

The Business Value of ChromeOS for Contact Centers



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Business Value Highlights

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Contact Center Benefits:

-  **33%**
reduction in ticket resolution time
-  **5%**
increase in the number of tickets resolved correctly
-  **19%**
higher productivity — contact center agents

Overall Value of ChromeOS Devices:

-  **245%**
three-year ROI
-  **44%**
lower three-year cost of operations
-  **\$3,901**
three-year total savings per ChromeOS device
-  **37%**
lower weighted device costs
-  **36%**
more efficient device management
-  **24%**
fewer security attacks
-  **77%**
higher productivity, faster reboots

Executive Summary

The market for contact center and digital customer care technology is undergoing broad changes in the face of a changing workforce. Overall, IDC believes that call center teams will be smaller and rely more heavily on automation and artificial intelligence (AI). A majority of businesses now rely on cloud-based technology (both public and private) to support call center operations. According to IDC, by 2024, 45% of contact centers will adopt remote, work-from-anywhere experiences for workers*. Along with the digital transformation of back-end support systems, the client experience for contact center workers will also undergo an evolution away from heavy, PC-based client endpoint technology to lighter, cloud-based device models. This presents an opportunity for devices running ChromeOS to support these emerging trends in contact center transformation.

IDC interviewed five organizations and surveyed more than 200 organizations that have provided devices running ChromeOS to their contact center agents. Study participants reported that devices running ChromeOS provide the right mix of functionality, performance, and cost for their contact centers. The improved user interface, strong device performance, and reduced device downtime from using ChromeOS improved agent productivity and effectiveness. These ChromeOS-related benefits enable agents to make more effective use of their contact center solutions and respond to inquiries more nimbly.

Google customers reported that devices running ChromeOS offer the following benefits for their contact center operations:

- **Providing an intuitive, high-performing, and easy-to-use interface** that enables agents to work effectively and focus on ensuring customer satisfaction
- **Improving the ability to respond to customer inquiries in a timely and correct way** to ensure customer satisfaction and support
- **Optimizing device costs**, which helps justify providing more agents with a common, high-performing device
- **Reducing the time required to deploy and manage devices**, thereby speeding up new contact center agents' onboarding and placing less burden on teams responsible for device deployment and management
- **Minimizing security risk** associated with accessing customer data

IDC calculates that use of devices running ChromeOS helps drive an average 19% productivity gain for contact center agents. This means that teams of 631 agents using ChromeOS devices perform as effectively as 750 agents using legacy or other devices. Further, IDC's research confirms that interviewed organizations using ChromeOS achieved lower device costs, staff efficiencies, improved security, and strong performance.

*Source: IDC FutureScape: Worldwide Future of Connectedness 2022 Predictions, IDC #US47438921, October 2021

The Business Value of Devices Running ChromeOS for Contact Center Agents' Use

Benefits of Using ChromeOS Devices for Contact Centers

Study participants reported using ChromeOS devices for their contact center operations, with an average of 631 contact center agents using 594 ChromeOS devices. They chose ChromeOS devices for higher agent productivity, strong performance, improved device security, and cost efficiency. Further, they sought to provide their contact center agents with devices with an intuitive user interface and reliable performance for enhanced ticket resolution.

Interviewed organizations highlighted the following benefits of devices running ChromeOS for their contact centers:

Ease of onboarding and transitioning from legacy devices:

"We're finding out that onboarding, training, and the shift from legacy software are all smooth with ChromeOS devices. We're looking at what's out in the market and where the need is ... but it's forward looking in terms of speed, simplicity, and security."

— CIO, U.S. HEALTHCARE ORGANIZATION

Ease of use and strong reliability:

"ChromeOS devices are incredibly simple and very difficult to break. They're reliable and easy to deploy. You log in and all your data is there, and if it breaks, you just get another one."

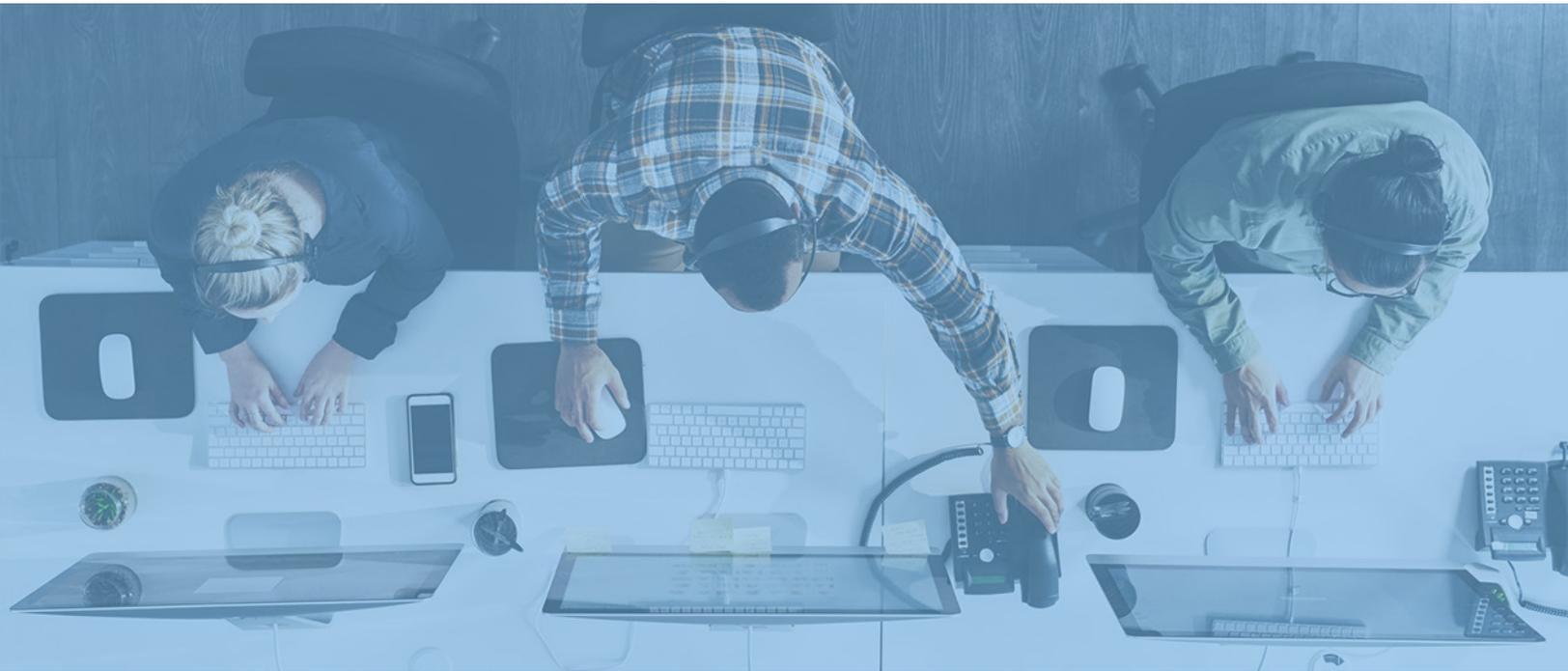
— IT DIRECTOR, U.S. REAL ESTATE COMPANY

Figure 1 (page 6) shows survey participants' leading responses for the most significant benefits and outcomes from using ChromeOS devices in their contact centers. Survey respondents listed the intuitive and easy-to-use interface most often, reflecting the importance of user interface for contact center agents to perform effectively.



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Survey respondents listed the intuitive and easy-to-use interface most often, reflecting the importance of user interface for contact center agents to perform effectively.



Survey respondents listed the following as critical benefits to contact center success:

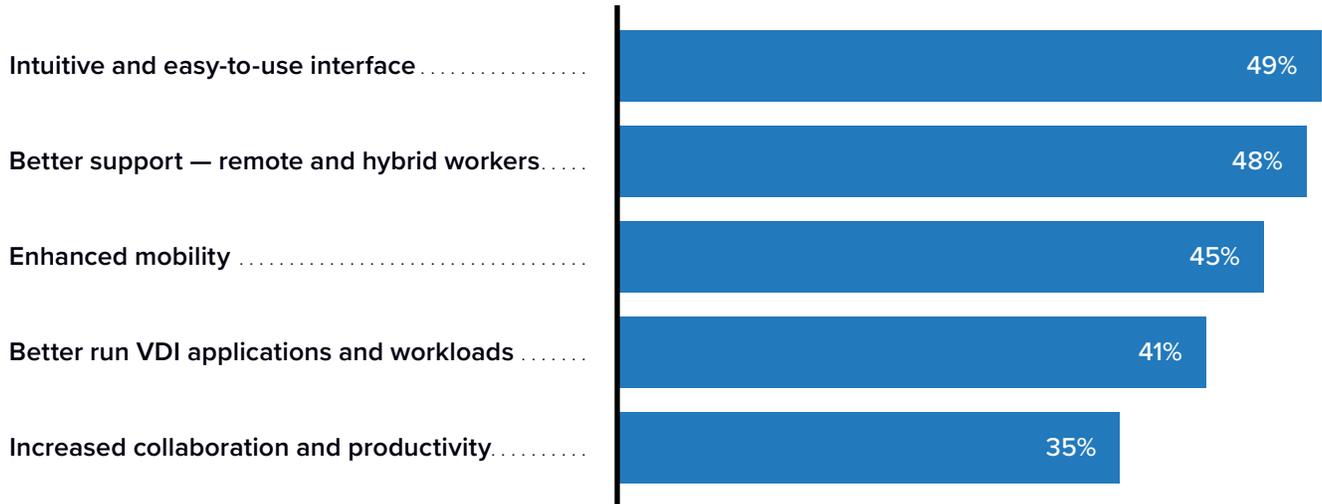
-  Intuitive and easy-to-use interface
-  Better support for hybrid and remote workers
-  Enhanced mobility
-  Improved VDI performance
-  Increased collaboration and productivity of contact center agents

In terms of most significant outcomes, the leading benefits tracked the broader results, with outcomes such as increased employee retention and the ability to capture more revenue also frequently named.

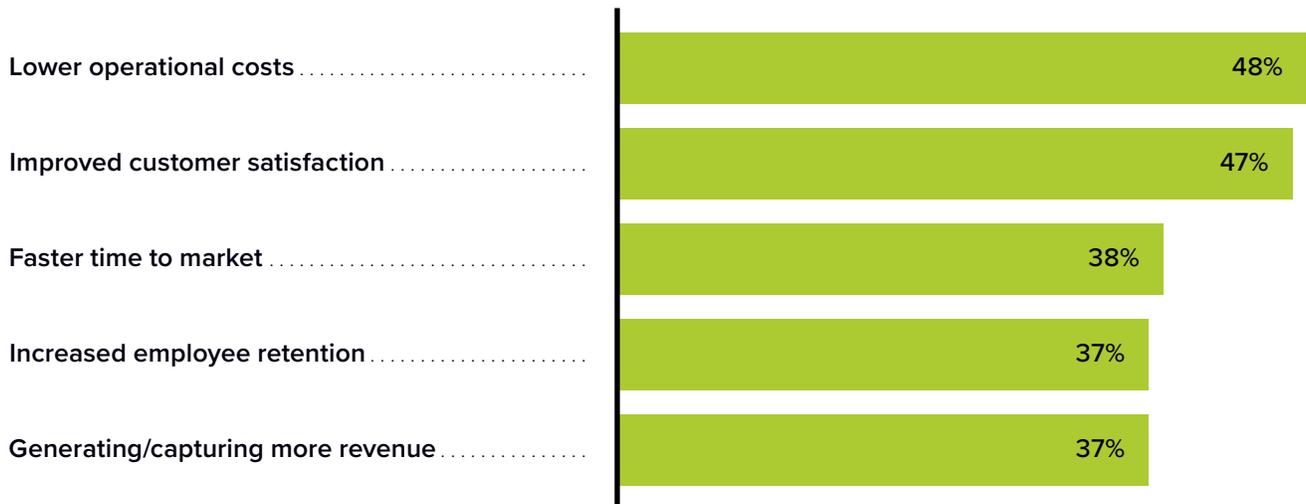
-  Lower operational costs
-  Higher customer satisfaction
-  Faster time to market
-  Increased employee retention
-  Ability to capture more revenue

FIGURE 1
Benefits and Improved Outcomes from Using ChromeOS Devices —
Organizations Using for Contact Center Operations
(% of respondents)

Most significant benefits



Most significant improved outcomes



n = 205, Source: IDC Business Value Research, June 2022

For additional details about the organizations interviewed using ChromeOS devices for their contact centers, see [Appendix B: Firmographics](#).

Value of ChromeOS Devices for Contact Center Use

Improved agent productivity and device performance are highly valuable for study participants who use ChromeOS devices to run their contact centers. Agents rely on devices as their primary means of accessing data, collaborating with other agents and employees and, ultimately, serving their customers. This makes device access, user interface, and performance imperative, as well as ease of management, deployment, and robust security.

Contact Center Agent Productivity Gains

Contact center agent productivity refers to both the volume and the quality of support an agent provides. Contact centers are crucial touch points with customers, and it is vital to a business' brand and reputation to provide an experience that delights customers.

Devices used by contact center agents figure prominently in their ability to work effectively. Agents need high-performing, reliable devices that allow them to readily access data and contact center applications they use on a daily basis. Study participants reported that devices running ChromeOS have allowed them to empower their agents with intuitive workflow experiences and high-performance devices.

Interviewed Google customers reported the following details about their contact center infrastructure and tools that run on ChromeOS:

- Hosted UCaaS/BCP solution including telephony, integrated with Salesforce and EMR, with specific setup left to contact center agents
- Contact center-specific software, email, and Slack, with a headset for softphone extension run on ChromeOS devices
- Telephony solution with multiple monitors, webcam, and a headset
- Virtualized access to key information systems, including HR and CRM, with the most common setup including two monitors and a headset

The improved agent productivity from devices running ChromeOS directly improves contact center KPIs. For example, users lose 77% less time to device reboots on average than previous or other devices. A real estate company in the United States using ChromeOS devices for its contact center noted:

Study participants reported that devices running ChromeOS have allowed them to empower their agents with intuitive workflow experiences and high-performance devices.



less time to device reboots on average than previous or other devices.

“With [a previous device], especially with these older ones, they were rebooting daily, or a couple times a week. If an update was involved, then it could take up to 1–2 hours, or if something goes wrong, it could take all day or longer to fix it. ChromeOS devices rarely reboot.”

Study participants attributed improvements in contact center KPIs as well as higher overall agent productivity to improved access to data and key applications. As a result, their agents can work more effectively and respond better to customers. For example, they reported that their agents using ChromeOS devices can resolve tickets an average of 33% faster and close 5% more tickets correctly (see **Figure 2**). Moreover, study participants reported that their employees, including contact center agents, can log in to ChromeOS devices 49% faster than legacy or other devices. These KPIs reflect agents’ ability to access and apply needed information with ease and speed on ChromeOS devices, which link to the agents having high-performing devices with strong user interfaces.

Further, study participants can better ensure the performance of ChromeOS devices through automated updates. They reported that on average OS and application updates happen 32% faster with ChromeOS devices. This means that ChromeOS devices require less time for updates, patches, and support due to automated and seamless releases. This also means that contact center agents face fewer potential disruptions and interruptions as they do their jobs due to device updates or performance issues.

Study participants reported that their agents using ChromeOS devices can resolve tickets an average of **33% faster** and close **5% more** tickets correctly.

FIGURE 2
Impact of ChromeOS Devices on Contact Center KPIs
(% of improvement)



n = 5 for in-depth interviews, n = 205 for survey, Source: IDC Business Value Research, June 2022

Study participants — both in-depth interviews and survey respondents — attributed significant productivity gains for contact center agents to having ChromeOS devices. In other words, their contact center agents can better support business operations by handling greater ticket volumes and responding more successfully to customer needs.

Overall, as shown in **Table 1**, IDC calculates that study participants realize 19% higher productivity for their contact center teams, which means that 631 contact center agents using ChromeOS devices are as effective as 750 agents using legacy or other devices. For purposes of attributing financial value to these productivity gains, IDC applies a 15% margin assumption, which results in an average net productivity gain of around 3%.

TABLE 1
Contact Center Team Efficiencies — Average per Organization

	Before/ Without ChromeOS Devices	With ChromeOS Devices	Difference	Improvement
Equivalent productivity of contact center agents (FTEs)	631	750	118	19%
Value of equivalent productivity per year	\$44.19M	\$52.48M	\$8.29M	19%
Net increase in value of equivalent productivity per year	\$44.19M	\$45.43M	\$1.24M	3%

n = 5 for in-depth interviews, n = 205 for survey, Source: IDC, June 2022

Lower Device Costs for Contact Centers

For study participants, providing their contact center agents with devices with a compelling user interface and strong performance is imperative. However, the reality of high costs often meant that they could not roll out new devices as broadly or frequently to contact center agents as would be ideal.

IDC’s research demonstrated that ChromeOS devices compare favorably in terms of cost with legacy and other devices used and considered by study participants. For example, an interviewed U.S. pharmaceutical company described how it has expanded remote device access across its contact center team: *“We wanted to provide our agents with a company-owned device ... and pushed Chromebooks due to cost and control Now, every call center agent, whether they’re an employee or contractor, all use the same Chromebook.”* A United States–based real estate company echoed these themes in how



We were in a vast growth mode and needed to set up offices very quickly without having to configure a whole network and VPN and all that; we could just send out the ChromeOS devices.”

ChromeOS devices have helped it maintain robust contact center operations as it expands: *“Most of our contact center agents are remote, even before COVID-19, and we have 100 offices using these ChromeOS devices in different states. We were in a vast growth mode and needed to set up offices very quickly without having to configure a whole network and VPN and all that; we could just send out the ChromeOS devices.”*

IDC’s research shows that across all study participants ChromeOS devices cost 37% less on average to purchase and run than previous or other devices. A United States–based pharmaceutical company using ChromeOS devices for its contact center noted: *“If you look at the cost of [other devices we’ve used], we’re looking at \$1,500–\$1,600 per device with the minimum configuration. With a Chromebook, you’re looking at \$420 per device; so it’s a third of the cost and that’s a significant difference.”* Over three years, this equates to average savings of \$463 per device, which adds up to considerable total savings across hundreds or even thousands of devices used by contact center agents.

IDC’s research shows that across all study participants ChromeOS devices cost **27% less** on average to purchase and run than previous or other devices.

Improved Manageability and Deployment for Contact Center Devices

Interviewed Google customers also focused on the ease of deploying and managing devices running ChromeOS. Not only does faster provisioning foster faster agent onboarding, but strong deployment and manageability functionalities help IT teams keep up with demand created by growing contact center operations. For example, a United States–based healthcare organization noted: *“Provisioning of devices for new contact center hires is quick with ChromeOS devices. We have their Chromebook overnighted to them; they log in, and they’re done. This is days faster than when we were doing [previously], even though we procure our equipment in the same way.”*

Study participants reported deploying devices running ChromeOS 63% faster on average than legacy or other devices, shaving off more than 45 minutes per device deployed. Further, ChromeOS devices require 36% fewer staff resources to manage, which both reduces the burden on device management teams and lowers the overall cost of operating devices. A United States–based real estate company using ChromeOS devices for its contact center spoke to the strong manageability capabilities of ChromeOS devices: *“Chromebooks are almost zero touch. I’ve literally had one of our managers just stop at a store to get one — he walked in, picked it up, walked out, and went back to his desk and set it up. It was so simple and easy for him to do that. If it was [another] machine, we’d have to put our remote software on it, and that would take my team an hour to configure and download and set everything.”*

Study participants reported that devices running ChromeOS:

- ⬆️ are **63% faster** on average than legacy or other devices
- ⬇️ require **36% fewer** staff resources to manage

Reduced Device Security Threats

Study participants also cited improved security with ChromeOS devices as key to minimizing the risk of cyberattacks and data breaches.

Contact center agents often handle personal and sensitive information, which makes device security crucial to business continuity, reputation, and compliance. This is especially the case as the COVID-19 pandemic and other workforce trends have pushed more contact center agents to work remotely.

An interviewed healthcare organization described how better security with ChromeOS devices enhances its contact center operations:

“We chose ChromeOS devices for their security features, including ransomware protection and proactive security updates, as well as the customer experience. We want our contact centers to be cloud first and agile.” Meanwhile, another healthcare organization noted its increased comfort with allowing agents to work remotely with ChromeOS devices because of robust security that minimized concerns about security issues affecting customer data: *“The security benefits of ChromeOS devices are huge. There’s no data on the device; if it gets stolen, nothing is lost. Through management, we have geofencing, which limits use of the device so we can retire it immediately to wipe it if needed. We have very low exposure with ChromeOS devices.”*

Interviewed Google customers connected their use of ChromeOS devices to improved security postures that included experiencing an average of 24% fewer security attacks than legacy or other devices, 29% lower overall security risk, and 29% more efficient device security teams.



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Interviewed Google customers experienced **24% fewer** security attacks than legacy or other devices, **29% lower** overall security risk, and **29% more efficient** device security teams.

Challenges/Opportunities



Transformation of endpoint management and security support teams.

While the new model of cloud-based device provisioning, management, and security promises to free up IT resources and staff, the transition to these new models can be challenging. Many organizations have built up substantial IT support models, supporting technology infrastructure and staff to manage full-client endpoint devices and associated technologies. Training and thoughtful transition planning will be required for IT support and security teams supporting cloud- and ChromeOS-based contact center agents under this new paradigm.



Transition from device-based to cloud/online-based threats.

Eliminating vulnerabilities at the device level (e.g., ChromeOS' small, secure footprint and vulnerability to attack) will not eliminate all security challenges facing contact center support teams. Organizations must still be vigilant to online-based threats to workers, including malicious spam and phishing attempts, as well as bad actors interacting with call center agents via voice or with online tools. Security tools and tactics must shift toward network-based security, with emphasis on AI and automation for detecting new types of cloud-based threats.

Conclusion

Study participants using ChromeOS devices for their contact centers reported strong benefits from agent productivity gains, improved security posture, simplified management, and lower device costs. IDC calculates that study participants will realize total savings with ChromeOS devices of \$3,901 per device over three years, which would result in 44% lower cost of operations over three years and a three-year ROI of 245%.

Appendix A: Methodology

IDC's standard Business Value/ROI methodology was utilized for this project. This methodology is based on gathering data from organizations currently using ChromeOS devices as the foundation for the model. Based on interviews with organizations using ChromeOS devices, IDC performed a three-step process to calculate the ROI and payback period:

- 1. Gathered quantitative benefit information during the interviews using a before-and-after assessment of the impact of using ChromeOS devices.**
In this study, the benefits included device cost savings, IT team efficiencies and productivity gains, and user productivity gains.
- 2. Created a complete investment (three-year total cost analysis) profile based on the interviews.** Investments go beyond the initial and annual costs of using ChromeOS devices and can include additional costs related to migrations, planning, consulting, and staff or user training.
- 3. Calculated the ROI and payback period. IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of ChromeOS devices over a three-year period.** ROI is the ratio of the net present value (NPV) and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings. For purposes of this analysis, based on the geographic locations of the interviewed organizations, IDC has used assumptions of an average fully loaded salary of \$100,000 per year for IT staff members and an average fully loaded salary of \$70,000 per year for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).
- The net present value of the three-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.
- IDC applies a net margin assumption (15%) for most user productivity gains and additional gross revenue attributed to interviewed organizations' use of ChromeOS devices resulting in the net productivity and revenue calculations applied to IDC's model.

Appendix B: Firmographics

Table 2 provides details about the organizations interviewed for this study using ChromeOS devices for their contact centers.

TABLE 2

Demographics and Use of ChromeOS Devices by Interviewed Organizations

	Average
Number of employees	57,000
Number of IT staff	7,886
Number of business applications	427
Revenue per year	\$18.37B
Number of contact center agents	631
Number of ChromeOS devices used	594
Annual growth rate — ChromeOS devices	7%
ChromeOS devices replacing another device	53%
Countries	United States (5)
Industries	Healthcare (2), financial services, pharmaceutical, real estate

n = 5, Source: IDC, June 2022

Note: All numbers in this document may not be exact due to rounding.

About the IDC Analysts



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Phil is the program vice president on IDC's Enterprise Mobility team. His research provides insights into how enterprises deploy mobile devices and applications, as well as management and security platforms. Key markets he covers include enterprise mobility management (EMM) and enterprise mobile security, including mobile data and threat protection, and mobile device security technologies.

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Linn tracks market trends and industry developments that impact the worldwide and U.S. markets for PCs, thin clients, and monitors. He participates in cross-research streams that cover all device categories.

[More about Linn Huang](#)



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Matthew is responsible for carrying out custom business value research engagements and consulting projects for clients in a number of technology areas with a focus on determining the return on investment (ROI) of their use of enterprise technologies. Matthew's research often analyzes how organizations are leveraging investment in digital technology solutions and initiatives to create value through efficiencies and business enablement.

[More about Matthew Marden](#)



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