Anticipating cloud work's most common side effects

The right technology choices can minimize complexity and help workers stay focused.

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Lauren Bacon knows how to get the most out of a distributed team. Now a business coach, Bacon spent many years as the head of a design and development studio. The firm had some full-time employees, some part-time, some freelancers, some working from the firm's office, some from home—and everyone relied heavily on cloud-based software tools. "People were coming and going all the time," Bacon remembers. "We had Adobe accounts. We were using Git for software versioning. We used QuickBooks for invoicing and accounting."

In this fast-moving environment, Bacon's favorite software was an exceedingly simple time-tracking app.

Bacon says the application boosted the productivity of all employees at the studio. And indeed, when specialized cloud applications function together as they are intended to do, they provide a flexible, scalable infrastructure.

Key takeaways

1 The proliferation of apps and devices at work increases complexity.

2 But integrated apps and management frameworks can boost productivity.

3 And specialized cloud apps provide a flexible, scalable infrastructure.

But there's a flip side to this abundance: complexity. The more apps and devices employees use, the harder it can be for them to find the right information and stay focused on the tasks at hand. One IDC study found that today's knowledge workers spend one-sixth of their work hours just searching for information they need—and, as often as not, failing to find it.[1]

The answer isn't to go backward: 68 percent of information workers say it's "very important" or "critical" that they have the ability to access work files and apps from anywhere, on any device, according to a 2018 Forrester Research study.[2] Instead, the right approach for IT decision-makers may be to thoughtfully embrace the cloud transition. When organizations plan ahead and pick the right apps and management frameworks, observers say, it is possible to contain the complexity and help keep workers on track.

"The big question is how easily do these apps allow people to do their jobs and really focus on their core productivity tasks, rather than getting in the way," Bacon says. "So, what I look

80%

of knowledge workers reported that to succeed in their job, they need instant access to information from a wide variety of sources.

Source: Forrester Research

for is always, how well are these things going to integrate with each other so I'm not having to manually repeat work, and so that we minimize the room for human error and maximize the elegance of the user experience?"

Knowledge in the cloud

Already, one-quarter of knowledge workers are "cloud workers" who've left behind desktop or on-premises software in favor of cloud-based apps delivered to multiple platforms, says Cyrus Mistry, group product manager for Chrome OS at Google. The shift means people can work from anywhere and adopt new tools quickly as the need arises. But it can also make the work experience more fragmented, as workers are forced to juggle more accounts and passwords, search across more siloes to find their data, and deal with an onslaught of notifications and messages.

On top of that, cloud workers have access to fast, user-friendly devices and apps in their personal lives—so getting saddled with slow equipment or finicky legacy applications in the workplace can feel like being forced to speak an unfamiliar language, Mistry says. But given the right choice of tools, the cloud work environment can feel more like home, with the result that employees are "naturally going to feel more at ease, they're going to be leaning in, they're going to be excited," Mistry says. "And that makes an enormous difference."

For organizations hoping to achieve consumer-style ease of use, one of the most basic challenges is making sure all users have easy access to the apps they need. Past a certain point, adding more software-as-a-service applications makes it harder for users to have a good experience, according to Christian Reilly, Citrix's global chief technology officer. "They
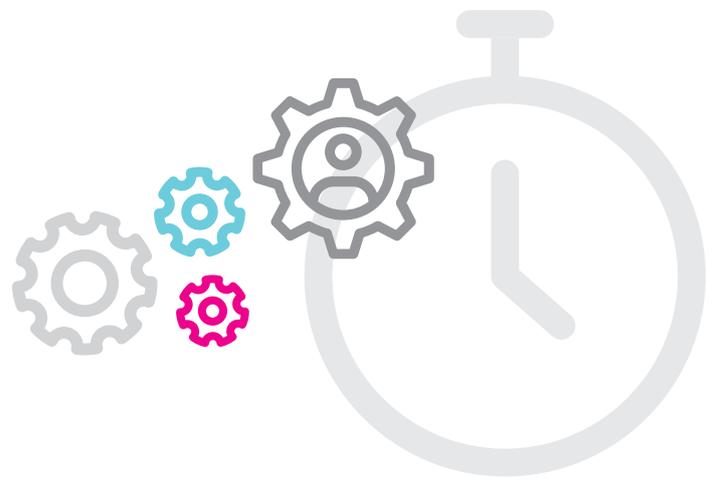
Such a platform would provide "a single point of view, a single pane of glass, where any device can actually provide the same experience. It would identify what I need for my job that day, whether I log in from home, a Starbucks, or an airport."

Christian Reilly
Global Chief Technology Officer for Citrix

have to remember the passwords. Or there's the frustration of not being able to log in from certain locations, or because the application doesn't work from your device." (Indeed, 65 percent of knowledge workers say single sign-on to accounts and applications is "very important" or "critical" for their work, Forrester reported in 2018, and 64 percent want their passwords and plugins to be the same across all devices).[2]

To help employees stay ahead of the sprawl, organizations need platforms that allow users to sign on once, wherever they are, and gain access to every app they need, based on their roles and tasks.

Ideally, says Reilly, such a platform would provide "a single point of view, a single pane of glass, where any device, whether it's a mobile device or a tablet or a laptop or a desktop, can actually provide the same experience. It would identify what I need for my job today, and that experience would be consistent whether I log in from home, from a Starbucks, from an airport, or from the corporate office." Citrix has, in fact, built such a platform. It's called Workspace, and it runs on Windows, Mac, Linux, iOS, Chrome OS, and Android devices.[3]

But when work moves to the same devices that employees use for everything else, there can be other unwelcome side effects, such as the productivity losses that accumulate with constant task-switching. Once a task has been interrupted, it takes information workers an average of 23 minutes, 15 seconds to return to it, one group from the Department of Informatics at the University of California, Irvine, found.[4] Then, of course, there are the ever-present temptations of the internet. If many workplace apps are browser-based, Mistry points out, "you're always one second away from opening a tab and watching a YouTube video."

61% OF KNOWLEDGE WORKERS ACCESS

4 OR MORE SYSTEMS ON A REGULAR BASIS;

13% NEED TO ACCESS

11 OR MORE SYSTEMS TO GET THE INFORMATION THEY NEED TO DO THEIR JOBS.

Source: IDC

It's a concern that surfaces all the time in Bacon's leadership coaching sessions. "The thing that I struggle with most, and that I hear from my clients as well, is the tension between productivity and distraction," she says. "For example, a lot of my clients need to use social media as part of their workdays. It's part of their community building. But those tools are optimized to pull their attention in and distract them. There's an underlying tension between the business models of some of the software that we have to use in our work lives, and what actually produces the best results for workers."

One dream solution, Bacon says, would be a kind of anti-multitasking filter. "In a perfect world,
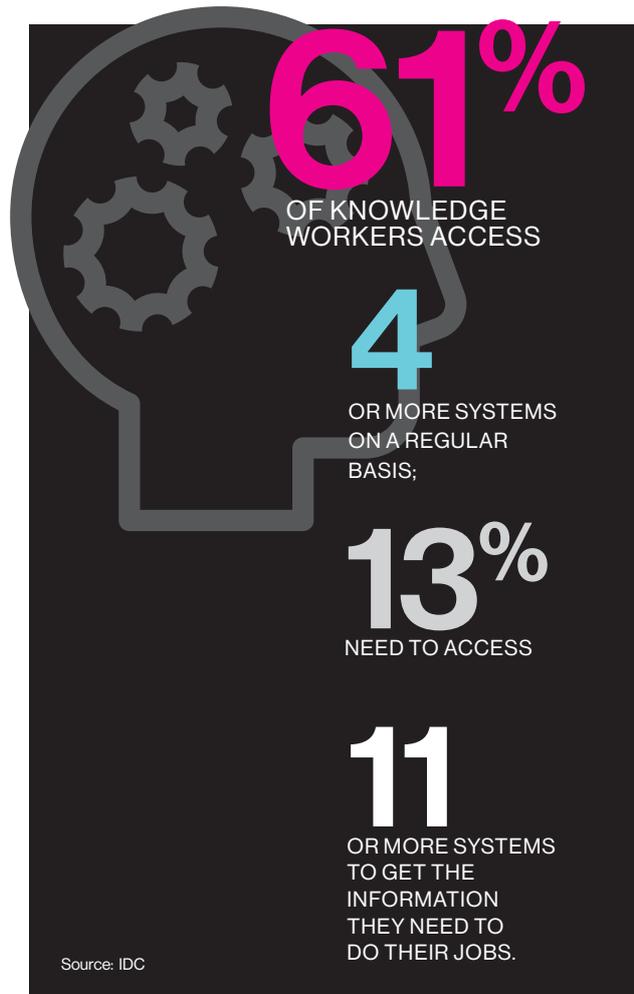
I would be able to go into my OS and say, 'Okay, 10:00 a.m. to noon is heads-down writing time, and don't let me fire up these apps.'"

At Google, developers are considering strikingly similar ideas for making Chrome OS into a more productive environment for cloud workers. "We're using some machine learning to actually see if you're starting to drift from your pattern of the workday," Mistry says.

Explicit signals—"I want to work on this slide deck right now and I want no interruptions for an hour"—are easy to interpret, says Mistry. "Implicit signals are harder to read but potentially more valuable. So yes, having focus mode, or even just
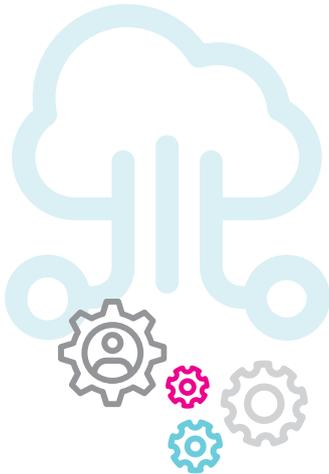
Organizations need to think through the variety of cloud apps they're using and find ways to make them work together. When they do that, "it helps for recruiting, it helps for retention, it helps for engagement."

Cyrus Mistry
Group Product Manager
for Chrome OS at Google

subtle alerts that say 'Hey, by the way, do you know you've drifted off into never-never land? Do you want to regroup?' are very useful. And we're experimenting with some of those nudges."

Citrix, too, is studying how to use artificial intelligence (AI) to provide nudges that help workers stay on task. One of the benefits of a platform like Workspace, Reilly explains, is that it allows organizations to build a data model of each employee: a picture of how, when, and where they do specific tasks. That creates the opportunity for the platform to open specific apps or provide needed data proactively.

"If Christian goes into this application and approves the PTO requests or purchase orders at noon every day, we can then be very prescriptive about providing an interface for Christian to do that at noon, instead of Christian having to open the application," Reilly says. "We can make recommendations and help guide work in a different way."

Cloud workers want the information systems in their workplace to be as friendly, flexible, and integrated as the ones they have on their smartphones, in their cars, and in their homes— and they're ready to vote with their feet. "If you don't like your cellular provider, if you don't like your cable TV provider, if you don't like your bank, you can go ahead and change it out, and we see that as an expectation that's now crept into work," Reilly says. "If you don't get that right, end users get frustrated."

Organizations need to think through the variety of cloud apps they're using and find ways to make them work together, Google's Mistry says. When they do that, "it helps for recruiting, it helps for retention, it helps for engagement," he says. Lessons from the consumer world are helping, as are advances in data collection and AI-driven data analysis. But often, it's the simple things—the right app, surfaced at the right time—that keep employees engaged and happy in their work.

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