "very important" or "critical")



Base: 468 global information workers who use cloud apps at least weekly for work
Source: A commissioned study conducted by Forrester Consulting on behalf of Google, February 2018

Key Recommendations

The era of mobility has segued into the era of cloud for an increasing number of employees. These Cloud Workers expect their data, applications, and digital experiences to live independent from individual devices — or even independent of all their devices. Instead, they seek a truly ubiquitous access to their computing experiences through a cloud-centered approach. Increasingly, enterprise decision makers will need to address the needs of these Cloud Workers with technologies, policies, and experiences.

Forrester's in-depth survey of employees and enterprise decision makers about workforce cloud computing yielded several important recommendations:



Segment your workforce. Not every worker today is a Cloud Worker. Consistent with the demise of “one-size-fits-all” end user computing strategies, you should segment your workforce to determine which classes of employees can benefit most clearly from cloud-centric devices and services. This group can pilot new solutions and become your early adopters.



Conduct “cloud-first” audits. The move toward cloud centricity requires updating, upgrading, and sometimes replacing legacy software infrastructures. For Cloud Workers, you must audit these systems to determine which are imperative to their work. For legacy applications that cannot easily or inexpensively be moved to delivery over the browser, you should consider VDI as a bridge, allowing Cloud Workers to access legacy applications through the browser in virtualized fashion.



Focus on employee experience. Just as customer experience has rightfully grown into a top priority for enterprises, employee experience must be its shepherd. Happy employees lead to happy customers, and the technology choices that organizations make impact employee experience at nearly every moment of their day. Analyze the employee journey and employ journey mapping to determine what devices and software maximize Cloud Workers' productivity, then deploy those solutions with employee experience as the key measurement of success.

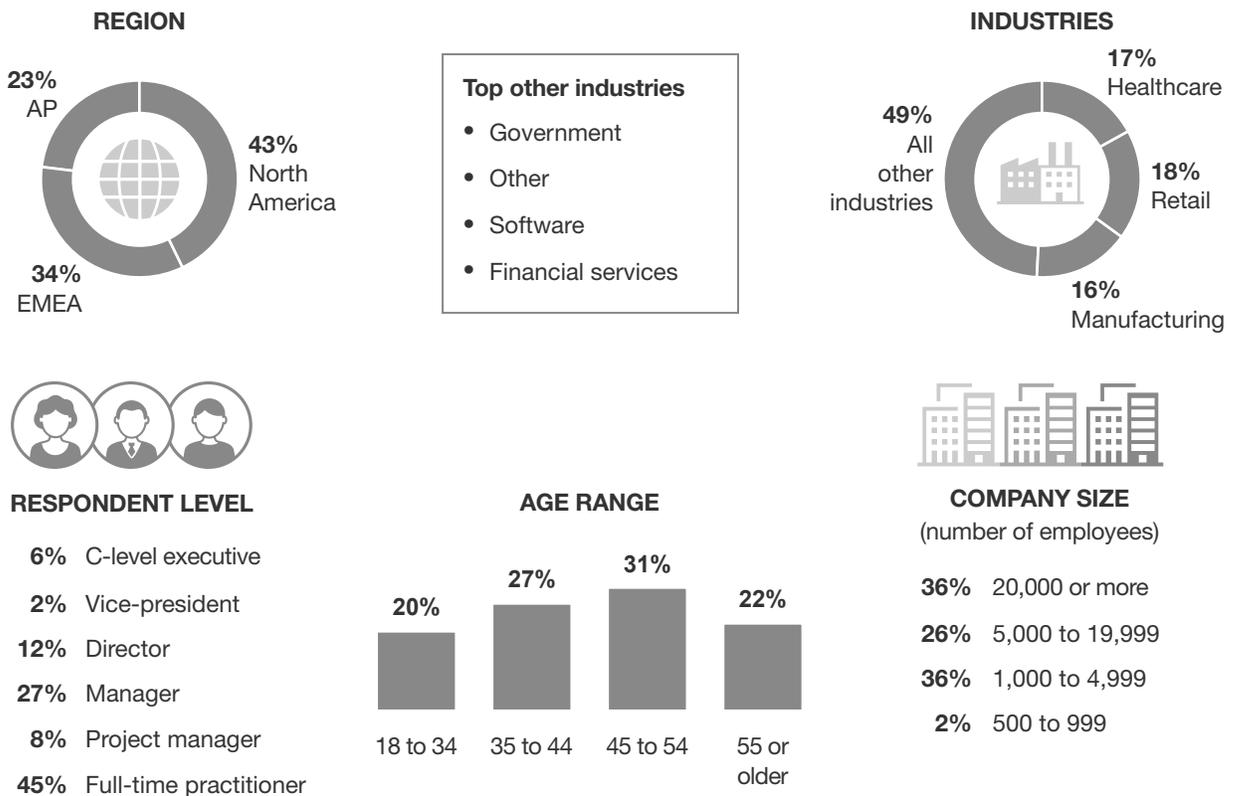


Follow the experience, not the device. Once you have employee journey maps in hand, you can also trace employees' access to devices — be they individual or shared, fixed or mobile — to determine cloud computing contexts. Our study shows an increasing diversity of locations, times, and needs for computing access, and gaining insight into these contextual moments will help you optimize experiences for people rather than for specific devices.

Appendix A: Methodology

In this study, Forrester conducted an online survey with 1,060 technology decision makers at enterprises in nine countries (the US, Canada, the UK, France, Germany, Sweden, Netherlands, Australia, and Japan) to evaluate workforce technology approaches. Forrester also conducted an online survey among workers at organizations in seven countries (the US, Canada, the UK, France, Germany, Australia, and Japan) to understand evolving needs of employees in the cloud era. The decision maker survey included technology decision makers in IT and business roles and the workforce survey included information workers (full-time employees across roles who use a mobile connected device at least 1 hour per day). Healthcare, retail, and manufacturing industries were among industries targeted for the study, but all industries were included. Respondents in both surveys needed to be current users of cloud services. Questions provided to the participants asked about trends related to cloud computing, employee preferences and behaviors, IT support processes, and what employees and ITDMs value in employee devices and browsers. Respondents were offered a small incentive as a thank you for time spent on the survey. The study began in January 2018 and was completed in February 2018.

Appendix B: Demographics



Base: 468 global information workers who use cloud apps at least weekly for work.
Source: A commissioned study conducted by Forrester Consulting on behalf of Google, February 2018.

Appendix C: Supplemental Material

RELATED FORRESTER RESEARCH

“The Technology-Augmented Employee,” Forrester Research, Inc., February 13, 2018

“Everyday Technology Choices For A Better Employee Experience,” Forrester Research, Inc., September 26, 2017.

“Engineer Your Technology Environment To Improve Employee Productivity And Flow,” Forrester Research, Inc., December 15, 2017.

“The Employee Experience Imperative,” Forrester Research, Inc., December 15, 2017.

Appendix D: Endnotes

¹ Source: Peter F. Drucker, “Knowledge Worker Productivity: The Biggest Challenge,” California Review Management, Winter 1999.

² Forrester defines information workers as full-time employees, across roles, who use a mobile connected device for at least 1 hour per work day.

To read the full results of this study, please refer to the Thought Leadership Paper commissioned by Google titled “Rethink Technology In The Age Of The Cloud Worker”

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