

A Forrester Consulting
Thought Leadership Spotlight
Commissioned By Google

July 2018

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

Insights On The Role Of The Browser From The
June 2018 Thought Leadership Paper, “Rethink
Workforce Technology In The Age Of The Cloud
Worker”



73% of ITDMs agree that the browser has become more important to their IT strategies due to employees' increasing use of cloud-based business apps.



94% of employees feel that browser-based business apps are as easy or easier to use than desktop apps.

Executive Summary

The rise of cloud computing has transformed the web browser from an ancillary research tool to a core asset for workforce productivity. Employees increasingly rely on cloud-based business apps to do their jobs, using the browser as a central resource to access information, collaborate with colleagues, and serve customers. As a result, browsers now have a more strategic role in enterprise IT strategies. Technology leaders are working to optimize employee experiences and boost productivity through browser and endpoint device strategies that support secure, fast, and seamless workflows.

In February 2018, Google commissioned Forrester Consulting to understand how cloud computing has transformed employee technology behaviors, needs, 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.¹ This spotlight focuses on the insights we collected about the role of the web browser in employee work flows and IT strategies.

KEY FINDINGS

- › **Employees are embracing the browser as a central resource for their work day.** On average, information workers spend more than a third of their typical 8-hour work day (2.7 hours) working on a browser — in addition to their time spent in meetings, phone calls, and offline tasks. Usage is even higher among an emerging sub-segment of Cloud Workers who are leading a shift toward cloud-first work and spend 4.6 hours of their work day using a web browser. Employees will continue to embrace cloud-first strategies for business apps because a decisive 94% feel that browser-based business apps are equally easy, if not easier than, desktop apps.
- › **In turn, enterprise IT organizations are emphasizing the browser, and browser security, in their IT strategies.** As 81% of enterprises take a cloud-first approach or prioritize cloud for new business apps, IT organizations are focusing on securing and optimizing browser experiences to protect company data while boosting productivity. Nearly three in four decision makers (73%) agree that the browser has become more important to their IT strategy with increasing use of cloud applications. IT teams are emphasizing browser security and increasing browser support and monitoring as part of this evolution.
- › **Browsers must support the productivity needs of the modern workforce through seamless, cross-device experiences.** Employees demand devices and browsers that enable continuous productivity. Cross-device work is now the norm, with employees using an average of 3.4 devices to do their jobs. The browser can support the employee's workflow across devices by becoming a single source of truth for their work lives. Employees value the ability to access work files across devices, continuity of passwords across devices, and single sign-on capabilities, all of which can be delivered with the right browser.

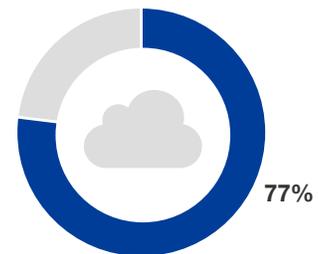
The Browser Has Become A Strategic Asset In The Age Of The Cloud Worker

Cloud computing has played a huge role in workplace transformation: 61% of enterprises have significantly evolved or completely transformed their workforce technology approaches because of cloud capabilities.

The cloud has also transformed the employee experience. For example, 80% of information workers feel they need instant access to a variety of information sources to succeed in their jobs. In a cloud-first world, the web browser has become a fixture in employee workflows. This elevates the importance of the browser, and browser security, in IT strategies. Our study of workers and technology decision makers (ITDMs) at global enterprises using cloud services revealed that:

- › **Cloud-enabled employees thrive by working anytime, anywhere, on any device.** The days of working exclusively at the office on a single device are gone forever. Information workers use an average of 3.4 devices to do their work, and a whopping 94% report using a device for work while commuting, traveling, or at home. Employees widely embrace this new normal: 69% agree that their ability to access company resources from everywhere gives them a better work/life balance, and 77% prefer technologies that give them the freedom to choose how and where to get their work done.
- › **Web browsers have become a vital resource for productivity and collaboration.** Employees now spend a third of the work day — 2.7 hours on average — working on a web browser. Company portals, file sync and share apps, team sites and collaboration apps, and email are among the top applications employees access via a web browser. This reflects an upward trend that will likely continue, since 67% of workers rely much more heavily on a web browser to do their jobs than they did two years ago (see Figure 1).

Employees agree:

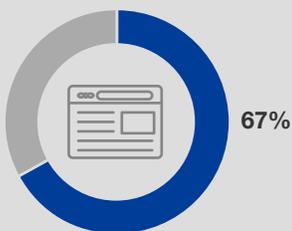


I prefer technologies that give me greater flexibility in how and where I do my job.

Figure 1

Employees increasingly use the browser as a central access point to communicate, collaborate, and serve customers.

Employees agree: I rely much more heavily on a web browser to do my job today than I did two years ago.



Average time spent using a web browser for work:

2.7 hours

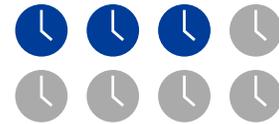


Most common apps accessed from web browsers:

-  Company portal
-  Team sites
-  File sync and share
-  Email

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 emerging Cloud Worker segment is on the leading edge of browser-centric work.** 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. 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. Even more than traditional information workers, Cloud Workers need to get work done wherever they are, like to switch between devices to do their work, and feel that remote work options give them a better work/life balance. Cloud Workers rely on web browsers to enable these work styles: They spend 4.6 hours per day working on a web browser and reported an increasing reliance on the browser at rates much higher than traditional information workers (44% vs. 26%).
- › **To keep pace with these trends, IT organizations prioritize the browser a strategic asset.** As the browser takes a bigger role in employee productivity, IT organizations must act not only to support employee needs, but to secure company data being shared and accessed from the browser(s) they support. Most decision makers (73%) agree that the browser has become more important to their IT strategies due to cloud-based business apps. IT leaders also cite greater emphasis on browser security, support, and monitoring as some of the biggest changes they've made to support their use of cloud applications (see Figure 2).



Cloud Workers spend 4.6 hours per work day using a web browser.

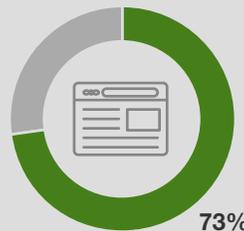
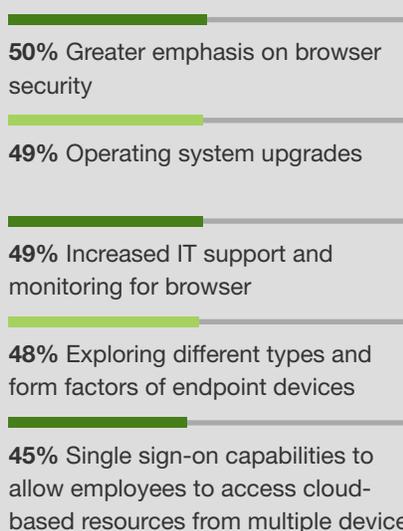


What defines a Cloud Worker?*

- 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

Changes IT orgs have made to device and application management processes as a result of adopting cloud services:



ITDMs agree: The browser has become increasingly important to our IT strategy because employees are using browser-based business apps.



The browser has become a more strategic asset in a cloud-first world.

Base: 1,060 enterprise technology decision makers in nine countries who oversee workforce devices and cloud applications
 Source: A commissioned study conducted by Forrester Consulting on behalf of Google, February 2018

Fast, Secure, Personalized Browsers Support The Flexible, Collaborative Work Styles Employees Need

IT organizations need to select, manage, monitor, and support browsers that balance employee needs with business requirements. Our survey revealed important insights to inform enterprise browser strategies:

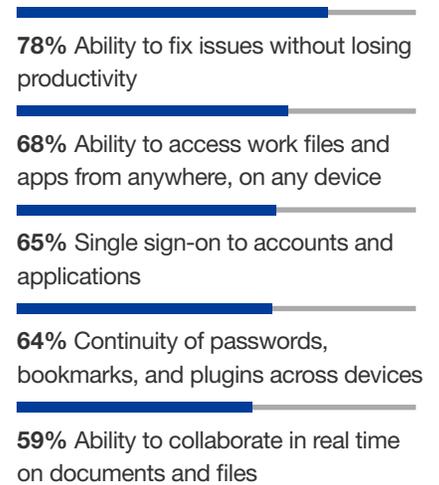
- › **Cloud-first strategies and employee preferences will solidify the strategic role of the browser for years to come.** The future of workforce productivity is in the cloud. In fact, 81% of technology decision makers describe their strategy for deploying new business applications as cloud-first or prioritizing cloud. This is great news for employees because 94% find browser-based apps as easy, if not easier, to use than desktop apps. This growing appetite for browser-based experiences, combined with enterprises' cloud-first strategies, will transform more information workers into Cloud Workers.
- › **Workers need browsers that foster productivity, flexibility, and convenience.** Above all, employees want devices that enable continuous productivity; they can't afford to wait for an issue to be fixed before continuing their work. Seamless cross-device experiences are another must. Specifically, nearly two-thirds of employees value continuity of passwords across devices and single sign-on capabilities — both of which can be achieved with the right web browser (see Figure 3). As browser power users, Cloud Workers are more likely than traditional information workers to value browser extensions that maximize their productivity.
- › **ITDMs prioritize application compatibility, security, and speed in selecting a preferred browser for the workforce.** These top sought capabilities align with the top overall IT priorities respondents cited in our survey, including reducing costs, improving endpoint security, and investing in technologies that support employee productivity. Fast and compatible browsers that preserve user credentials across devices support employee productivity, while security features and frequent updates ensure that company data is sufficiently protected. Success on both fronts creates efficiencies that support overall cost reduction goals (see Figure 3).

When choosing a preferred browser, ITDMs look to balance collaboration and convenience with security and speed.

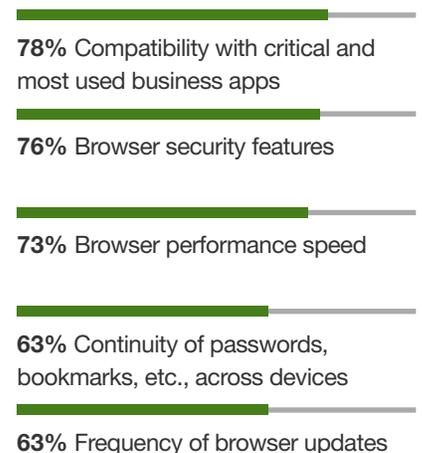


Figure 3

Very important or critical capabilities for employees in devices used for work:



Very important or critical capabilities for ITDMs in selecting a preferred browser*:



Base: 468 global information workers who use cloud apps at least weekly for work.
 *Base: 1,060 enterprise technology decision makers in nine countries who oversee workforce devices and cloud applications
 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 all their devices. Instead, they seek ubiquitous access to their computing experiences through a cloud-centered approach. Increasingly, enterprise decision makers must 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 technology yielded several important recommendations:



Focus on employee experience. Customer experience has rightfully grown into a top priority for enterprises, but employee experience must be its shepherd. Happy employees lead to happy customers, and the technology choices 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.



Embrace user demands for browser experiences. The employee experience exercise will reinforce the importance employees place on browsers and their desire to use best-in-class, consumer-quality browsers. In other words, you must fulfill their wishes by choosing a browser that's easy to use, fast, and flexible and that can address their work and personal lives — all while ensuring enterprise standards are met and enforced.



Prioritize security and privacy. About half of ITDMs ranked security (50%) and IT support and monitoring (49%) at the top of their browser strategies. A similar proportion (52%) named browser security as one of the most important considerations for endpoint security tools.² In this era of security threats — in which endpoint devices are often the entry point for dangerous security incursions — security and manageability should be a primary concern. Finally, in the General Data Protection Regulation (GDPR) era, maintaining customers' privacy also depends on the security and manageability of the browser. All these concerns must be balanced against employee experience-driven browser needs.



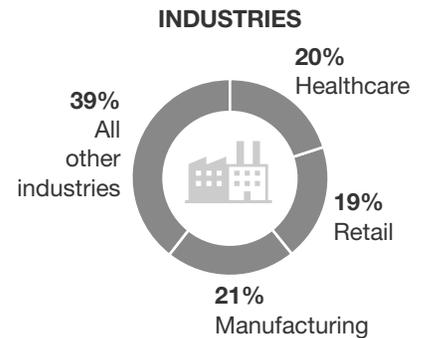
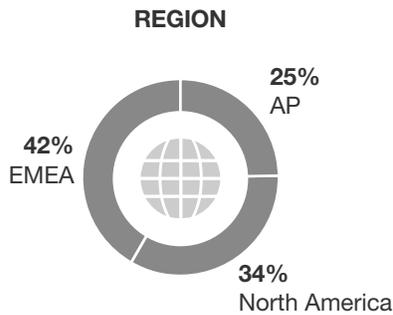
Conduct "cloud-first" audits. The move toward cloud centricity requires updating, upgrading, and sometimes replacing legacy software infrastructures. For Cloud Workers, you must audit these systems to determine which are imperative to their work. For legacy applications that cannot easily or inexpensively be moved to delivery over the browser, consider virtual desktop infrastructure (VDI) as a bridge, allowing Cloud Workers to access legacy applications through the browser in virtualized fashion. Choosing — and testing — a browser with strong capabilities in these areas is often the final success criterion for enterprises.

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.

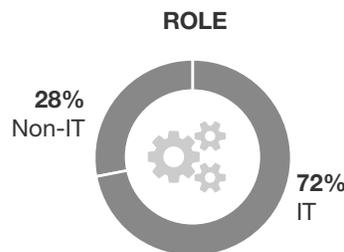
Appendix B: Demographics/Data

DECISION MAKER SURVEY



RESPONDENT LEVEL

- 23% C-level executive
- 11% Vice-president
- 35% Director
- 31% Manager



One hundred percent of respondents have technology selection/purchasing as one of their primary job functions.

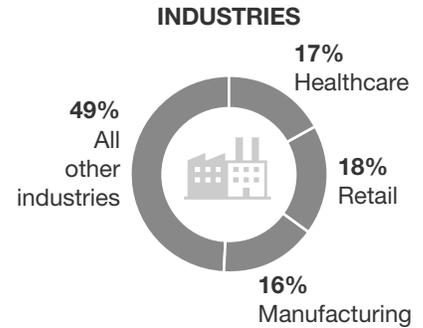
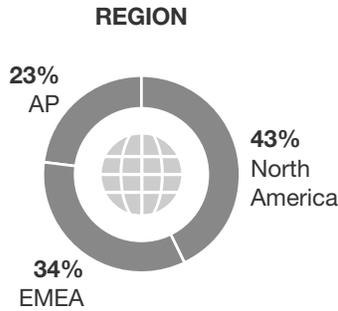


COMPANY SIZE
(number of employees)

- 13% 20,000 or more
- 26% 5,000 to 19,999
- 56% 1,000 to 4,999
- 4% 500 to 999

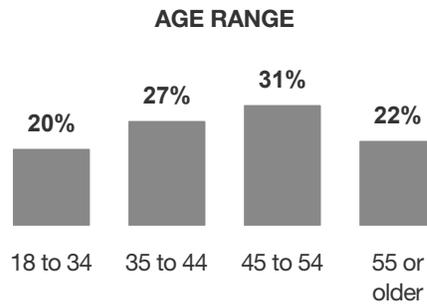
Base: 1,060 enterprise technology decision makers in nine countries who oversee workforce devices and cloud applications. Source: A commissioned study conducted by Forrester Consulting on behalf of Google, February 2018.

WORKFORCE SURVEY



RESPONDENT LEVEL

6%	C-level executive
2%	Vice-president
12%	Director
27%	Manager
8%	Project manager
45%	Full-time practitioner



COMPANY SIZE (number of employees)

36%	20,000 or more
26%	5,000 to 19,999
36%	1,000 to 4,999
2%	500 to 999

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.

“Predictions 2018: Employee Experience Powers The Future Of Work,” Forrester Research, Inc., November 8, 2017.

Appendix D: Endnotes

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

² Source: “Rethink Enterprise Endpoint Security For The Cloud Computing Era,” a commissioned study conducted by Forrester Consulting on behalf of Google, September 2017.

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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