



FORRESTER®

# Empower Frontline Workers With Cloud Experiences

How Cloud-Native Technology Can Help Employees  
Produce More And Deliver A Better Customer Experience

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FORRESTER OPPORTUNITY SNAPSHOT: A CUSTOM STUDY COMMISSIONED BY GOOGLE | MAY 2019

## Cloud-Native Devices Empower Frontline Workers

Frontline workers — the employees closest to customers and products — can make or break a company's success. From nurse practitioners to retail associates to factory workers, the frontline workforce has the power to deliver exceptional products and service. However, major barriers in their work environment, such as outdated technology and information gaps, impede progress.

Enterprises can deliver better technology via cloud-native devices that offer greater reliability, better access to critical job-related information, and increased device security, which in turn improves customer experience and boosts frontline productivity.

In April 2019, Google commissioned Forrester Consulting to conduct a global study of 506 workers on the front lines of customer interaction, administrative support, and product manufacturing across government, healthcare, manufacturing, and retail.

## Key Findings



Frontline workers are regularly hindered by technology problems that impact worker productivity and customer experience.



Frontline workers want technologies that support continuous productivity, simplify communication, and enable greater self-service.



A shift to cloud-native devices could alleviate many of the problems that frontline workers currently face.

## Technology Barriers Hinder Frontline Workers' Success

Technology hiccups impair frontline workers and create information gaps. The top technology issues — device booting or rebooting, slow technology, and device operating failure — are more than just a minor annoyance; they also impact productivity and customer experience.

Despite most frontline workers agreeing that they need instant access to information from a wide variety of sources to do their job, companies too often fail to equip their employees with the devices and software that allow them to succeed. A whopping 73% of frontline workers must either stop work or tell a customer to wait while they retrieve information on a daily, weekly, or monthly basis.

**MANUFACTURING WORKER** “Unreliable computers [are] unable to provide us with the information we need.”

**RETAIL WORKER** “[Deliveries] do not go out on time because the system is slow.”

**GOVERNMENT WORKER** “Systems are slow and crash regularly . . . [they] take a very long time to [reboot].”

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## “How frequently do you experience the following issues in your current job?”

● Weekly or more   ● Once per month or less   *Total*

I need to tell a customer to wait while I find information that I don't have at my fingertips.

Frequency	Percentage	Total
Weekly or more	46%	73%
Once per month or less	27%	

I need to pause or stop my work to retrieve information that I do not have at my fingertips.

Frequency	Percentage	Total
Weekly or more	46%	73%
Once per month or less	27%	

I have to wait several minutes for my device to boot or reboot.

Frequency	Percentage	Total
Weekly or more	40%	72%
Once per month or less	32%	

My device stops working due to a technical issue, interrupting my workflow.

Frequency	Percentage	Total
Weekly or more	25%	72%
Once per month or less	47%	

I find my technology slows me down while doing my job.

Frequency	Percentage	Total
Weekly or more	35%	64%
Once per month or less	28%	

Device/operating system updates interrupt the flow of my work.

Frequency	Percentage	Total
Weekly or more	25%	60%
Once per month or less	35%	

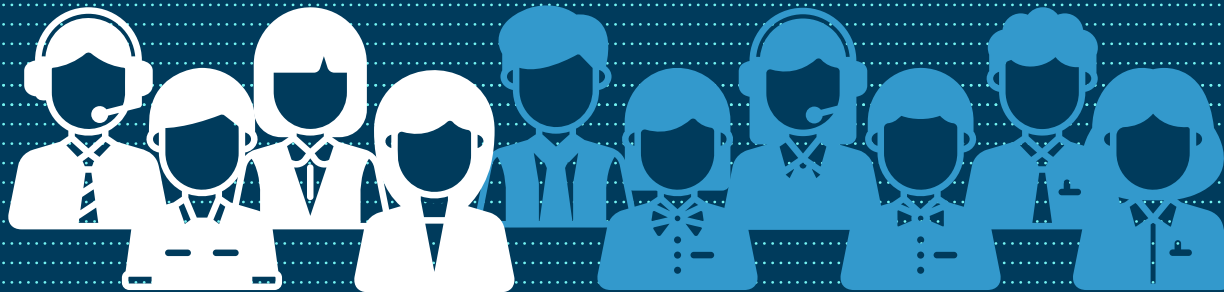
Base: 506 global frontline workers at companies with 100+ employees

Source: A commissioned study conducted by Forrester Consulting on behalf of Google, April 2019

## Employers Underinvest In Frontline Worker Technology

Information workers are ahead of frontline workers on technology adoption, e.g., information workers are more likely to agree that they now rely more heavily on a web browser than they did two years ago and that their technology needs are constantly changing.<sup>1</sup> While frontline workers are unlikely to spend their whole day at a desk, they greatly benefit from technology that can: 1) identify manufacturing line issues in real time; 2) enable retail workers to check inventory on the sales floor; or 3) support scheduling a key meeting. Despite recent shifts to a more digital workplace, 41% of frontline workers agree their job includes many paper-based tasks that would be easier to execute on a computer or mobile device. These findings suggest employers are stumbling on equipping frontline workers with effective technology.

**41% of frontline workers agree their job includes many paper-based tasks that would be easier to execute on a computer or mobile device.**



# Poor Technology Enablement Drives Potential Employee Attrition

Poor technology experiences correlate with employee attrition. When frontline workers were asked if they were actively looking to switch jobs, those who experienced device operating failure were two times more likely to agree. The result is expensive churn, costing between 50% to 250% of an employee's annual salary, depending on seniority and job type.<sup>2</sup>

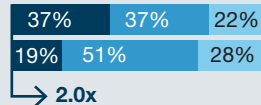
Forrester's employee experience research reveals that typical employee engagement efforts look at factors like growth opportunities, regular performance feedback, and recognition.<sup>3</sup> Unfortunately, too many employers ignore barriers that prevent employees from making progress on core tasks, which may contribute to driving frontline workers out the door. Our survey further validates this assertion.

## “How frequently do you experience the following issues in your current job?”

- Weekly or more
- Once per month or less
- Never

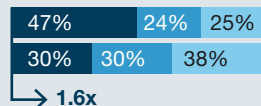
My device stops working due to a technical issue, interrupting my workflow.

Employees at risk of churn  
Employees not at risk



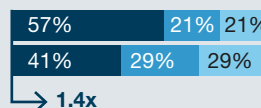
I find my technology slows me down while doing my job.

Employees at risk of churn  
Employees not at risk



I need to pause or stop my work to retrieve information that I do not have at my fingertips.

Employees at risk of churn  
Employees not at risk



**“Employees at risk of churn”** are those who agree they are actively looking for opportunities to switch job roles and/or companies.

## Frontline Workers Want Secure Tech For Continuous Productivity, Simplified Communication, And Self-Service

When it comes to their technology stack wish list, frontline workers have clear priorities:

- **Frontline workers are tuned in to security imperatives.** From the nurse entering patient data to the customer service agent handling customer information, frontline workers cite device security as their top technology priority.
- **Frontline workers seek continuous productivity, eliminating time spent troubleshooting device issues.**
- **Frontline workers want to facilitate communication**

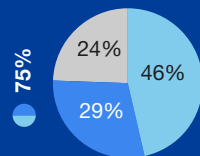
**inter-team, intra-team, and with leadership.** Rolling out technology that enables open communication also increases engagement, as more than half of frontline workers agree that frequent communications or announcements from managers or leadership make them feel more connected to their job.

- **Frontline workers seek self-service access to job-related content.** Considering that they require a variety of information sources, it is not surprising that frontline workers seek empowerment to find the knowledge they need, when they need it.

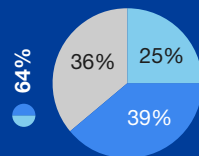
“Imagine you are in charge of a technology upgrade that you and your colleagues will use daily. How important are each of the following capabilities to help you do your job better?”

- Extremely important/critical
- Very important
- Moderately, slightly, or not important

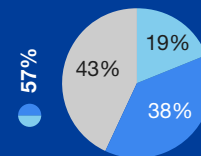
Device security from external threats or hackers



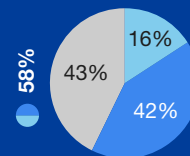
Ability to fix issues without losing productivity



Ease of communication and information sharing between my team and leadership/headquarters



Self-service access to training materials



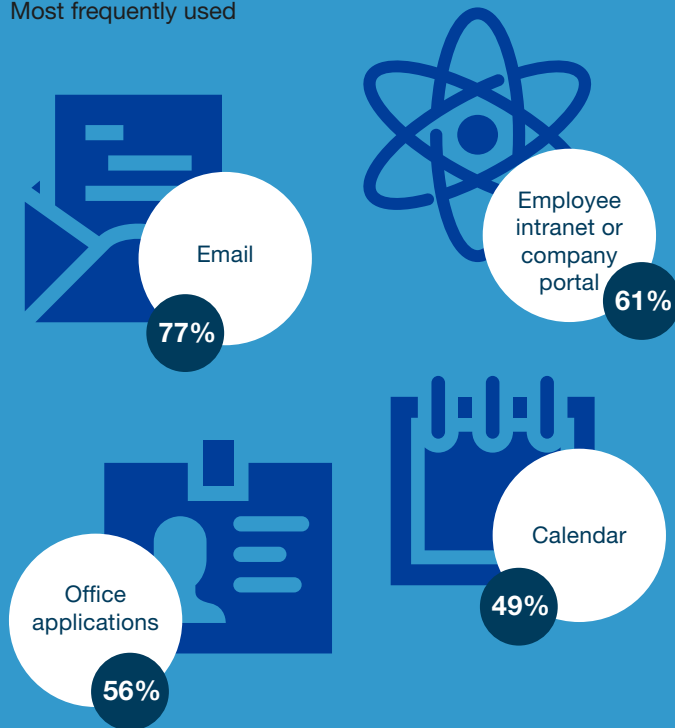
## Cloud-Native Devices Support Frontline Workers' Top Software Needs, Alleviate Common Technology Complaints, And Deliver Cost Savings

Based on the most frequently used applications, browsers can deliver the majority of frontline workers' software needs. When asked which software frontline workers use on a weekly basis, the top of the list includes email, employee intranet or the company portal, office applications, and calendar. Each of these applications could be delivered via a cloud-native device, alleviating top complaints typically associated with client devices, such as frequent updates and device failures.

Companies that implement cloud-native devices also experience cost savings on licenses, deployment, and training, delivering both experience and financial benefits.<sup>4</sup>

### “Which of the following software do you use at least weekly for work purposes?”

Most frequently used



## Frontline Workers Are Comfortable With Cloud-Native Devices And Are Primed To Make The Shift

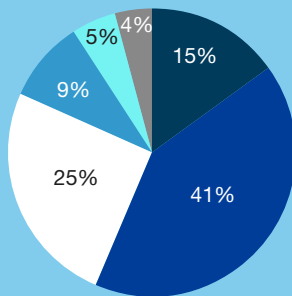
Based on comfort with browser-based applications and types of devices used, frontline workers can easily adopt browser-based computing. Only 14% of frontline workers do not agree that they could complete all technology-supported tasks in a browser, and only 12% find browser-based applications difficult to use.

A common device setup for this group includes a shared terminal (i.e., the device at the checkout or the workstation that healthcare providers use during patient visits), where 59% of shared workstation users require moderate, limited, or very limited applications or tasks on that device. Shared devices are an optimal use case for cloud-native devices that can support many users throughout the workweek. These working trends will only expand as frontline workers' technology needs continue to evolve in favor of browser-based work. Enterprises can make headway by delivering better frontline technology via cloud-native devices that offer fewer glitches, greater access to critical job-related information, and increased device security.

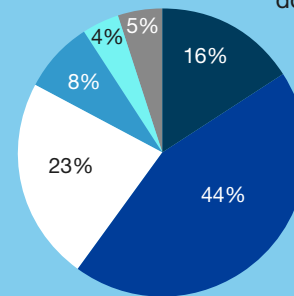
**“Please rate your level of agreement or disagreement with the following statements.”**

● Strongly agree  
 ● Somewhat agree  
 ● Neutral  
 ● Somewhat disagree  
 ● Strongly disagree  
 ● Don't know/ does not apply

“I feel like I could get all my technology-supported tasks done in a browser with the right web applications.”



“I find it easy to use work-related applications that I can access via a web browser.”





## Conclusion

Frontline workers depend on having the right tools and information at their fingertips, and a shift to cloud-native devices can alleviate the common obstacles that they face. Our study showed that:

- Frontline workers experience technology issues that slow them down, impair their access to critical information, and in turn impact customer experience.
- Employers are missing out on giving frontline workers the right technology.
- Workers are more likely to seek a new job if they experience technology challenges and information gaps more frequently.
- Frontline workers want secure technologies that support continuous productivity, simplify communication, and enable greater self-service.
- Cloud-native devices fill the gap in frontline worker experience, securing intellectual property, increasing worker productivity, improving customer experience, and delivering cost savings.

### **Project Director:**

[Morgan Steele](#),  
Market Impact Consultant

### **Contributing Research:**

[Forrester's CIO research group](#)

## Methodology

This Opportunity Snapshot was commissioned by Google. To create this profile, Forrester leveraged its existing research on the role that technology innovations play in the workforce, employee experience, and the adoption of emerging technologies. Forrester Consulting supplemented this research with custom survey questions asked of 506 global frontline workers at companies with 100 or more employees. The custom survey began in March 2019 and was completed in April 2019. For more information on Forrester's data panel and tech industry consulting services, visit [forrester.com](https://forrester.com).

### ENDNOTES

<sup>1</sup> Forrester defines information workers as full-time employees, across roles, who use a mobile-connected device for at least one hour per workday.

<sup>2</sup> Source: "Retaining Talent: A Guide To Analyzing And Managing Employee Turnover," Society for Human Resource Management Foundation, 2008.

<sup>3</sup> Source: "Introducing Forrester's Employee Experience Index," Forrester Research, Inc., February 14, 2019.

<sup>4</sup> Source: "The Total Economic Impact™ Of Google OS Devices For Knowledge Workers," Forrester Consulting report prepared for Google, September 2018.

### ABOUT FORRESTER CONSULTING

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## Demographics

### REGION

North America: 32%

Europe: 36%

Asia Pacific: 32%

### COMPANY SIZE (EMPLOYEES)

Small (100 to 499): 20%

Medium (500 to 999): 20%

Large (1,000 or more): 60%

### INDUSTRY

Manufacturing: 26%

Healthcare: 26%

Retail: 24%

Government: 24%

### RESPONDENT ROLE

Workers, supervisors, and project managers in:

Back-office support: 17%

Production: 26%

Customer-facing roles: 57%



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