Lessons from the virtual trenches

Enterprise IT leaders weigh in on remote workforce management



Smarter technology for all



"All eyes are on me. And I'm trying to deal with exploding online loads, people working remotely, new cyberthreats. Every day it's something new."

Banking CIO

Across industries, businesses are adopting flexible work policies, and a growing percentage of employees are now working remotely. This is a challenge throughout organizations but particularly for CIOs, who are responsible for deployment, security, and management of dispersed devices and company networks. In this e-book, we hear from IT leaders about their priorities and challenges in managing a more permanent pivot to the work-from-anywhere model. TABLE OF CONTENTS

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The permanent pivot to remote work

The sudden and significant shift to remote work in early 2020 is now well established. In a matter of weeks, 88% of organizations were encouraging or requiring employees to work from home.¹ The COVID-19 pandemic was not the single cause, but it dramatically accelerated a remote work trend that was already in motion. And business leaders are banking on the trend continuing indefinitely.

3in**4**

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C-level business leaders revealed they are shifting budgets and resources to support permanent remote work.

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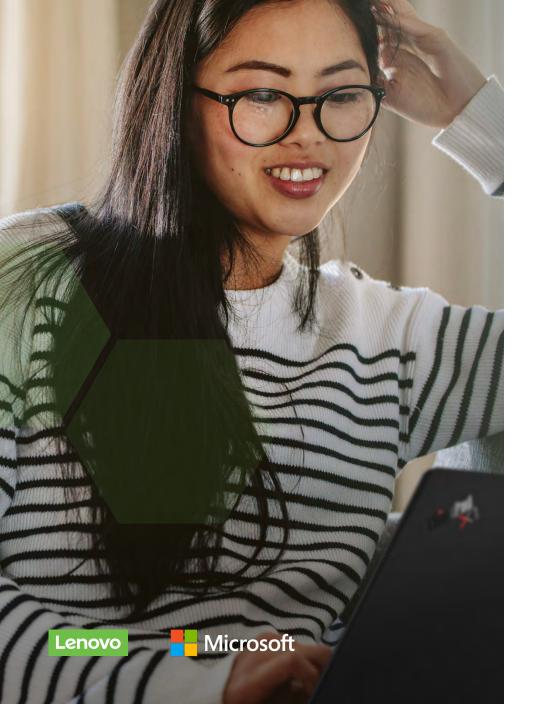
In a recent Gartner survey, three in four C-level business leaders revealed they are shifting budgets and resources to support permanent remote work for 5% to as much as 50% of their workforces.² These leaders represented companies ranging in size from \$500 million to \$50 billion in annual revenue with as many as 100,000 employees indicating that a shift to remote work is not limited by a company's size.

All departments in a large enterprise are affected in one way or another by the need to support a growing remote workforce, but probably none more than IT. COVID-19 sped up the pace of digital transformation overall. It validated initiatives already underway and prompted compressed timeframes to complete them.

Disruption often reveals unanticipated gaps opportunities to improve workflows. In fact, as many as 95% of CIO respondents reported their IT organizations were bogged down by inefficiencies with the changeover to a remote workforce.³

In this critical moment, technology is playing a pivotal role in reshaping business. How are IT leaders responding?





Industries by the numbers

Percentage of work that can be done remotely by industry⁴

	Unweighted	Weighted by Wage
Educational Services	83%	71%
Professional, Scientific, and Technical Services	80%	86%
Management of Companies and Enterprises	79%	86%
Finance and Insurance	76%	85%
Information	72%	80%
Wholesale Trade	52%	67%
Real Estate and Rental and Leasing	42%	54%
Federal, State, and Local Government	41%	47%
Utilities	37%	41%
Other Services (except Public Administration)	31%	43%
Administrative and Support and Waste Management and Remediation Services	31%	43%
Arts, Entertainment, and Recreation	30%	36%
Mining, Quarrying, and Oil and Gas Extraction	25%	37%
Healthcare and Social Assistance	25%	24%
Manufacturing	22%	36%
Transportation and Warehousing	19%	25%
Construction	19%	22%
Retail Trade	14%	22%
Agriculture, Forestry, Fishing, and Hunting	8%	13%
Accommodation and Food Services	4%	7%

63%

Researchers estimate 63% of US jobs require significant onsite presence and the remaining 37% can be performed entirely remotely, with significant variation across cities and industries.⁴ Where are CIOs prioritizing investments?

#1 P Cybersecurity

7in10

4 in 10 A anticipate additional headcount

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HOME

Gartner's take

Analyst firm Gartner predicts that as organizations see some recovery and reopening following the pandemic, there will remain pending IT projects but depleted funds. So, CIOs will take advantage of subscription products and cloud services, including infrastructure as a service and cloud-based conferencing, to minimize cash outlay.⁶

IT leaders will be looking at ways to "industrialize" remote working. Gartner believes one avenue is desktop as a service (DaaS). Cloud-based, scalable, and relatively inexpensive, DaaS is expected to grow 98% in 2020 and is now one of the top 10 priorities for ClOs.⁶

98%

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"Looking around the corner and experimenting with AI-powered technologies and strategies will enable future growth, open up opportunities for innovation, and improve overall efficiencies."⁷

Cynthia Stoddard, Adobe CIO

Microsoft

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Spotlight on Al

To better understand how CIO priorities have shifted, Adobe teamed with Fortune to survey more than 200 CIOs in the US.⁸ Here's where AI landed.

Only 50% of respondents use artificial intelligence (AI), and those use cases are mostly in IT and customer support. But more than 90% implemented AI over the past year, indicating growing interest. Adobe CIO Cynthia Stoddard believes that as companies move toward more remote workers, this technology becomes even more critical.

Why?

When IT teams use AI, machine learning (ML), and robotic process automation as business enablers, the human workforce (whether onsite or remote) can shift focus to higher-level responsibilities. "It's early days and AI is a competitive advantage," says Stoddard, "but we'll soon get to a point where AI is table stakes."

A match made in the future

Al is ideal for helping hiring managers with time-consuming recruitment and compliance tasks. And one of the most practical uses in a work-fromhome world is machine learning programs for accurate, non-invasive performance monitoring.

How?

Stoddard recommends taking IT out of the equation where you can, with services and processes that can be automated and/or shifted to a self-healing platform. "Have a data strategy in place before deploying AI," she advises. "Start small, like automating a procurement task or IT help desk tickets to demonstrate the value of AI, and make sure you have advocates throughout the business to get buy-in."

In the hearts and minds of CIOs

In a broad look across the internet, these issues came up repeatedly as top concerns of CIOs who are managing a high percentage of remote workers, likely for the long term.

People first When asked

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When asked about the most important aspects of transitioning to a largely remote workforce, many CIOs put people at the top of the list.

Says Massimo Rapparini, CIO and head of CX at Logitech: "Be human. It's important to keep sight of humanity. How are your teams doing? How do they like to work? What are their communications preferences? What other pressures do they have on their time and attention? The answers to these questions can only come from one source: your employees."⁹

"Business leaders need to shift priorities to first and foremost safeguard the emotional and physical well-being of employees, while also ensuring business continuity," Stoddard emphasizes.¹⁰

The Citrix IT and HR teams worked in tandem to draft the company's work-from-home policy and develop a list of resources. "We decided to lean in and take a walk in the user's shoes and collect feedback along every step of their journey that could be used to deliver a superior experience that would enable them to perform at their best," says Rajavel."





"Every CIO knows change is not just about technology. It's about people, process, and technology."¹²

Meerah Rajavel, Citrix CIO





A novel approach to shadow IT

In a perfect world, IT would create the perfect user experience for every employee where adoption is easy, safe, and secure. But sometime, somehow, someone will be tempted to go around IT. Shadow IT is a formidable force. One effective approach: Use empathy.

Tell your employees you understand their feelings. Then clearly outline the reasons behind policies and procedures. You want to create an environment where employees feel heard and eager to collaborate with IT when things get tough. Anything less will make the months ahead more difficult and less secure for everyone. **Resilience and continuity**

"If you didn't have plans, you now realize you need them," points out Arsalan Khan, a speaker and blogger on business and digital transformation. "If you had plans, you now realize you need to test them. If you tested plans, you now realize you have to update them."

In a recent IDG TECHtalk, three lessons learned emerged: Take a proactive, longterm stance to business continuity planning; design IT infrastructure for flexibility and adaptability; and don't bake business continuity and resilience into specific assets. Instead, make it a framework of decisions and criteria that are regularly tested and that can lead the business.

Lenovo's IT team credits advance preparation for their disruption readiness and fast response to changing workforce needs. Planning included upgraded multi-protocol label switching (MPLS) and scalable infrastructure and application design, including VPN gateway expansion and a work-from-home call center solution.





Security Enabling

Enabling employees

"We need to ensure that [we maintain] the... continuity of the business, and validating the productivity of our employees... as well as making sure the business is secure," says Sheila Carpenter, Zix/AppRiver CIO.¹³ Here's what they do:

- Issue each employee a portable computer and a VPN token with multi-factor authentication
- Make sure all devices are encrypted, contain endpoint security, and have everything in place for regular patching
- Make sure all devices are equipped with email security, encryption, archiving, and backups to protect against spam, ransomware, malware, spearfishing, etc.
- Provide security awareness training for all employees, as well as education on working securely and remotely
- Add security reminders on lock screens, improve training, and bolster at-scale security technology

Server access

A virtual private network (VPN) lets employees make an encrypted connection to a company server. This provides an added layer of protection on a potentially unsecured Wi-Fi network in an employee's home, a café, or other public network connection. In addition, companies should be using a contextual security mode, which assesses request risk on multiple data points.

A user's identity alone should not be acceptable to vouch for the cyberhealth of their device. Security professionals are pushing for access control policies that incorporate some information about the device, its risk state, the location where the request was initiated, etc. A user's identity then determines what they have access to.





Just as COVID accelerated digital transformation, disruption is doing the same for the changing role of IT. These factors are contributing to a broadening of IT's role in the enterprise.

- CIOs are gaining visibility
- IT has stepped up its role in sustaining the business
- IT and business operations are beginning to break down silos to create a business technology agenda
- IT and HR are partnering on things like collaboration and productivity tools

Collaboration

When employees are working from anywhere, remote collaboration is a lifeline. In a culture of collaboration, employees are more productive, deliver higher-quality work, and are happier.

Multi-functional teams

Savvy companies are pulling together diverse teams to address such issues as high-availability VoIP implementation, employee stipends for internet and phone costs, and guides for employees and managers on working in a remote environment.

Cross-department collaboration between HR, IT, and facilities management enables strong policies, better ideas, and more effective problem solving.

Successful teams are now organizing leadership courses on how to manage remotely and have begun a regular cadence of company communication to ensure connection and transparency. Adam Ely, deputy chief information security officer at Walmart, noted in a recent post: "I spoke to one company that says this [collaboration] drove [security teams] to have better relationships with people in business lines they didn't know. Those teams now have a better understanding of their colleagues' business processes and plan to work more closely with peers across the business. It is a potential silver lining for IT, where strong relationships with business partners are increasingly critical to growth."¹⁴

The right tools

Smart collaboration solutions like all-inone conference room systems, featurerich videoconferencing platforms, and laptops with high-quality audiovisuals are playing a key role in the success of hybrid environments with a mix of onsite and remote workers.



Device management

With so many dispersed endpoints and unpredictable security, remote device manageability is vital. IT must be able to "see" devices virtually, push updates, and troubleshoot issues.

Applications are available that help businesses sync devices with IT asset management (ITAM) systems.

Once integrated, IT can view current configurations and health information, wipe systems, reboot, and retire assets.



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Employees speak: The importance of employee experience

Among the interesting findings in the PwC 2020 US Remote Work Survey were the following key takeaways on employee productivity.¹⁵

42%

43%

Executives report that employees have become more productive (44%) while working from home during the pandemic. Employees are less sure, with only 28% feeling more productive.

When employees were asked what could help them become more productive while working remotely, four needs rose to the top of the list.

44%

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Executives report that employees have become 44% more productive while working from home during the pandemic. **57%** More flexible work hours. 57% of executives plan to provide this.

55% Better hardware and equipment. 55% of executives plan to provide this.

Clear rules on required availability. 42% of executives plan to provide this.

Help managing workloads. 43% of executives plan to provide this. Two key takeaways

Executives and employees agree on the top two requirements remote workers need to increase their productivity.

But while employees are clearly signaling they need support to set boundaries between their professional and personal lives so they can produce at their highest levels, less than half of executives plan to address those requirements.

Getting it right, making it sustainable

The upheaval of 2020 and the abrupt shift to remote work are undeniable. But as enterprises settle into a longer-term remote work situation, both employers and employees will begin to experience the benefits of this new work world. Many already are.



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