



The Workers' Experience

Survey reveals the importance of technology to spark motivation, enhance productivity and strengthen security

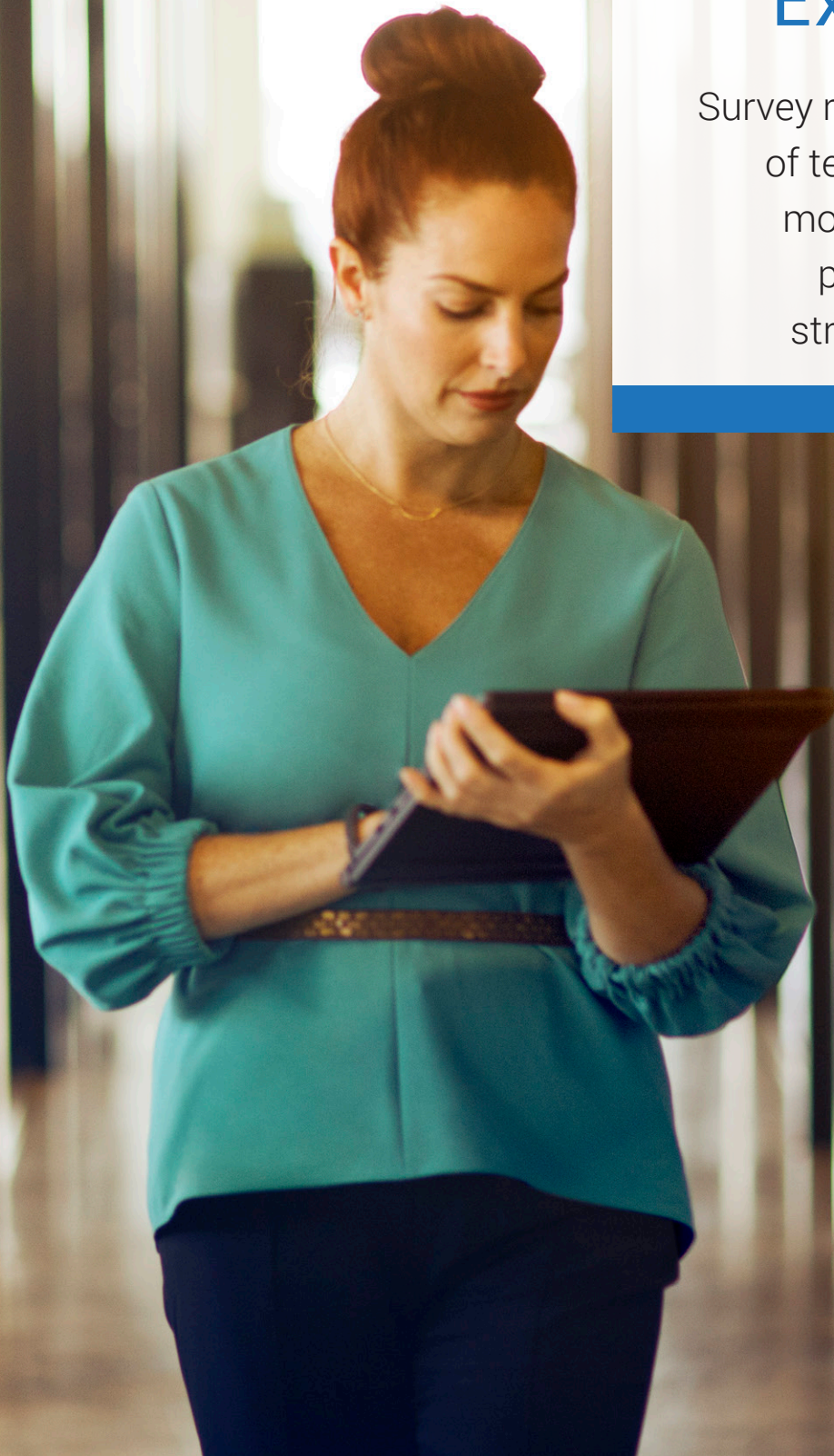


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Introduction

To compete in the digital era, organizations require a skilled and highly productive workforce, empowered by the right technology. Technology decision makers must match highly functional technology to the needs of every worker, enabling each person to have an experience that is productive and fulfilling, while taking organizational competitiveness to the next level. It's a straightforward mandate, but is not always easy for technology decision makers to achieve.

To shed light on today's digital-era workforce and its needs, Dell commissioned a study that is the subject of this report. The survey probes the requirements of users, patterns of work, and the desires and frustrations of workers in their quest to maximize their ability to contribute to their organizations.

In a step-by-step fashion, this comprehensive report takes you through the survey results to help you better understand the needs of your own workforce. In doing so, we recommend looking at your employees through the lens of four types of workers:

- Desk-centric worker: Primarily office-based and at a desk
- Corridor warrior: Primarily office-based but mobile within the corporate building
- Remote worker: Primarily at a distant location
- On-the-go pro: Primarily mobile

Often, workers are best understood in terms of hybrid categories that are a combination of these four basic types of workers.

Key Findings

As you read along, you will find several points stand out:

- Worker motivation and engagement are keys to productivity.
- Substandard or inappropriate technology impedes workforce effectiveness.
- Every worker's technology needs are different.
- Security is important, but must not thwart workers' ability to access data and applications.
- It is essential to provide each worker with a complete technology ecosystem.

Examining user needs, the survey found technology decision makers should pay attention to a broad array of devices beyond laptops, desktops and 2-in-1 devices. These include such additional equipment as digital pens, large displays, AR/VR headsets and extra power supplies that can boost productivity significantly for certain users. This equipment comprises the user ecosystem, which workers say they would like their organizations to provide. Indeed, fully 85% would prefer their organizations provide them with an ecosystem of tested and



85% of all workers prefer their organizations provide them with an ecosystem of tested and supported devices and accessories, rather than providing that ecosystem themselves.



supported devices and accessories, rather than providing that ecosystem themselves. And 62% say having the right ecosystem makes them more motivated and engaged.

Geographic differences can also be highly significant for technology decision makers at companies with worldwide operations. For example, in some regions, public transportation is the norm; in others, home offices are often used; in others, the use of personally provided devices is commonplace. Each of these environments can impact workers' technology needs.

Taken as a whole, our research shows that in the digital era, the organizations that are the most competitive will be the ones that focus most closely on the needs of every employee. Those organizations will do the most to provide each worker with the technology ecosystem that helps them – and their companies – achieve their full potential.

Let's begin our journey.

About the survey

To better understand the modern workforce and its technology needs, Dell commissioned Research Now to conduct a survey of 6,809 respondents. The survey covered five major global areas: North America, Western Europe, Japan, India and Latin America. The survey also covered seven major vertical industries: Education, Healthcare, Media & Entertainment, Technology and R&D, Finance, Manufacturing Logistics & Retail, and Energy.¹ The survey was fielded during the summer of 2018.

The importance of the workforce experience

New business models, new customer relationships and new modes of work are changing the way business gets done. Organizations must adapt rapidly or be left by the wayside. Workforce experience, in particular, is undergoing profound change. Technology decision makers must re-evaluate the experience of employees and the role of technology in that experience.

This report examines the workforce experience that takes place across three vectors: personal productivity, collaboration and security.

Personal productivity. Today's workers expect to advance the cause of their organization in innovative ways at any time of the day or night, from wherever they might happen to be. In short, user behavior has changed and location-independence and mobility have become essential requirements.

In the previous task-centric paradigm, work duties were spelled out and uniform tools were distributed in a top-down manner. In the digital era, that old paradigm has been overturned. Now, personal productivity is measured by how creatively, how enthusiastically and how effectively employees accomplish their work – no longer by whether workers merely perform certain assigned tasks. Performance is highly dependent on motivation and engagement.



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In this new work environment, the lines between work and personal life have been blurred if not erased. In fact, our survey uncovered the following:

- 64% say technology plays a role in good work-life balance, resulting in higher motivation and engagement.
- 65% prefer to work for an organization that offers mobility and flexibility.

Work that is creative and innovative can be highly involving. To perform it, workers need to be focused and fluid – they need to get tasks done without delays, distractions or interruptions. 60% report experiencing glitches, freezes and bugs that negatively affect their motivation and engagement. To be engaged and motivated, employees must have powerful yet easy-to-use tools available to them at all times – and many workers need multiple tools, including desktop, laptop, 2-in-1 or smartphone devices. Technology that is distracting or frustrating is a direct cause of lost productivity.

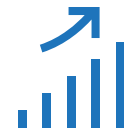
When technology decision makers provide the right ecosystem, not only will workers be more productive but their attitude toward their employers will be better. In many cases, the survey found, workers are likely to quit a job with substandard technology. Overall, 46% are likely to do so, and the percentage reaches 60% in Technology and R&D. A high percentage (56%) of on-the-go pros are likely to leave if the technology the company provides them is not up to par.

When companies tailor technology to workers' needs, those workers perceive their companies as taking an interest not only in corporate goals, but in their personal success. A significant number (46%) would prefer their organization offer more mobility and flexibility over a salary raise. A proactive approach on the part of the employer tends to increase employee commitment, loyalty and retention – and, through word of mouth, employer reputation. These positive forces will in turn improve the organization's ability to attract and retain talent.

The needs of workers vary by industry. According to the survey, workers in the fields of Manufacturing Logistics & Retail and Tech/R&D, as well as on-the-go pros, have a greater need for multiple devices. Tech/R&D and Finance workers show the greatest relationship between technology and productivity. For example, 70% of survey respondents in those industries say that cutting-edge, high-performance technology would help them be more productive at work, compared with 63% overall.

Taken together, these results show the time has come for technology decision makers to consider employees not merely as task performers, but as individuals with distinct technology needs. Instead of issuing devices to employees and leaving them to adapt their work to the equipment they are given, IT should provide devices that are geared to the different ways that different employees work.

Collaboration. By multiplying the knowledge and skills of individuals, collaboration enables employees to create new insights, new strategies and even new business models. Collaboration not only has a profound effect on business results, it also has a dramatic effect on personal



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60% of Technology and R&D workers are likely to quit a job with substandard technology.

productivity. When employees are able to collaborate, they are likely to do more – and higher value – work. And conversely, when they are unable to collaborate, their productivity is greatly diminished.

Collaboration takes place in either real-time or asynchronous modes, both of which are important. Real-time collaboration takes the form of online and in-person meetings, chat, VoIP communications and videoconferencing. Asynchronous collaboration can take place through email, file-sharing and managed workflow.

To enable collaboration, technology decision makers must provide solutions that allow data to seamlessly and securely flow from end to end, to and from personal devices across the underlying infrastructure, taking into account the new modes of personal productivity that are characteristic of the digital era. Technology decision makers must provide reliable, high-bandwidth connections capable of carrying voice, text, video and large image files.

Business meetings are an important mode of real-time collaboration, and the ability of employees to share data in these meetings is essential. According to the survey, on-the-go pros (57%) and corridor warriors (44%) are most likely to collaborate in daily meetings. Confidential and strategic data as well as internal and sensitive data are often shared at these meetings.

Because work at many enterprises is done globally on a 24x7x365 basis, infrastructure that enables collaboration must afford high uptime with a high level of security. When employees need not worry about the risk of sharing data, they will do so without hesitation, focusing on achieving their business mission without concern for risk.

Security. Data security has never been more important, as attacks continue to multiply in number and sophistication. A data breach can cost hundreds of millions of dollars in financial losses and incalculable reputational damage. Security measures must be effective, but they also must not impede the productivity of workers or their ability to collaborate. Technology decision makers should rethink their approach to security so that workers can access and share data – even sensitive data – without the difficulty or delays caused by outmoded security protocols.

In their quest to get work done, employees are likely to bypass security measures that create obstacles to accessing data and using devices. According to the survey, 41% of respondents sometimes work outside security protocols at their organizations. On-the-go pros are significantly more likely than others to work outside organizational security guidelines. And roughly two-thirds of this group say that working outside security protocols enables them to work more effectively.

Complicating the security equation is the use of multiple personal devices. That is because technology decision makers who implement security measures on a company-issued laptop or desktop and a phone might not think of implementing those same measures on additional personal devices, such as a home desktop or personal smartphone. However, those personal devices might be used to send sensitive corporate data via a personal email account or to store intellectual



65% of all workers prefer to work for an organization that offers mobility and flexibility.



41% of respondents occasionally circumvent security protocols.

property on a network-attached storage (NAS) device. And it must be remembered that onerous security measures make it more likely that employees will use this off-the-grid equipment in these ways. Thus, IT must deploy non-intrusive security measures on both corporate and personal devices.

Finally, the importance of security in all industries is heightened by regulatory guidelines. The General Data Protection Regulation (GDPR) of the European Union governs the use of the personal data of European citizens across all companies using it, whether or not they are based in EU countries. Regulations for specific industries increase the significance of security further. In healthcare, Health Insurance Portability and Accountability Act (HIPAA) guidelines mandate the protection of patient data and frequently result in fines against organizations that are found to be in violation. In financial services, Payment Card Industry Data Security Standard (PCI-DSS) rules are in effect to protect the data of credit card users. In these industries, lax security significantly increases the risk of financial penalties.



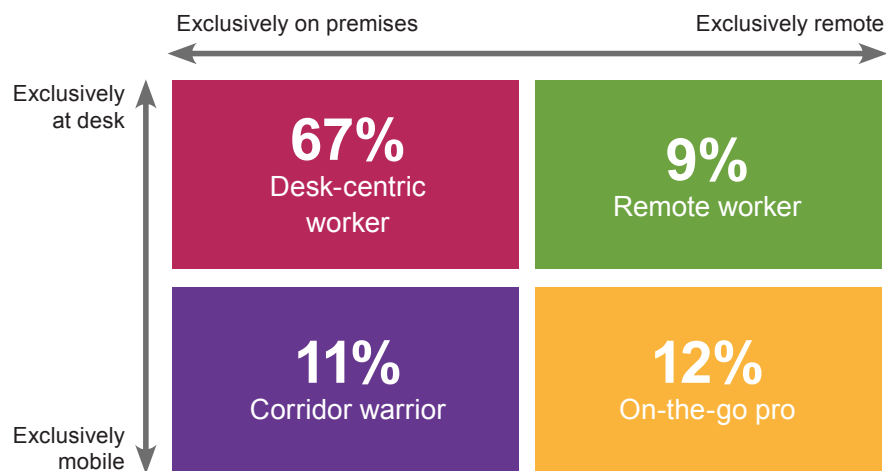
Types of workers and their importance



Types of workers and their importance

To serve the technology needs of an organization's workforce, technology decision makers must understand the roles of each worker in the organization and how technology can help each worker make a greater contribution to the organization. Across a diverse array of industries, workers fall into four basic categories, governed mainly by the location where most work is done and the degree of mobility of the workers:

- Desk-centric worker - Primarily office-based and at a desk
- Corridor warrior - Primarily office-based but mobile within the corporate building
- Remote worker - Primarily at a distant location
- On-the-go pro - Primarily mobile



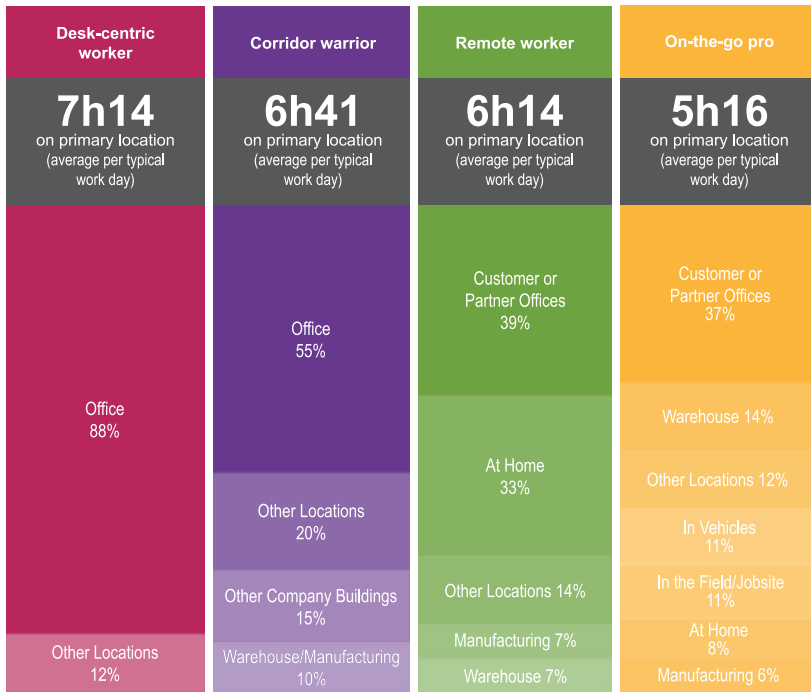
Although workers fall into the four main categories above, many workers combine to a greater or lesser extent the characteristics of different types – they are actually a combination of multiple types. For example, an on-the-go pro may be mobile most of the time, but still might work at a desk for a considerable amount of time. Another example: The needs of desk-centric task workers and desk-centric knowledge workers might be very different. Also, some desk-centric workers work from home one or more days per week.



Technology decision makers must understand the roles of each worker in the organization and how technology can help each person make a greater contribution.



How would you describe your primary work location?



88% of desk-centric workers work mostly on company premises; 84% mostly at a desk.

It's important to understand that there might be a very large number of workers embodying multiple characteristics of the four principal types. The task of IT is to provide workers with equipment that meets their potentially complex needs. However, when acquiring technology, many organizations take the "one-size-fits-most" approach. This approach neglects the almost infinite variety of individual worker needs across the four main types of workers.

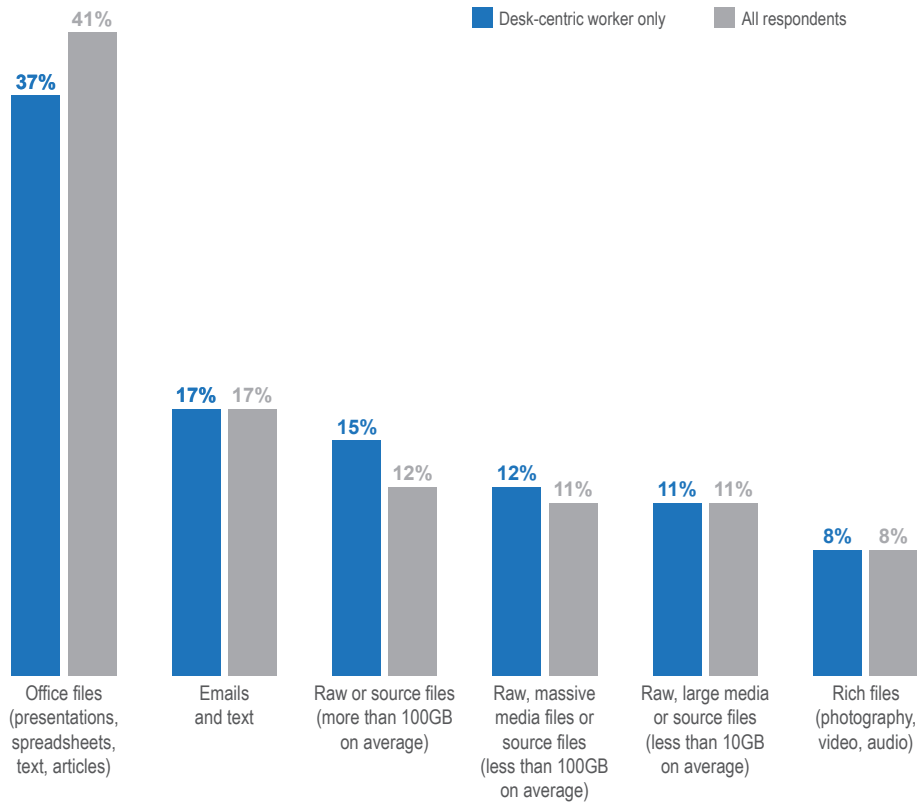
Desk-centric workers

Desk-centric workers are most often found in corporate offices. They usually work over seven hours per day at a primary location, typically on company premises (88%), in an office (87%) and at a desk (84%). Optimizing the workspace where they spend most of their time is essential to making these users highly productive. To that end, they might require peripherals that afford higher productivity and convenience, such as large displays or multiple displays, wireless keyboards, mice and printers, as well as wireless headsets. And desk-centric does not necessarily mean they are sitting. Many of these workers find they would prefer to get their tasks done from a standing position.

Desk-centric workers typically utilize office productivity applications and require connectivity to other corporate workers, workgroup printers and the Internet. They utilize files such as presentations, spreadsheets and text with greater frequency than their peers [see chart on next page]. In addition, they may find themselves in technology-enabled meeting rooms, secure premises and smart buildings.

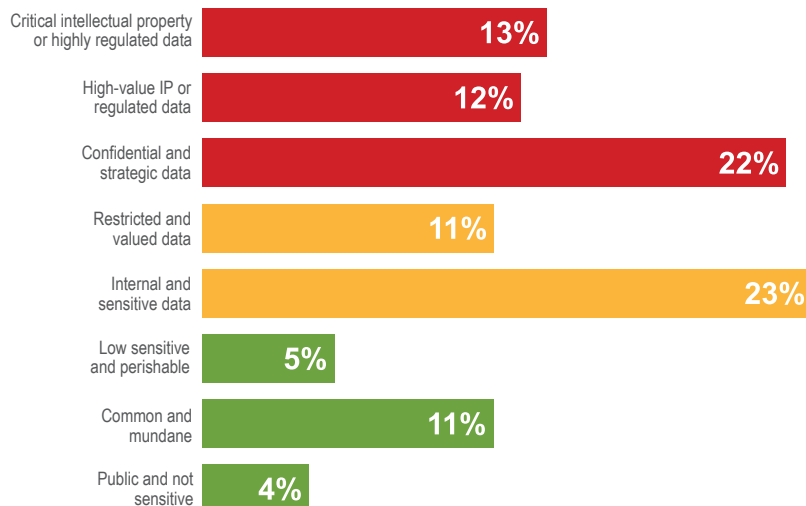


Which of the following describes the average types of files you primarily work with?



Desk-centric workers often share data and large office files containing intellectual property, which must be protected. For example, the survey found 47% work with data that is confidential, strategic, or even more sensitive, as well as internal, restricted and sensitive data (34%). [See chart below.]

Which of the following statements best describes the intellectual property (IP) of the data you primarily work with?



It's important to remember that even workers who are mainly desk-centric might be mobile to some extent. They might use laptop computers instead of desktop computers, with peripherals such as docking stations, external keyboards, mice and monitors. Tellingly, 57% of desk-centric workers think that mobile devices make employees more productive. Additionally, 25% of them are close to being corridor warriors and over half of desk-centric workers also work from home more than five hours per week. For desk-centric workers who do some work from a remote location such as home, a corporate-issued laptop with security software could play a significant role in keeping data safe.

The challenge for technology decision makers is to enable a high degree of productivity in a corporate office, but not neglect the fact that some may be mobile some of the time. Looking to the future, technology decision makers should also be aware that this type of worker may be evolving from being exclusively desk-bound to being increasingly mobile.

Corridor warriors

Corridor warriors have duties that take them away from a desk in an office. Their work has a mobile dimension that takes them to different locations across organizational facilities. For example, they may visit warehouses, manufacturing floors, shops, or simply have frequent meetings in the course of their work. Corridor warriors spend an average of 6 hours and 41 minutes per day at their primary location, which may not be the organization's property. Compared with desk-centric workers, however, far fewer corridor warriors (55%) have an office as their primary location.

Mobility is important for corridor warriors: On average, across all industries, 41% are mostly mobile. And 37% spend at least one-quarter of their working time in a vehicle which therefore demands innovative tech solutions. Since their location changes frequently, corridor warriors need equipment that enables connectivity, especially through wireless connections. Equipment that is helpful to corridor warriors includes hot desks, distributed docking stations, efficiently designed and equipped meeting rooms, and swappable batteries with chargers.

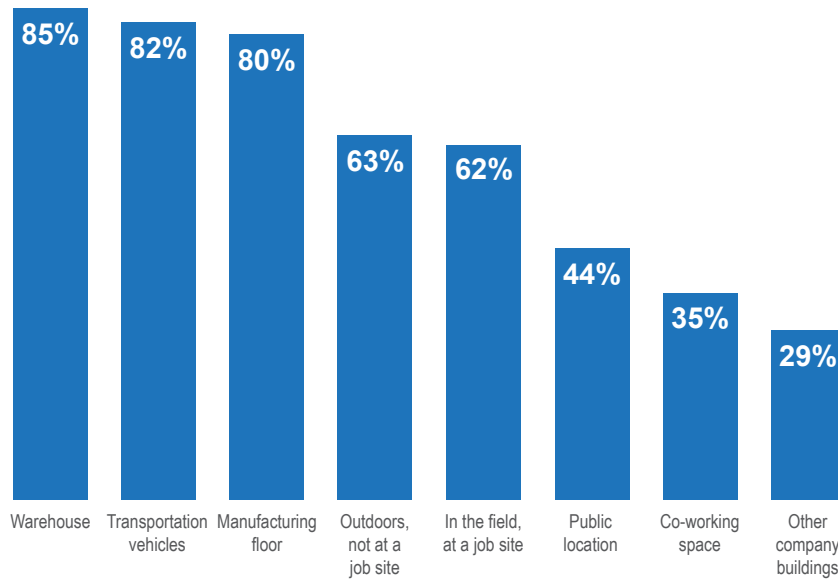


57% of desk-centric workers think that mobile devices make employees more productive.



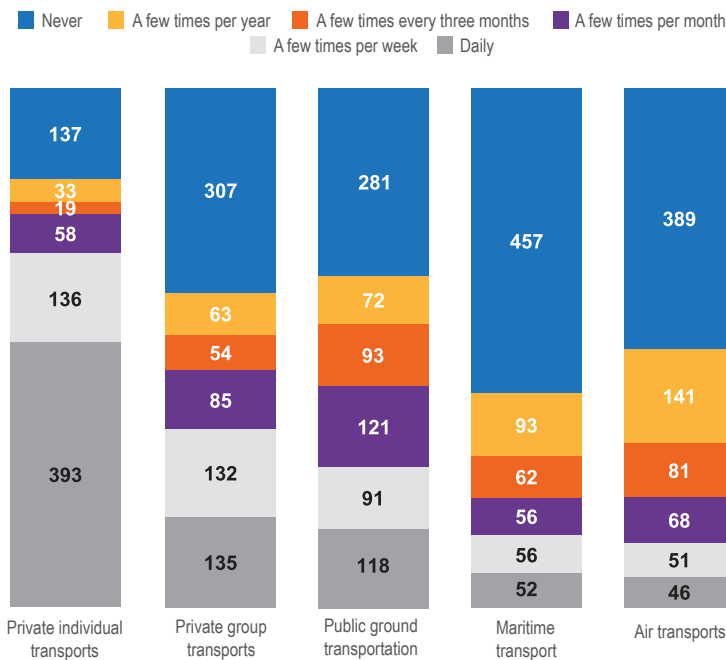
37% of corridor warriors spend at least one-quarter of their working time in a vehicle.

Are you exposed to any of the following at your primary work location: freezing temperatures, extreme heat, dust, chemicals or explosive atmosphere (gas, detergents, oil)?



Corridor warriors may spend a significant amount of time in a warehouse or manufacturing floor, and it is important to note that these locations are often hard on technology. Conditions such as heat, cold, dust and vibration could damage computing equipment and peripherals [see chart above].

On average, how often do you use the following modes of transportation for work?



Remote workers

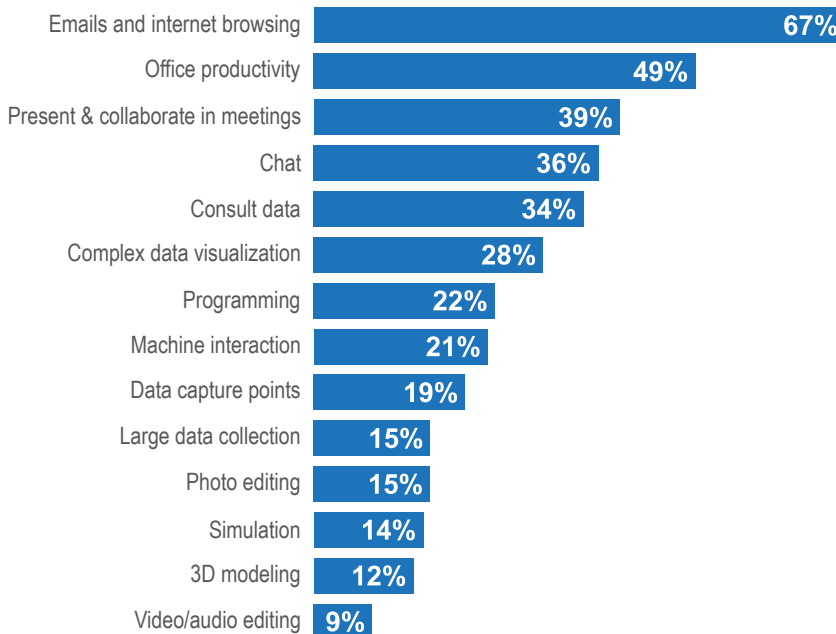
Remote workers are vital to many organizations because they expand the geographic coverage of their companies. A home office is the primary location for 33% of remote workers, a greater percentage than all the other types of workers. Additionally, 39% work primarily in customer or partner offices: warehouses, manufacturing floors, or other locations.

The specific personas of remote workers vary by industry, but in general, they are consultants, accountants or auditors at customer sites. Some are mainly sedentary, while others are nomadic. In education, they might be professors working from home, while in healthcare, they might be caregivers who move from site to site to provide services, counseling or prevention.

An important requirement for remote workers is that they be self-sufficient – they must have a technology ecosystem consisting of everything they need to be productive from their distant location. That includes, perhaps most importantly, the ability to communicate and collaborate with their colleagues remotely.

The survey found remote workers, more than any other group, participate, present and collaborate in meetings (39%). [See chart below.] They are the most frequent users of chat functionality (36%). Like desk-centric workers, remote workers are frequent users of office productivity applications such as spreadsheets, presentations and text editing (49%). Also like their desk-centric counterparts, they often use email and Internet browsing applications (67%). In addition, some remote workers are frequent users of complex data visualization applications.

Which of the following tasks do you perform on your PC for work?



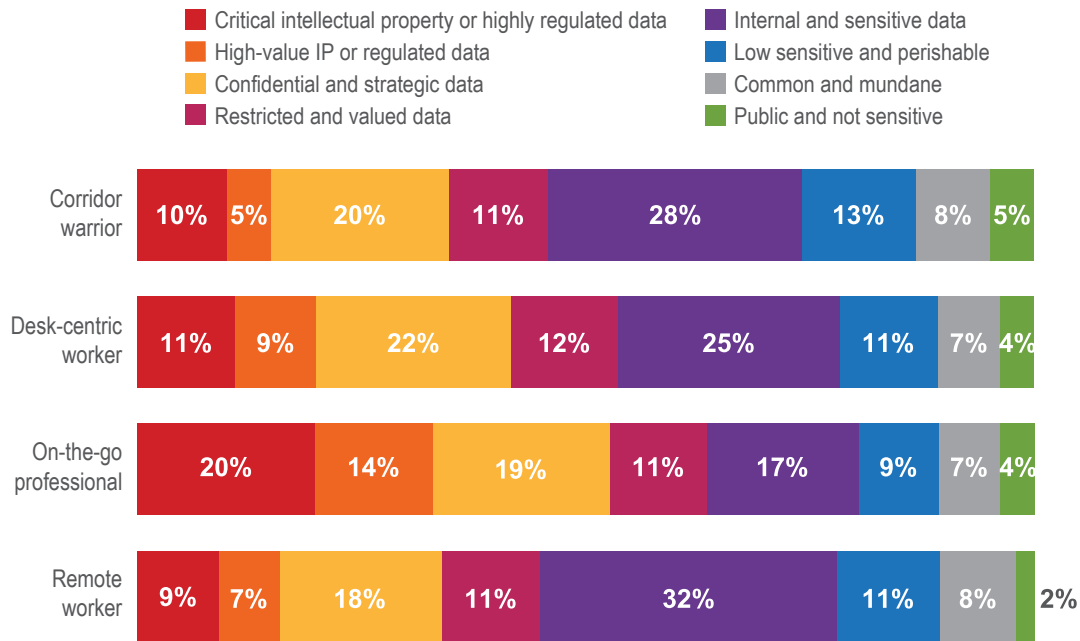
A home office is the primary location for remote workers, more than any other group.



Remote workers, more than any other group, participate, present and collaborate in meetings.



How would you describe the level of sensitivity of the data you share most frequently?



On-the-go pros

As the name suggests, on-the-go pros are highly mobile. They work, on average, from more than four locations every week, including customer buildings, field locations, home offices and in transit. They might be sales professionals, account executives, service managers or procurement specialists, among others. The ability of on-the-go pros to communicate is highly important. In addition to sending and receiving data across corporate networks, they are likely to use public and third-party networks.

These professionals have a greater need than their peers for multiple devices, and would purchase them with their personal funds if their organizations did not provide them. Also important: They utilize additional equipment significantly more often than their counterparts. And with such a highly mobile work style, they need to carry their technology with them. However, like the other types of workers in the study, an overwhelming majority would prefer that their organizations provide them with tested and supported devices.

Data security is a pressing need for on-the-go pros, because they are significantly more likely to work outside organizational security measures when compared to the other three types of workers. 60% work in contrast to their organizations' security protocols. Of these, 69% say it is because it enables them to work more effectively.

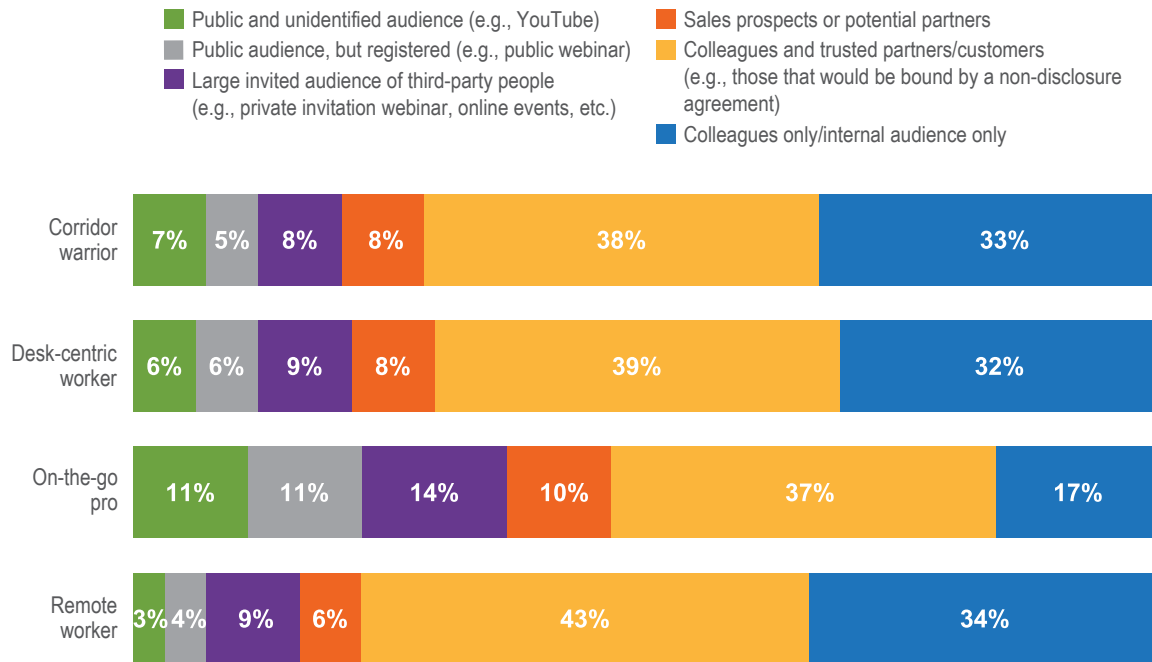


60% of on-the-go pros say working outside corporate security enables them to work more efficiently and effectively.



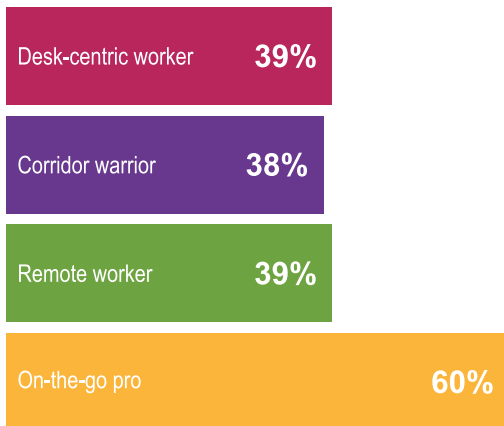
Collaboration is important to 39% of the remote workers, who most often share data with colleagues and trusted partners/customers. [See chart below.]

When you share/collaborate over the organization’s network, which best describes your typical audience?



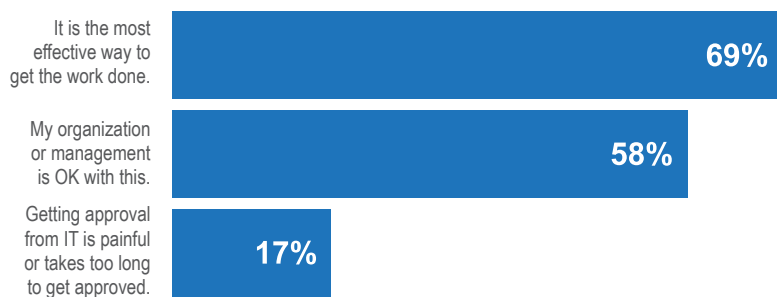
While remote workers mostly share with colleagues and trusted partners, the data remote workers share as they collaborate is internal, often sensitive or confidential. Remote workers share this kind of data frequently [see chart on next page]. Because they frequently share data from remote locations, perhaps even from customer and third-party sites and across third-party infrastructure, data security is an important issue for remote workers.

Do you sometimes find it necessary to work outside your organization's security protocol?

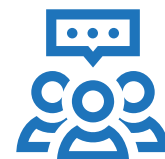


The reason these workers are so likely to bypass corporate security is the simple need to get things done – 69% say it's the most effective way. 17% say getting approval from IT is too painful or takes too long. Organizations apparently recognize this issue: 58% say management is OK with the practice of working outside security protocols.

Why do you sometimes work outside your organization's security protocol?



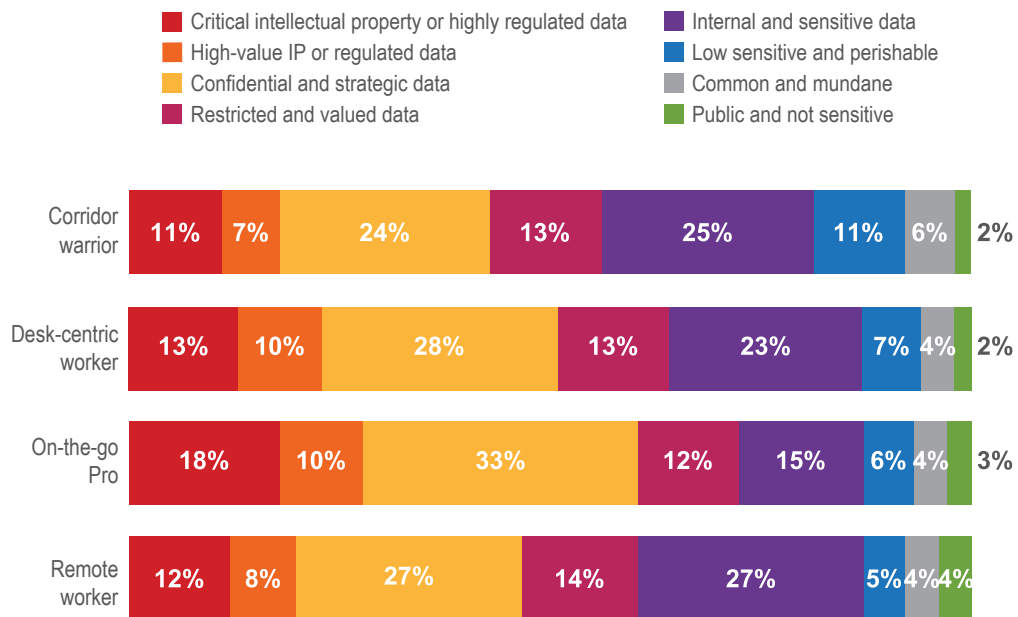
Complicating matters is the frequency with which sensitive data is shared – and with whom it is shared. On-the-go pros are more likely to share critical data with colleagues than other types of workers: 33% share confidential and strategic data over their organizations' network. Additionally, 18% of on-the-go pros share critical intellectual property or highly regulated data – a much higher percentage than other types of workers.



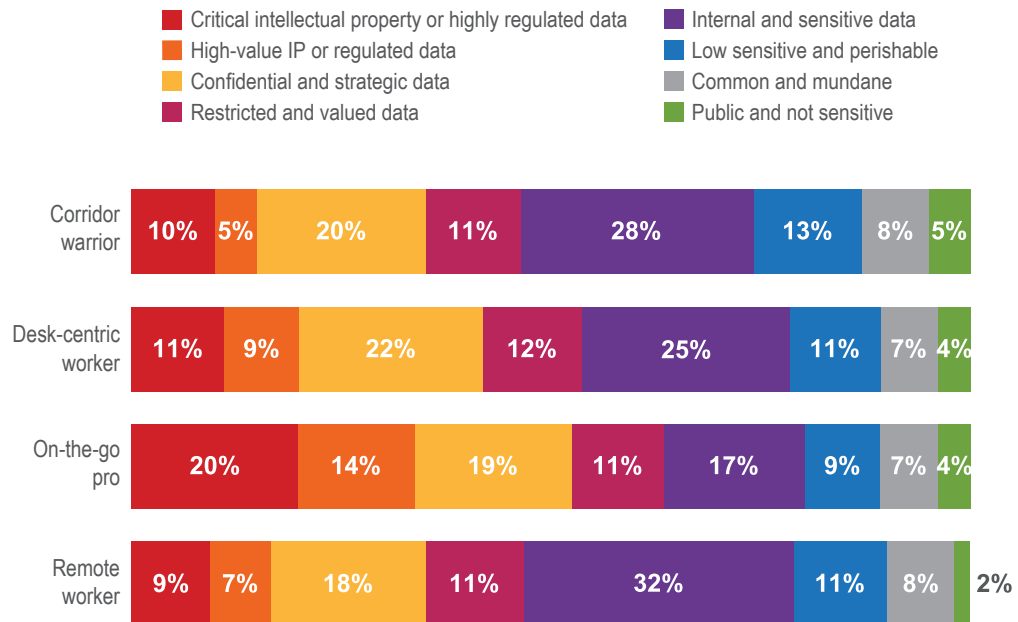
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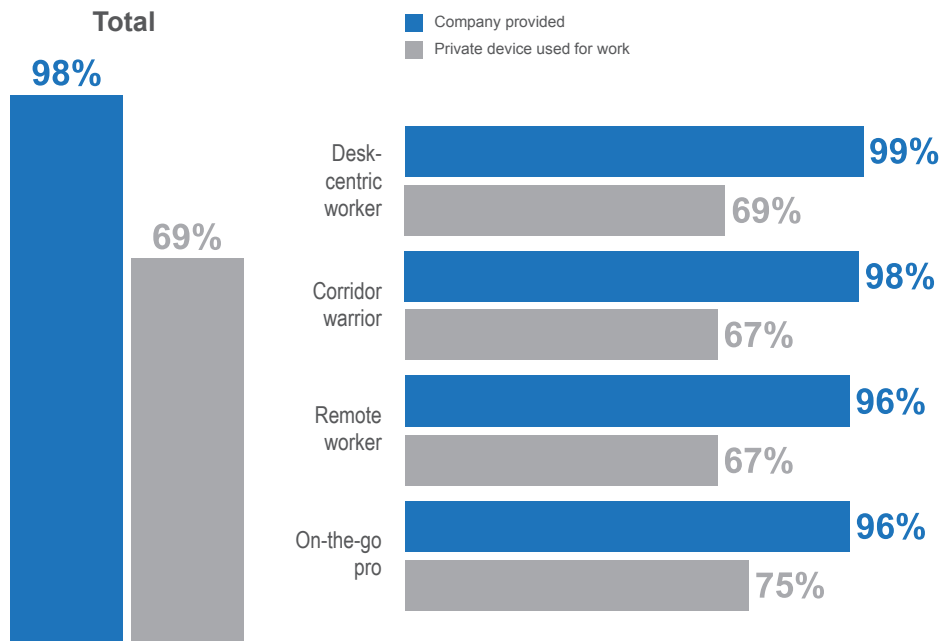
What is the highest level of sensitivity of data that you share over the organization's network?



How would you describe the level of sensitivity of the data you share most frequently?



Which of the following devices do you use for workplace activities or tasks?



On-the-go pros are more likely than others to use personally provided devices (75%), along with company-provided devices (96%). As a result, the sensitive data they handle may well reside, at least temporarily, on a private device.

Another point worth considering is that on-the-go pros may find themselves, like corridor warriors, in an environment with extreme conditions. For example, 36% work in a warehouse environment, and of those, 97% of on-the-go pros say the warehouse experiences extreme conditions. Meanwhile, 31% work in manufacturing, and of those, 94% identify the conditions as extreme. Fully rugged systems could be justified for these individuals. The combination of mobility, the use of multiple devices and additional equipment, communication across multiple network types, the sharing of highly sensitive data, the need for personally provided devices, and their presence in hostile work environments mean that on-the-go pros constitute the greatest overall security challenge of all of the types of workers in the study.



The sensitive data that on-the-go pros handle may well reside, at least temporarily, on a private device.

Top topics



Top topics

Reliable tools are needed for great productivity. People are acutely sensitive to the performance of their personal systems. They are no strangers to performance and reliability issues and they blame those shortcomings for limiting their productivity. Fully 60% say freezes, bugs and glitches negatively affect motivation and engagement.

Technology and employment

Please indicate if you agree or strongly agree with the following statements about technology and your employment.



Users' productivity has depended on the systems they use. What's different today? Many users have grown accustomed to highly functional personal computer systems. These systems might have higher performance, larger displays, more storage, superior applications, and advanced accessories and peripherals. When users compare their experience with their own systems to their corporate technology, they often find their experience to be superior. That stands to reason, as they have selected a system specifically suited to their needs. Conversely, a corporate-issued device is typically selected by the organization at a lower price to satisfy most of the needs of most of their employees – but by no means all needs of all users.

Reliable tools for great productivity

Company-issued devices tend to have better basic reliability. The hardware and operating systems of company-issued laptops and PCs have fewer reported problems [see chart on next page].

The survey findings show that rightly or wrongly, IT departments likely are being blamed for modifications they make to corporate-issued systems. On both company-issued laptops and PCs (32% and 29%, respectively), background IT process issues generated significantly more problems than



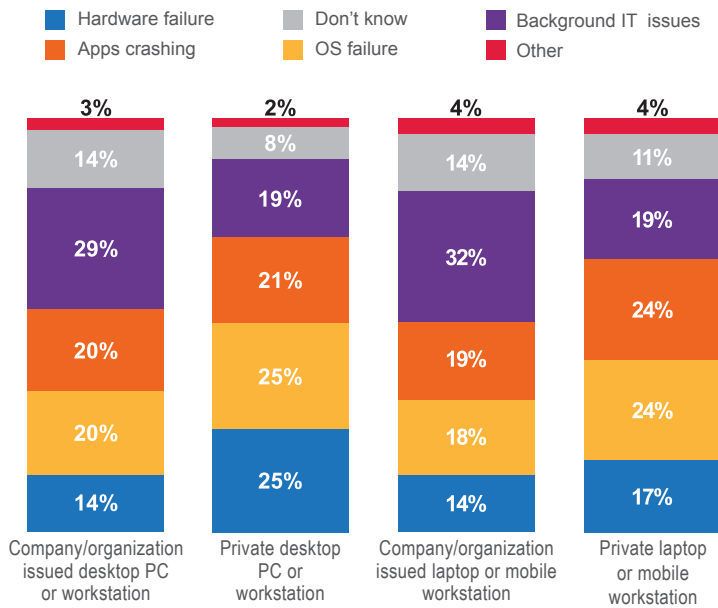
49% of all workers consider an organization's technology when applying for a position.



did private laptops and PCs (both 19%). The finding suggests that IT managers may be loading up systems with security, monitoring and management software that, while it may be necessary, might be causing performance issues that lead to lower user satisfaction.



When you experience issues with these devices, which area causes the most problems?



60% of all workers report that glitches, freezes and bugs negatively affect their motivation and engagement.



Getting the right ecosystem is important

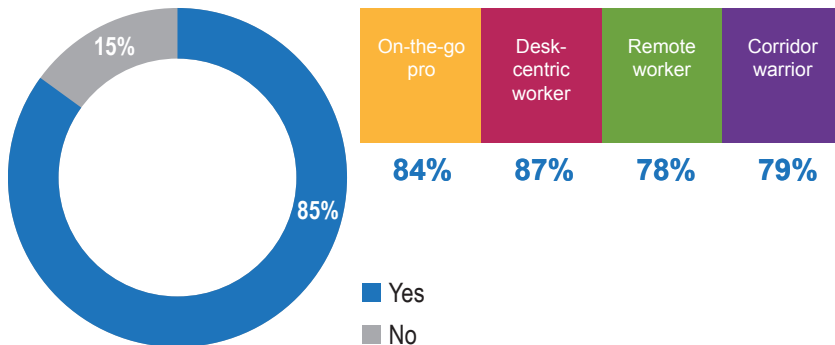
The vast majority (85%) would prefer their organizations provide them with an ecosystem of tested and supported devices and accessories rather than providing that ecosystem themselves. In short, they want IT to get it right. The preference was strong among all types of workers, from 87% of desk-centric workers to 78% of remote workers expressing this view.

Tested and supported devices are part of the overall user ecosystem, which includes accessories to make users more productive in their work. The entire ecosystem, in all of its details, is highly important: 61% say having the right ecosystem makes them more motivated and engaged. 68% of remote workers and 66% of on-the-go pros say it improves engagement.

The entire ecosystem, in all of its details, is highly important.



Would you prefer that your organization provide you with tested and supported ecosystem (devices and accessories) rather than seeking out devices yourself?



The ecosystem encompasses essential accessories. Digital pens are most useful in note-taking, sketching and annotation, where they can help workers record comments faster than is possible with a keyboard and mouse. For users who often work in a standing position, such as corridor warriors and on-the-go pros, digital pens are essential.

Power packs and additional batteries can be critical productivity enablers by preventing system downtime. This is particularly true for on-the-go pros, who might not be near an electrical outlet for extended periods of time. The savings generated by preventing downtime can add up. For example, if a knowledge worker costs a company more than \$350/day, losing power – and, hence, access to data and connectivity for an hour or two – can be expensive, not only for that worker but also for colleagues who depend on him or her. Over a three- to four-year span, the cost of such lapses can multiply to the point where the return on investment of providing additional batteries can be easily justified.

Headsets can be another significant, if sometimes overlooked, productivity enabler. By allowing workers to participate in remote meetings hands-free, headsets enable participants to take notes and annotate documents that can be shared with meeting participants, increasing the value of interaction for all.

Workers feel so strongly about the productivity value of accessories that they are likely to purchase them with their own funds. Among vertical industries, 80% of Manufacturing Logistics & Retail workers say they buy digital pens, 67% purchase headsets and 74% buy additional batteries. Among the different types of workers, on-the-go pros are the most likely to purchase accessories on their own, with 78% buying digital pens, 75% batteries, and 68% headsets.

Working outside security protocols

Notwithstanding the security measures that IT departments have put in place to keep data safe on corporate-issued devices, users sometimes do their work and connect to corporate systems outside these protocols.



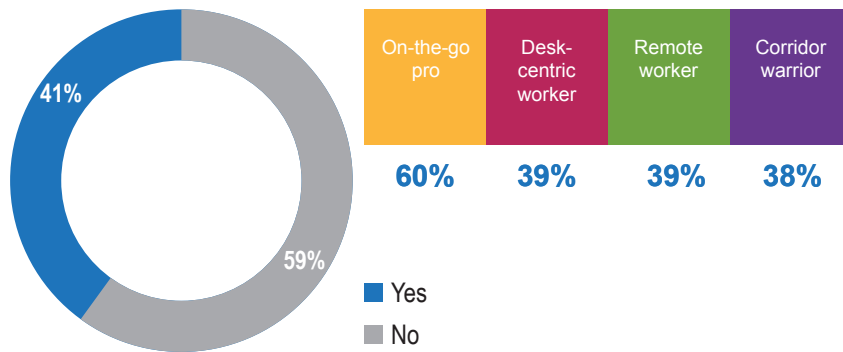
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For example, a worker might often handle sensitive data on a home desktop system rather than a corporate-issued laptop. If corporate security protocols aren't implemented on that home PC, such usage increases the risk of data loss or theft.

Given the publicity surrounding today's data breaches, why do employees do this? If security measures are cumbersome, users are likely to bypass them. In fact, 41% say they sometimes find it necessary to work outside corporate security protocols in order to get their work done. Perhaps not surprisingly, on-the-go pros are the most likely (at 60%) to circumvent corporate security, while less than 40% of desk-centric workers, remote workers and corridor warriors do. After all, they are the most likely to be working apart from corporate facilities, whether on the road or at customer locations, and security measures for remote access are often the most unwieldy.

Do you sometimes find it necessary to work outside your organization's security protocol?



On-the-go pros are the most likely to circumvent corporate security.

However, on-the-go pros also often use sensitive data, including corporate intellectual property. Because their mobile devices are being used in remote locations, including airports and hotels, those devices are susceptible to loss or theft. Because of these factors, encryption of data on those mobile devices should be a top security strategy.

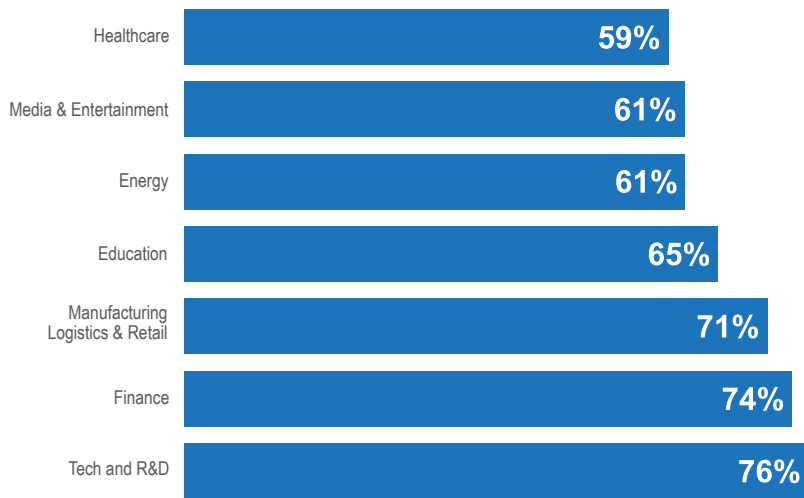
Sharing and collaboration

Meetings, both in-person and online, are an essential feature of business. In-person meetings often take place around a table or in an auditorium where attendees must share information – data, files and images – in order to exchange ideas and reach meaningful conclusions. Meetings are also held using online tools, while employees collaborate digitally using email, shared documents, online presentations, VoIP, videoconferencing and chat.

Meeting on a regular basis is a work reality for 25% of the workforce, yet the meeting-room experience varies greatly. In Healthcare, 59% are satisfied or completely satisfied with meeting-room technology, while in the Tech and R&D sector, 76% are satisfied or completely satisfied.



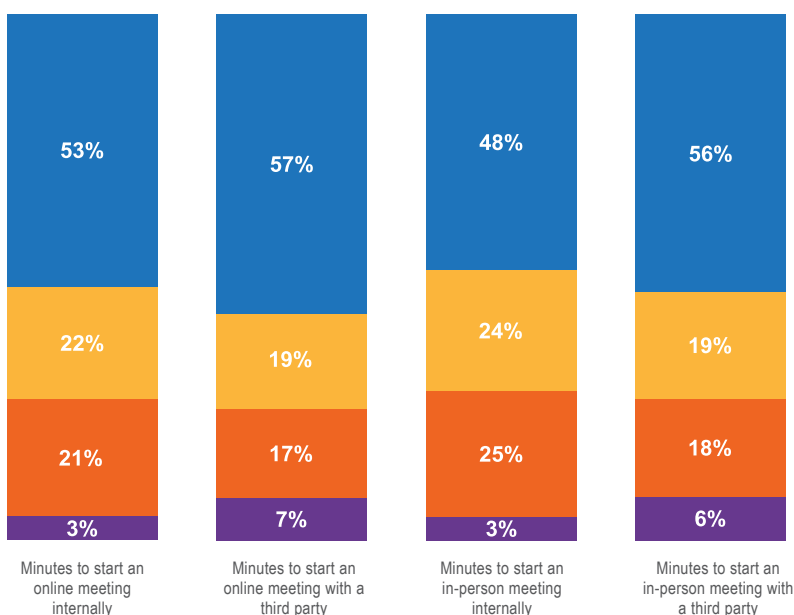
Rate your satisfaction with meeting-room technology at work.



Meeting rooms, auditoriums and so on are part of a shared work ecosystem deeply connected with the IT infrastructure. 61% of the workers agree that having “smart” facilities would make them more productive. That result stands out when considered in the context of meeting efficiency. Many business meetings require technology setup and in many cases the work involved takes more than 10 minutes [see chart below]. Technology that is out-of-date or that does not work as it should could erode the productivity of IT staff charged with meeting setup.

61% of workers agree that having “smart” facilities would make them more productive.

Time to start a meeting



Sensitivity of shared data during collaboration

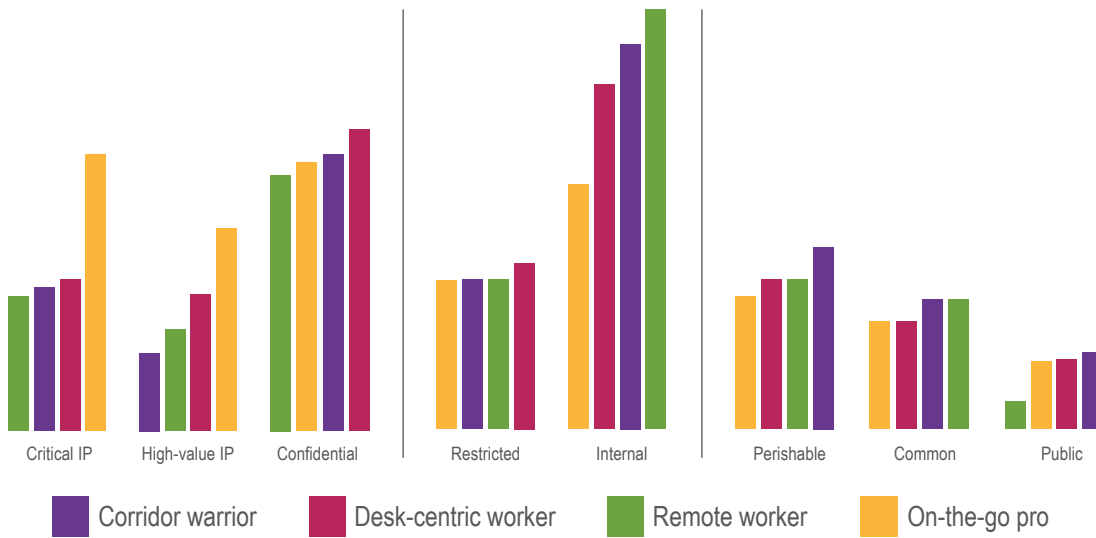
Most employees share some sensitive data with their co-workers – not surprising, because sensitive data often contains valuable information. Examples include intellectual property, corporate strategy directives, customer buying patterns and human resources data. According to the survey, confidential and internal data is the most common sensitive material that is shared. On-the-go pros most frequently share confidential information [see chart below].

Line-of-business and technology decision makers must be aware that sensitive data is being handled internally and must implement security controls to protect it. However, end-point security measures must be implemented with mobility in mind, so that proprietary data on the systems of mobile users, particularly on-the-go pros, does not fall into the wrong hands. Measures may include data-loss prevention, insider threat protection, encryption, application white-listing and user privilege control.



On-the-go pros most frequently share confidential information with their co-workers.

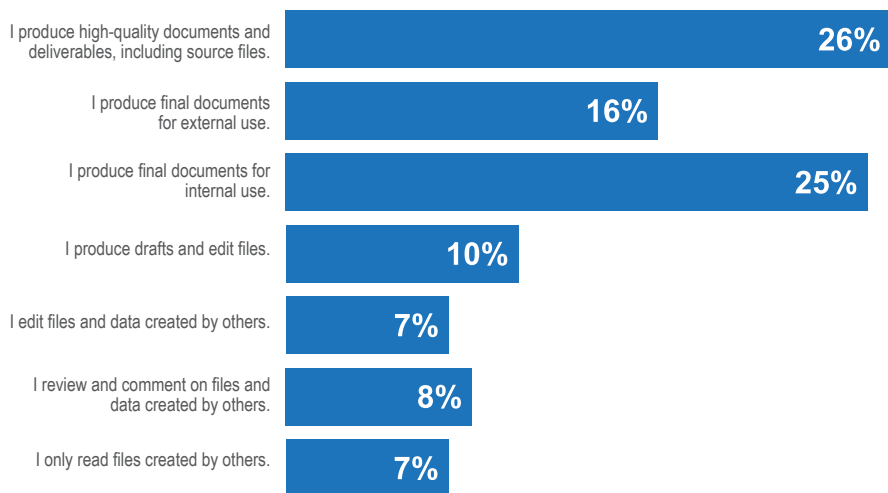
Sensitivity of data shared during collaboration



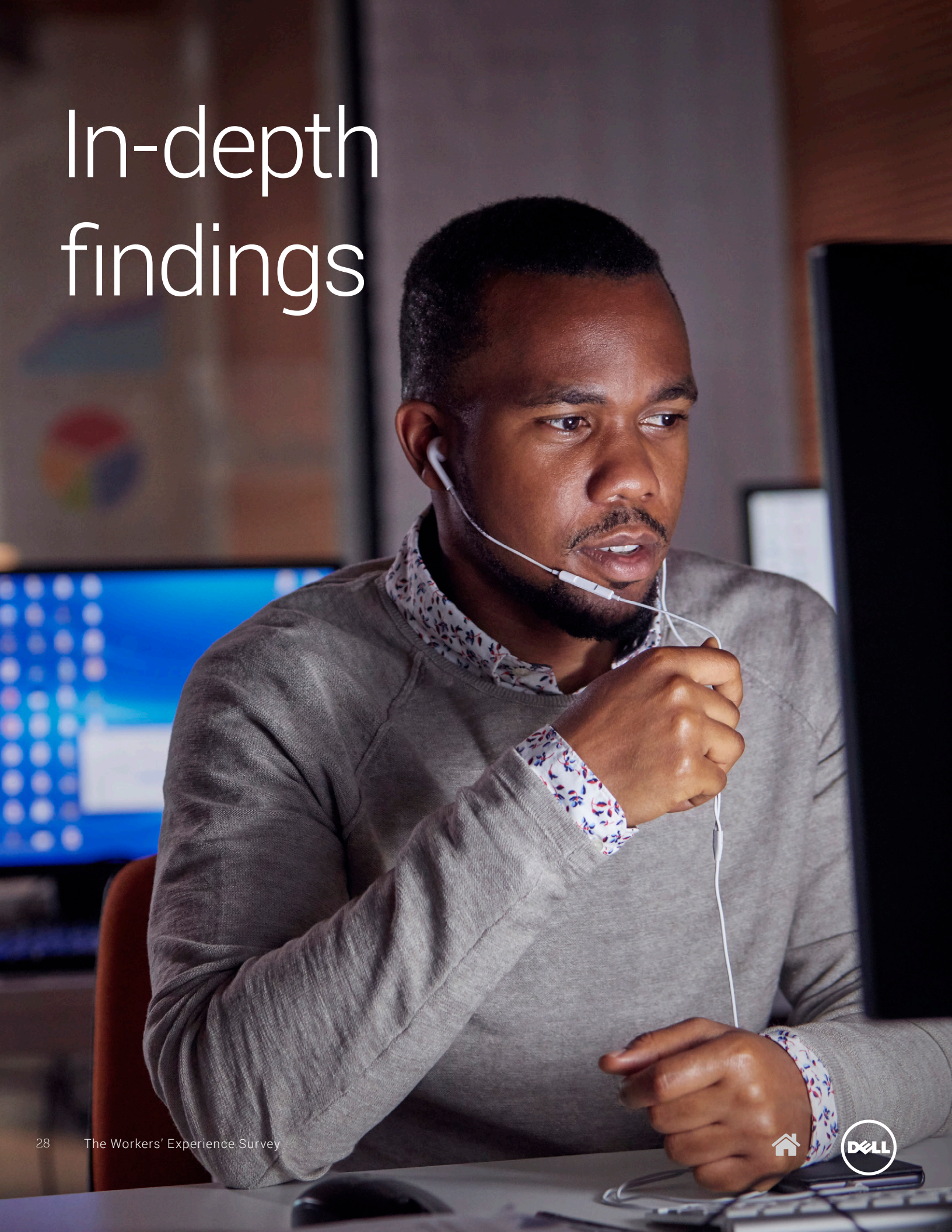
Tasks and data usage

As to the tasks that workers perform, the most common are the production of high-quality documents and deliverables as well as final documents for both internal and external use. To produce these documents, large amounts of data are often required, leading to two important infrastructure considerations: the need for network access and more powerful systems. First, high-bandwidth, secure and reliable network access is needed because data is often shared, and data in very large quantities is often difficult to store on individual devices. Second, systems with more powerful CPUs are required for efficient production of high-quality documents and deliverables. For true collaboration to occur, both of these key requirements need to be met.

While doing your current job, what task from the list below do you carry out most often?



In-depth findings



In-depth findings

Workers often need additional equipment or high-powered technology to be productive. Others need to take extra precautions because they work in tech-hostile environments or with sensitive information.

Use of additional equipment

No two jobs are exactly alike and no two workers are exactly alike, so it follows that every worker has different equipment needs. The survey detected patterns that correlate to the four principal worker types. It should not come as a surprise that desk-centric workers are the most frequent users of keyboards and mice (85%) as well as scanners (42%), which are often shared.

At the other end of the mobility spectrum, on-the-go pros often utilize a variety of equipment in addition to their mobile computing devices. They are more likely than others to utilize additional batteries (29%), digital pens (29%), webcams (27%), 3D modeling accessories (14%) graphics tablets (16%), professional cameras (12%), professional sound recording equipment (12%), 3D printers (17%) and 3D scanners (15%), among other equipment.

Besides your PC and personal devices, what equipment do you use while working to be fully productive?

■ Indicates top 3 most noted devices by segment

	Total	Type of Worker			
		Desk-centric worker	Corridor warrior	Remote worker	On-the-go pro
Keyboard and mouse	79%	85%	68%	71%	59%
Scanner	38%	42%	31%	33%	30%
Headset, headphones or speakers	37%	38%	28%	42%	35%
Webcam	25%	25%	19%	24%	27%
2D printer	25%	26%	30%	20%	22%
Additional external displays	22%	22%	16%	27%	21%
Docking station	20%	18%	19%	27%	25%
Additional battery	17%	14%	17%	17%	29%
Digital pen	16%	14%	16%	14%	29%
Power banks	16%	16%	14%	1%	20%
3D printer	11%	11%	11%	9%	17%
Room-sized equipment	10%	9%	13%	6%	17%
Graphics tablets	9%	8%	9%	8%	16%
Professional camera	9%	9%	11%	7%	12%
Professional sound recording equipment	8%	8%	8%	7%	12%
3D scanner	8%	7%	9%	6%	15%
3D modeling accessories	8%	7%	10%	6%	14%
Large specialized equipment	7%	6%	8%	6%	13%
Building-sized equipment	6%	5%	6%	4%	10%
AR/VR headset	5%	4%	5%	3%	8%
Other accessories	3%	2%	4%	3%	3%



The use of 2D printers is broad-based as all types of workers need this fundamental piece of office equipment to some degree. Corridor warriors need them most (30%), followed by desk-centric workers (26%), on-the-go pros (22%) and remote workers (20%). Among other notable findings, remote workers are the top users of headsets, headphones or speakers (42%), followed by desk-centric workers, (38%) and on-the-go pros (35%).

Augmented reality and virtual reality (AR/VR) headsets, an emerging equipment need, are most in demand by on-the-go pros (8%). One example: Mobile technicians' use of them as an aid to making remote repairs. The future could see a significant increase in the use of these devices, as 50% of respondents say AR/VR will transform the way we work [see chart below].

Did you purchase any of the devices listed below yourself for work-related purposes, whether you were reimbursed or not?

Devices Purchased by the Individual

■ Indicates top 3 most noted devices by segment


	Type of Worker			
	Desk-centric worker	Corridor warrior	Remote worker	On-the-go pro
Digital pen	67%	63%	65%	81%
Power banks	65%	58%	71%	73%
3D modeling accessories	63%	54%	65%	80%
Additional battery	63%	59%	69%	75%
AR/VR headset	62%	74%	75%	83%
Graphics tablet	59%	66%	66%	77%
Headset, headphones or speakers	50%	53%	58%	77%
Webcam	42%	56%	45%	69%
Keyboard and mouse	32%	34%	47%	64%
Additional external displays	29%	41%	36%	72%
Docking station	29%	35%	31%	57%
Scanner	28%	40%	44%	58%
Other accessories	16%	7%	31%	18%

Many users, particularly on-the-go pros, purchase their own equipment due to personal need – and, according to the survey, they would do so again. Even so, it is important to remember that as previously reported, 85% would prefer all their equipment to be provided, tested and supported by IT.




Do you agree or strongly agree with the following statements concerning technology and productivity?


Totals:


Cutting-edge high-performance tech would help me be more productive at work.
 62%

Having the right technology ecosystem improves my motivation and engagement.
 61%

Having 'smart' facilities make people more productive.
 61%

Mobile devices make employees more productive.
 60%

Being able to work from home helps employees get more done.
 59%

Augmented and virtual reality will transform the way we work.
 50%

Required security processes negatively affect my productivity.
 40%

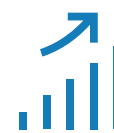
	Type of Worker			
	Desk-centric worker	Corridor warrior	Remote worker	On-the-go pro
Cutting-edge high-performance tech would help me be more productive at work.	62%	58%	61%	66%
Having the right technology ecosystem improves my motivation and engagement.	60%	54%	68%	66%
Having 'smart' facilities make people more productive.	61%	56%	62%	66%
Mobile devices make employees more productive.	57%	61%	64%	72%
Being able to work from home helps employees get more done.	57%	51%	73%	68%
Augmented and virtual reality will transform the way we work.	49%	47%	52%	60%
Required security processes negatively affect my productivity.	38%	39%	43%	54%

Cutting-edge high-performance technology

As the chart above indicates, cutting-edge high-performance technology would be welcomed by a significant number (62%) of employees, and on-the-go pros (66%) would be the most eager to have such advanced devices. This technology might include more powerful laptops, 2-in-1 and tablet PCs, as well as such additional equipment as digital pens, professional cameras and 3D printers. Among members of industry verticals, those in Finance (70%) and Tech/R&D (69%) respond most favorably to the prospect of gaining cutting-edge high-performance technology. This result should be expected, since these individuals are likely to be performing compute-intensive tasks, such as big data predictive analytics and 3D modeling.

Required durability of devices

Additional equipment often finds itself in tech-hostile environments, such as factories and field locations, and durability is a key requirement. It is most critical for digital pens and AR/VR headsets to operate in tech-hostile surroundings, according to the survey [see chart on next page]. There are a number of specific durability requirements tracked by the survey, reflecting the broad range of different workers' needs. These include the need to survive occasional bumps and shocks, the need for antimicrobial treatments and the need for devices to be sealed against dust and rain.

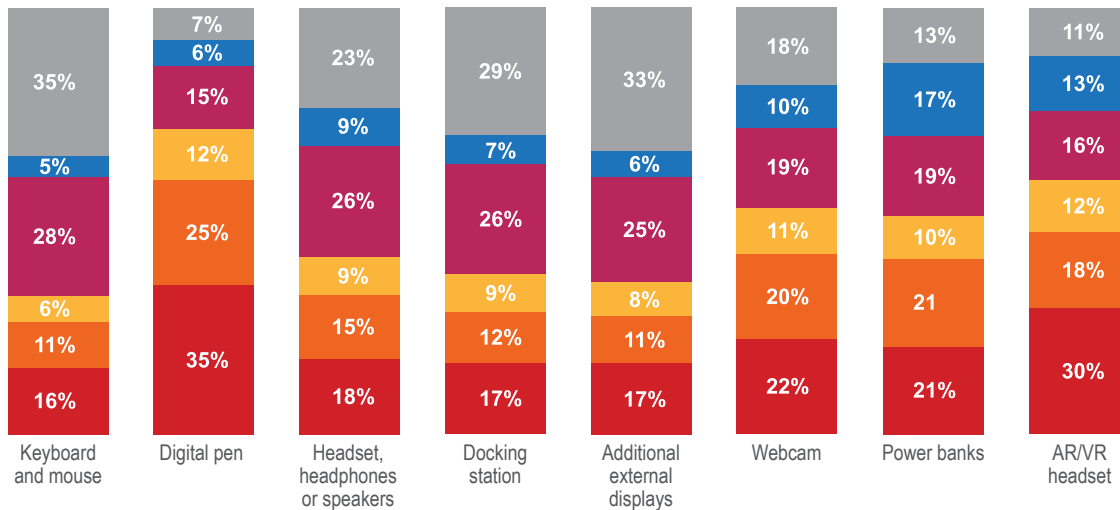


62% of workers welcome cutting-edge high-performance technology.



When you think about how you use your equipment when working, how durable does it need to be?

- It only needs to work after an occasional drop or scratch
- It should be safe to use for a day trip outdoors
- It should be able to survive occasional bumps and shocks
- It should have antimicrobial treatment and operate in warm summer or in a freezer
- It must be a sealed device – functional in the rain or dusty/dirty environments
- It must be able to operate in tech-hostile environments (salted fog, explosive atmospheres, corrosive chemicals)



Confidential, restricted or internally sensitive work

When workers utilize data with a high degree of sensitivity, it is a likely sign their work is of strategic importance to their company. Half (50%) state most data they work with is in the top three categories of sensitivity [see chart on next page]. Another 33% say the data they mainly work with is somewhat less sensitive – either restricted and valued or internal and sensitive. In contrast, a relatively small number (19%) say they primarily work with data of low sensitivity [see bottom three bars in chart].

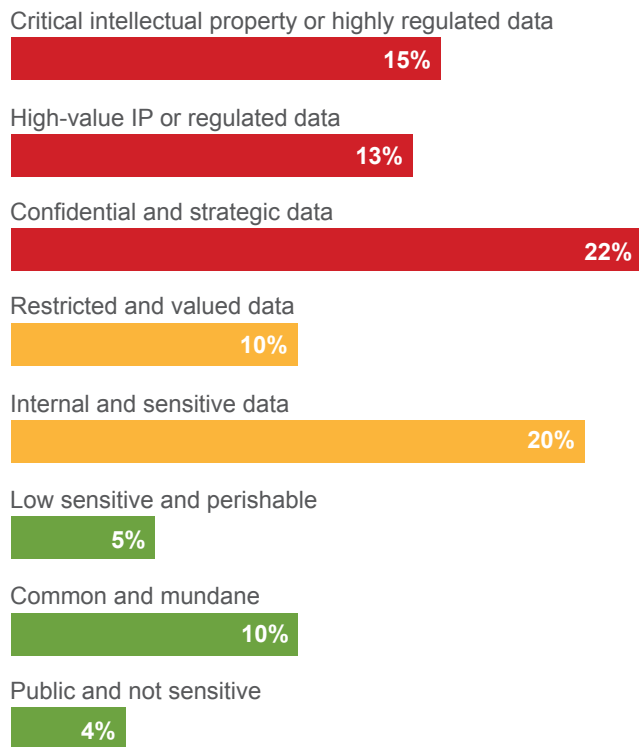
Workers in some sectors utilize more sensitive data than others. For example, in Finance and Tech/R&D, 24% utilize critical intellectual property or highly regulated data. And many Tech/R&D (52%) and Finance employees (47%) work outside security protocols, significantly increasing the need for data protection among these workers.



Half of all workers state they work with critical, high value or confidential data.



Which of the following statements best describes the intellectual property (IP) of the data you primarily work with?



Value of Intellectual Property

	Type of Worker			
	Desk-centric worker	Corridor warrior	Remote worker	On-the-go pro
Critical intellectual property or highly regulated data	13%	16%	17%	25%
High-value IP or regulated data	12%	14%	17%	18%
Confidential and strategic data	22%	21%	21%	22%
Restricted and valued data	11%	10%	11%	8%
Internal and sensitive data	23%	18%	18%	11%
Low sensitive and perishable	5%	6%	5%	4%
Common and mundane	11%	9%	7%	7%
Public and not sensitive	4%	6%	5%	4%



Guidance and tips



Guidance and tips

A close examination of the survey sheds light on several trends that can provide guidance as you travel the journey of workforce transformation. The most important conclusion to draw from the survey is that the needs of each worker are unique, spanning a broad spectrum characterized by the four different worker types: desk-centric, corridor warrior, remote worker and on-the-go pro. To enable the highest levels of productivity, technology decision makers must equip workers with technology that is appropriate to their distinct needs.

Evolving worker types

It is important to keep in mind that many workers have the characteristics of more than one persona. For example, one company might have many remote workers who spend most of their time at a desk, while another company might have remote workers that tend to be more mobile, yet not as mobile as on-the-go pros. In analyzing their workers and their modes of work, some companies might find it useful to create their own worker types, perhaps as many as 10 to 12 different ones.

Worker types are evolving. For instance, desk-centric workers appear to be increasingly mobile. Even though they currently spend the majority of their productive time at a desk, fully 63% of desk-centric workers say they prefer to work for an organization that offers flexibility and mobility.

At this point, it is instructive to compare the results of a separate survey, “Digital Transformers versus Controllers Opportunity Snapshot,” by Forrester Consulting, that highlights the priorities of technology buyers. According to that report, many IT organizations seek mainly to improve overall IT efficiency (80%) and information security (85%). Although employee productivity is not a low priority (75%), there is less emphasis on supporting mobility and flexible workstyles (56%).² This contrasts with the finding of the present survey, as noted earlier, that 65% of users prefer to work for an organization that offers mobility and flexibility.

The right technology drives worker productivity and satisfaction

When technology buyers indiscriminately procure identical technology for every worker, regardless of their distinct workstyles, they miss the opportunity of achieving competitive advantage by increasing worker productivity and job satisfaction. Such an approach is a costly compromise. Instead of spending a small amount, perhaps less than 0.5% of a worker’s salary, on the right equipment, technology buyers succumb to the illusion of cost savings, forfeit the investment opportunity and prevent workers from reaching their full on-the-job potential. Another Forrester Consulting report adds support to this approach. That report, “Total Economic Impact of Dell & Partner Workforce Enablement Solutions,” examines the benefits of a “best-device” purchasing policy for end-user equipment. When the best devices are purchased to fit the different user types, organizations reap a productivity benefit of 9% to 13% due to a marked increase in employee engagement, according to the report.³



While most of the workforce is desk-centric, 63% of workers are looking for more flexibility and mobility.



When the best devices are purchased to fit the different user types, organizations reap a productivity benefit.



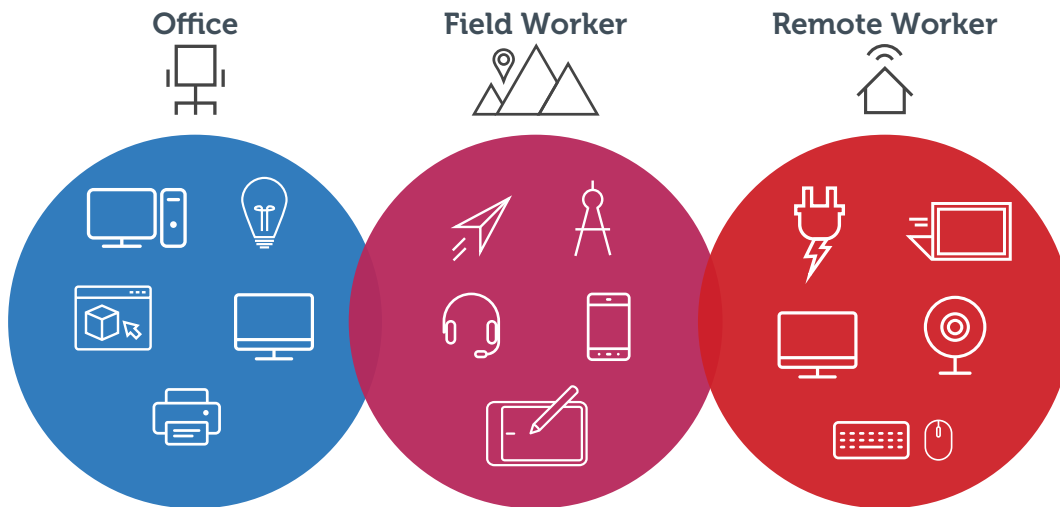
A third Forrester report, “Transform the Employee Experience to Drive Business Performance,” by Forrester Research, emphasizes the importance of happy employees to strong corporate performance. The report points to a multiyear study with 300,000 data points, published in 2013, in which Dr. Tae-Youn Park and Dr. Jason D. Shaw showed that an increase in employee turnover from 12% to 22% reduces total workforce productivity by 40% and the organization’s financial performance by 26%.⁴ These results drive home the idea that forward-looking management must take into account the importance of the right technology tools for worker productivity and happiness, and ultimately, for corporate success.



76% of survey respondents work in two locations and 52% work in three places weekly.

Location, location and location

Of all the factors influencing the needs of each worker, location is clearly important. While it might be reasonable to assume that a remote worker or on-the-go pro might work from multiple locations regularly, even desk-centric workers frequently work from a secondary location. According to the survey, 76% of all survey respondents work in two locations and 52% work in three places weekly.



To fully enable productivity, IT buyers must consider the technology ecosystem needed by workers in each location. Our survey found that remote workers place a higher importance on having the right ecosystem (68%) than their peers, perhaps because they are working in a third-party, home or separate corporate office and must be self-sufficient.

Some typical user needs for secondary and tertiary locations include displays, docking stations, printers, digital pens, webcams, scanners, 3D modeling accessories and AR/VR headsets. While some IT buyers might be prone to overlooking these needs, strategically minded decision makers will seize the opportunity to maximize user productivity in each location in which work is done.

For example, a desktop display can significantly enhance productivity for many workers. Yet, if only a worker’s primary location has an adequate



display, the worker would have to make do with his or her laptop display at a secondary or tertiary location. When working in one of those places, the worker would likely be significantly less productive. That diminished productivity might seem like only a small amount per day, but multiplied across a year, it could easily justify the investment in additional displays. The Forrester Consulting report on Total Economic Impact referenced earlier asserts that supplying workers with the best equipment according to type of worker can increase productivity by 21 to 29 days per year.⁵

Further, when workers often find themselves in a tech-hostile location such as a warehouse or factory, even when it's not their primary work location, they might benefit greatly from the use of ruggedized systems. Without a ruggedized system, a person might hesitate to use his or her device and instead resort to pencil and paper, necessitating additional time to input handwritten notes into the system later. At a cost of perhaps two to three dollars per day for a ruggedized system, these workers would be fully productive when working from these tech-hostile environments. Even having two different devices – a rugged system in addition to their everyday device – likely would be justifiable in terms of cost.

Security for the way work is done

A similar top-down, control-based approach to security can also have unintended and undesirable consequences. Here's an example: To prevent possible exposure to malware, the IT department might prevent the installation of certain software on a user's laptop. Later, the user finds herself in need of that software, perhaps a video player, in order to view the video of a new product prior to launch. As a result, she might simply view the video on her home PC, which has the software installed. Doing so, however, places that strategically important video outside the protection of corporate security.

It's also worth considering that while 41% say they work outside security protocols, it is reasonable to assume that this percentage is actually higher in real life, because workers who do this likely are hesitant to admit they are working in this way. It's also possible that some workers are working outside corporate security measures and not fully realizing it. For example, they might send work to their personal email address with the intention of accessing and working on it later from home, not thinking that they are sending sensitive proprietary information outside IT security controls. Even so, users who take these risks, wittingly or unwittingly, no doubt think they are doing their companies a favor by being more productive.

The right partner

This report emphasizes the importance of understanding the unique needs of every user and meeting those needs with the most appropriate technology. However, IT buyers have many options in how they do this. The right technology partner, with a complete portfolio of devices, including desktops, laptops and 2-in-1 devices, as well as additional equipment such as displays, docking stations, scanners, digital pens, projectors, AR/VR headsets and more, can go far to streamline hardware procurement, enabling the organization to efficiently meet its users' needs and thereby its larger competitive goals.



**Strategically minded
decision makers
will seize the
opportunity to
maximize user
productivity in each
location in which
work is done.**





Appendix: Regional considerations



Regional considerations

The way people live and work in disparate regions of the world can be very different. Yet each worker, wherever he or she may be in the world, has unique technology needs. Here are the most salient observations of each geographical region covered in this survey: North America, Western Europe, Japan, India and Latin America.

North America

Of North American workers, 65% say an office is their primary work location. That is less than other regions, particularly Japan, where 90% of survey respondents say an office is the main place they get work done. Only Western Europeans (62%) work less frequently in an office.

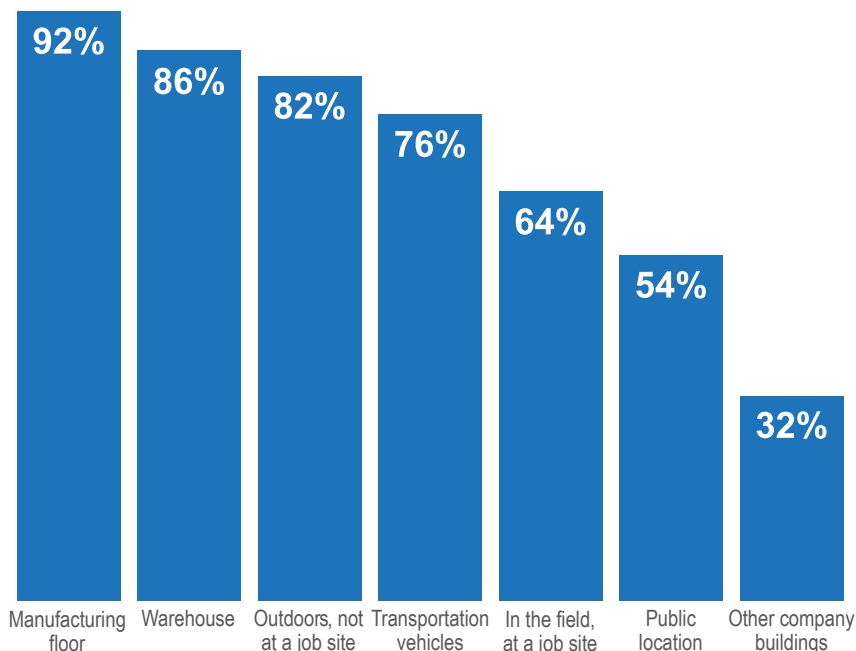
Perhaps consistent with their tendency to work outside the office, many North American workers find themselves in tech-hostile environments. For example, although only 5% say they work primarily in a warehouse, 86% of those describe the warehouse environment as having tech-hostile characteristics. Likewise, 92% of those working on a manufacturing floor describe that environment as tech-hostile. With 34% of North American workers indicating they spend at least some of their time working in a warehouse or on a manufacturing floor, the potential exposure to tech-hostile conditions is significant.



Western Europeans work less frequently in an office than those in other regions surveyed.

Thinking about your primary work location, are you exposed to any of the following: freezing temperatures, extreme heat, dust, chemicals or explosive atmosphere?

Percentage Yes



With that in mind, it is expected that device durability would be a valued characteristic among the North American workforce. The survey asked respondents whether they use fully rugged devices and/or high-performance workstations. A relatively high percentage responded in the affirmative to this question. Although some workers are issued PCs that conform to MIL-STD-810G standards, many more no doubt simply appreciate devices that can stand up to sometimes challenging conditions.

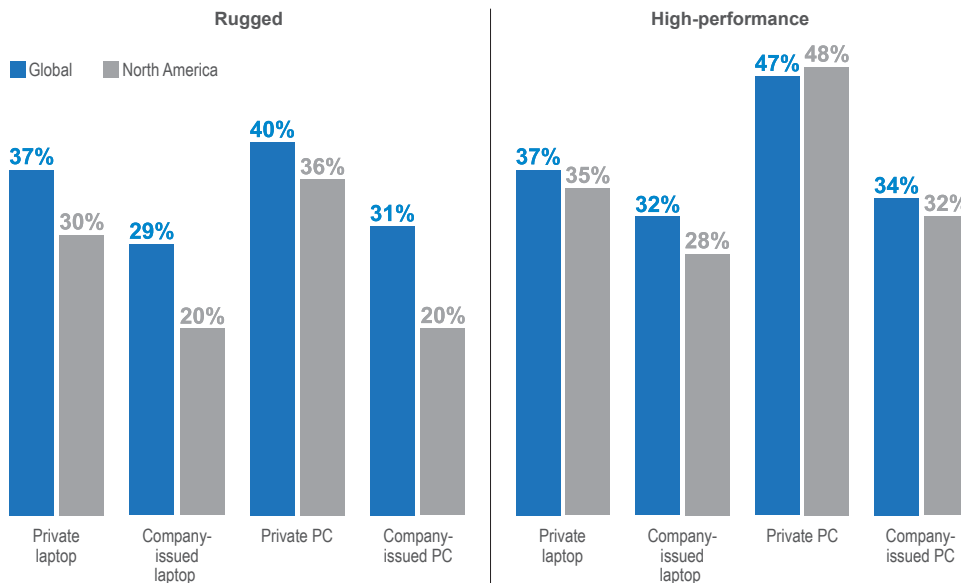
Interestingly, users say the private devices they use are much more likely to be rugged and/or high-powered compared to their company-issued devices. This leads to the conclusion that workers believe their personal devices are more durable and powerful than those they receive from their companies.

This is quite a change from two to three decades ago, when work equipment was almost always superior to home devices. Now that has changed to the point where it appears that a significant percentage of users feel the technology they get at work is worse than what they have at home.

When compared to respondents globally, North Americans report fewer rugged systems overall, a finding that suggests they might need more rugged devices than they have. For example, more than 34% of North American workers labor in a location that is tech-hostile, yet only 20% have a corporate-issued desktop or corporate-issued laptop that is rugged. In addition, the number of corporate-issued high-performance devices issued to North Americans is less than the number issued to their global peers [see chart below]. These findings tend to show why North American workers might rely instead on their more powerful and durable personal device.



North American users say their private devices are much more likely to be rugged and/or high-powered than their company-issued devices.

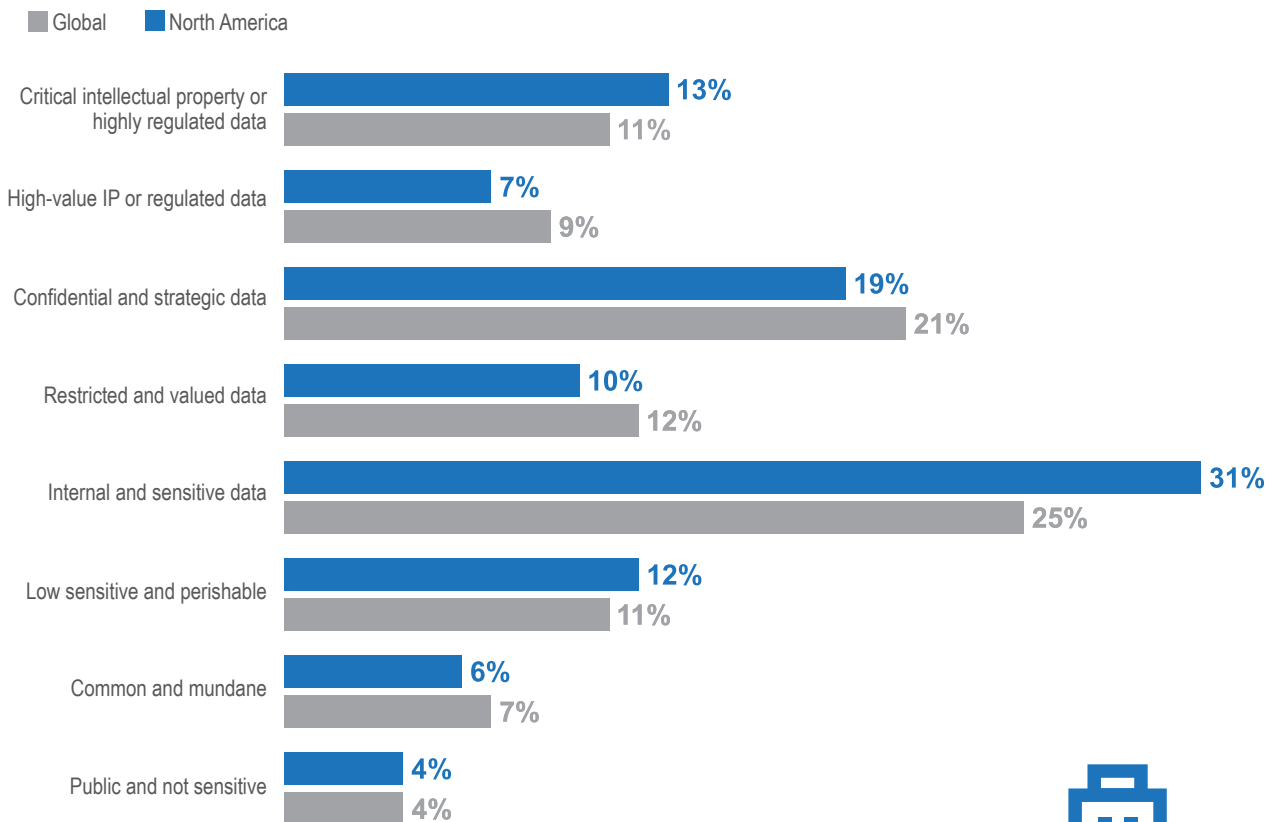


34% of North American workers labor in a location that is tech-hostile, yet only 20% have a rugged corporate-issued desktop or laptop.

Considering how often North Americans work outside the office, the sensitivity of data they share is notable. 89% of the data they share across their organization's network is sensitive to some degree [see chart on next page]. In these survey findings, 50% say they share the three most sensitive levels of data (critical, high-value or confidential); 39% share data that is restricted or internally sensitive; 11% share data of low sensitivity.



What is the highest level of data that you share over the organization's network?



These findings indicate that in providing for North American workers, technology decision makers should regard their users as less likely than their global peers to be desk-bound, with a good chance they will need durable and perhaps fully ruggedized equipment so they can work in tech-hostile environments. Security measures implemented on those systems should be strong, given the sensitivity of data they are often handling. Technology decision makers should be aware that workers' personal devices might be perceived to be superior to those issued by the company, creating higher expectations for corporate-issued systems.

Japan

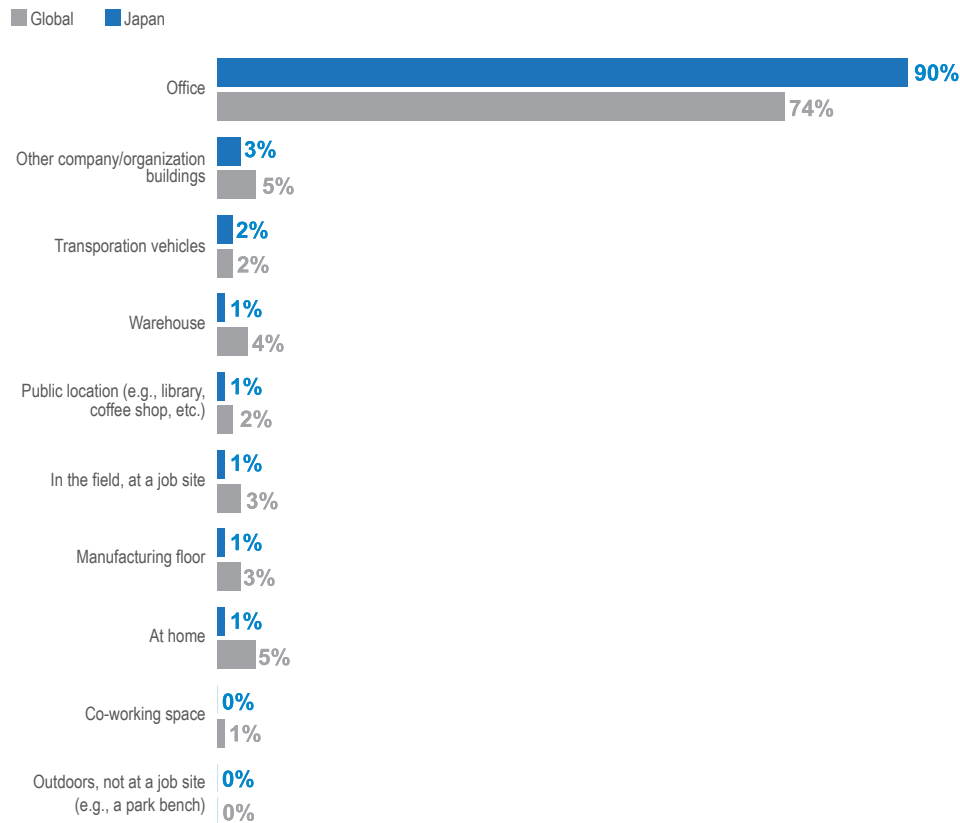
The survey found workers in Japan gravitate to offices markedly more than in other regions. For example, 90% say an office is their primary work location – far more than the 65% of North Americans who say so. 40% work exclusively at a desk or workstation. Only 1% work primarily from home, while 10% of North Americans do so. Those in the Manufacturing Logistics & Retail vertical are the only ones who say they spend considerable time in a location outside an office (12% in a warehouse; 18% in vehicles).



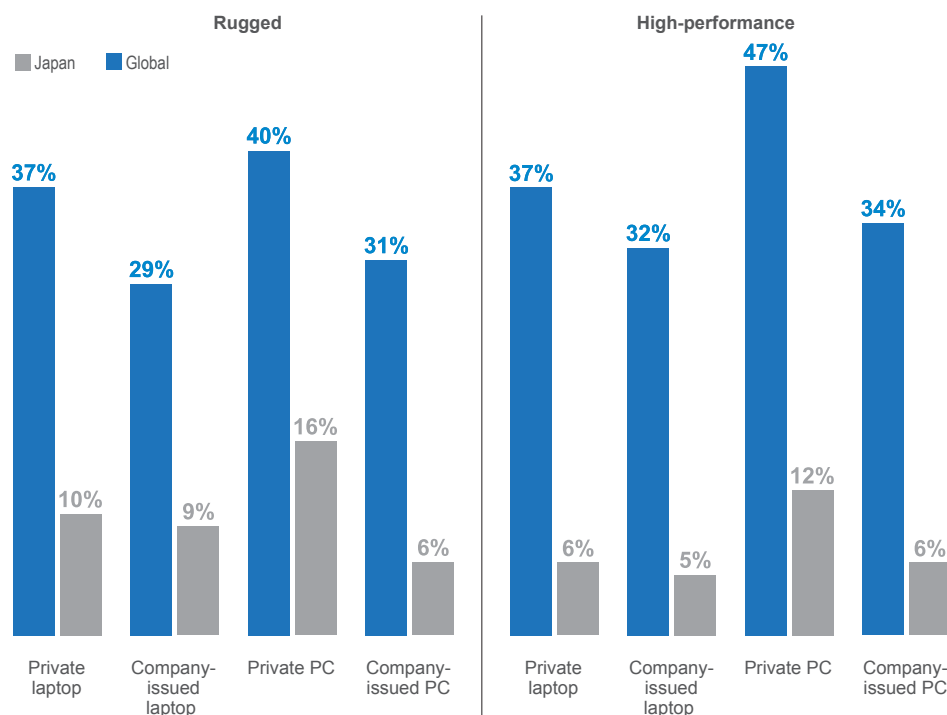
90% of Japanese workers say the office is their primary work location – far more than other regions surveyed.



How would you describe each of your work environments or locations?



Perhaps because Japanese workers are working in a controlled environment, they are much less likely to use fully rugged devices than are users in other markets in this study.



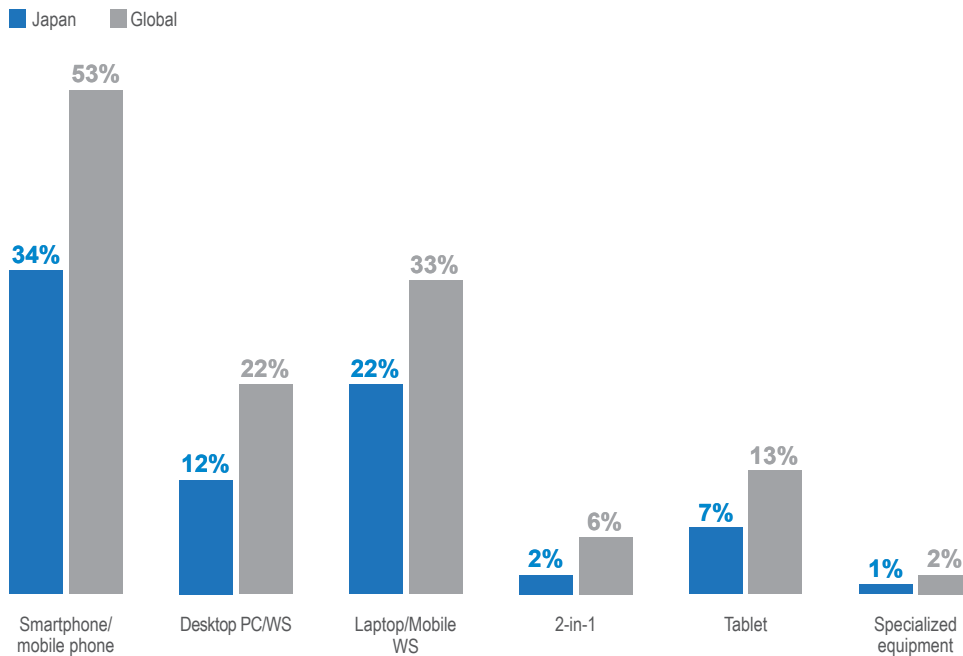
Japanese workers are less likely to use their own personal devices at work.




In a finding that indicates that Japanese workers might tend to be more satisfied with their corporate devices than those in other regions, they are also less likely than others to use their own personal devices. Only 47% of Japanese workers use one or more personal devices for work – significantly lower than any other region and the global average of 69%.

As in other regions, phones are the most likely to be a personal device. Japanese workers also have the lowest usage of phones in the workplace with only 47% using a phone, versus the global average of 71%, as well as the lowest usage of desktops – 64% versus the global average of 71%. And when they do use a desktop, they are highly unlikely to use a personal desktop (12% in Japan versus 22% global). This result is likely connected to the low likelihood of Japanese working from home where personal desktops are most often used.

Which of the following personal devices do you use to conduct work-related activities or tasks?




Japanese workers also have the lowest usage of phones in the workplace.

However, in a finding that is consistent with other regions, devices that Japanese individuals provide themselves elicit higher satisfaction levels than those provided by their respective organizations, although, interestingly, those satisfaction levels are all significantly lower than all other regions. This could indicate Japanese workers are more demanding and judgmental technology users than their global peers.

As might be expected, the likelihood to recommend a device aligns with the overall satisfaction of the product – Japan’s low satisfaction is then reflected in their low likelihood to recommend compared to global.

Please indicate if you agree or strongly agree with the following statements about technology and your employment.

	Global	Japan		
	All verticals	All verticals	Tech, R&D	Finance
I consider an organization's technology when applying for a position.	49%	21%	25%	33%
I would leave an organization with substandard technology.	44%	20%	26%	34%
Technology can help create good work-life balance which makes me motivated and engaged.	64%	29%	33%	36%
Freezes, bugs and glitches negatively affect my motivation and engagement.	60%	45%	46%	55%
I would leave an organization with inefficient security technology and policies.	46%	23%	25%	33%
I prefer to work for an organization that offers mobility and flexibility.	65%	29%	32%	37%
I would prefer my organization offer more work mobility and flexibility over a salary raise.	46%	19%	22%	26%

As seen in the chart above, Japanese workers place less emphasis than their global peers on the technology posture of their organizations, although workers in the Finance and Technology and R&D sectors tend to place greater value on it.

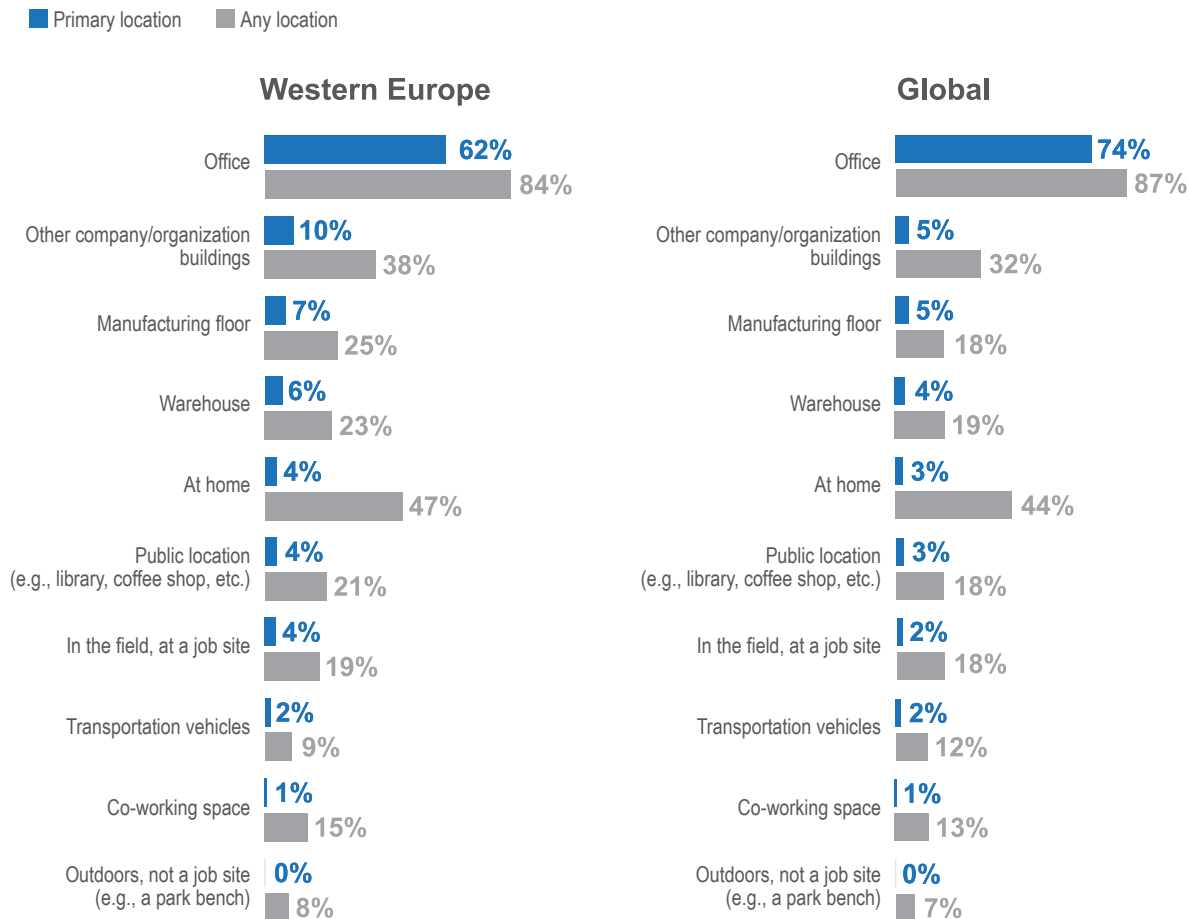
In summary, despite willingness to purchase their own devices, the overwhelming majority of the Japanese audience would prefer that their organizations provide them with tested and supported devices rather than seeking out devices themselves, a finding consistent across all geographic areas. The bottom line for technology decision makers in Japan is to give primary focus to the office technology ecosystem.



Western Europe

Western Europeans are among the most mobile of workers. When compared to other regions, this audience spends the least time (62%) tied to an office.

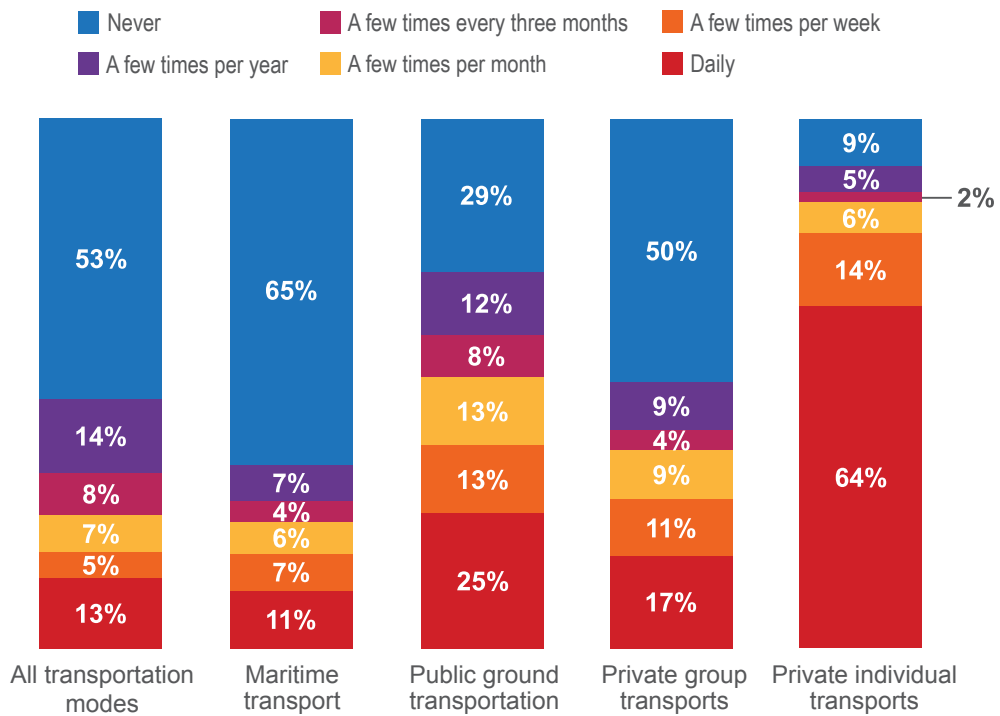
How would you describe each of your work environments or locations?



It's not surprising, then, that Western Europeans frequently utilize transportation of varying kinds, particularly private vehicles such as cars, motorcycles or bicycles. Significantly, Western Europeans often use public ground transportation such as trains and buses. Nearly 60% use some form of public or group transportation at least monthly. Workers who take these modes of transit often seek to get work done while they travel, typically using a laptop, tablet or 2-in-1 device to create documents or access the Internet via mobile broadband and collaborate.



On average, how often do you use the following modes of transportation below for work?



Western Europe’s on-the-go pros are very likely to use additional equipment – far more often than other types of workers. They are willing to pay for these devices themselves. Even so, the majority of Western Europeans (78%) would, like those in all other regions, prefer their organizations to issue them supported and tested devices and accessories.

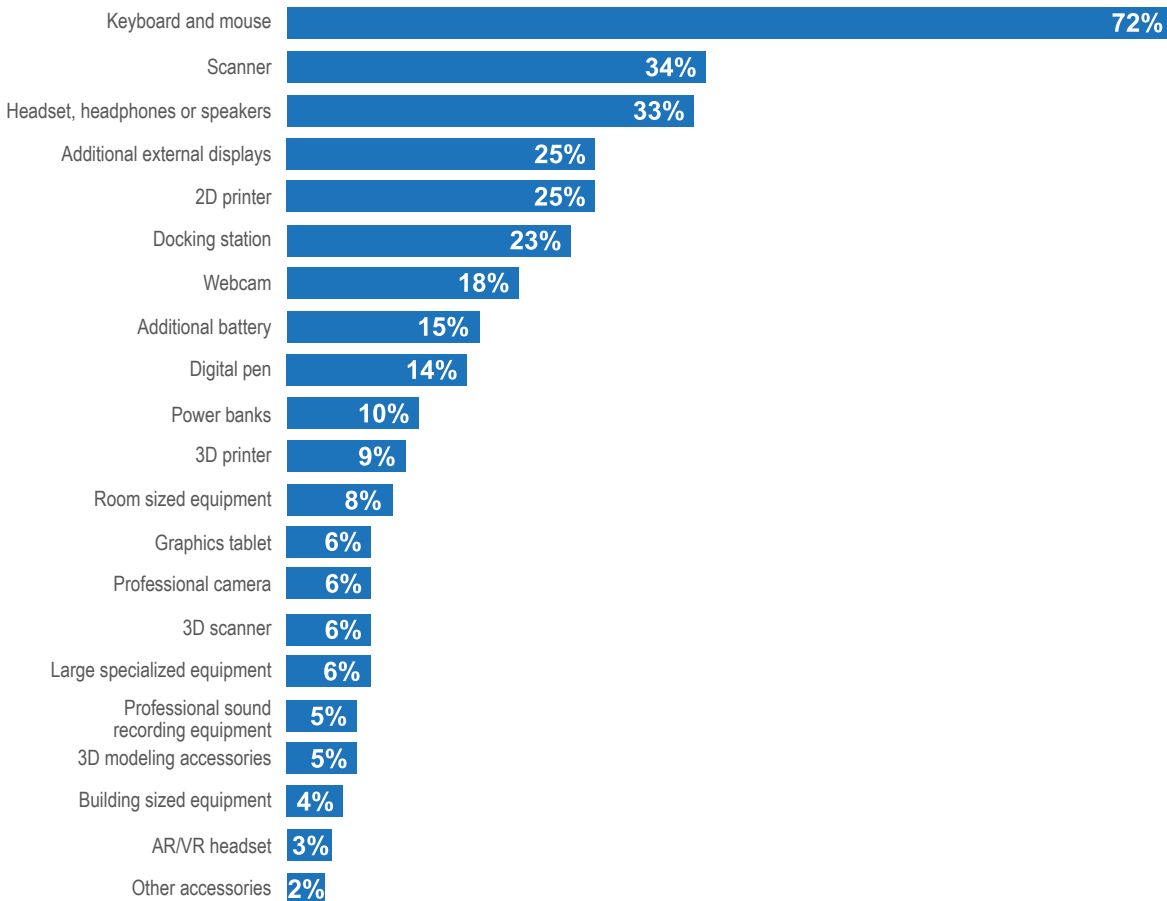


Did you purchase any of the devices listed below for work-related purposes, whether you were reimbursed or not?

Devices Purchased by the Individual

	Desk-centric worker	Corridor warrior	Remote worker	On-the-go pro
Additional battery	59%	58%	74%	69%
Digital pen	55%	48%	65%	79%
Headset, headphones or speakers	32%	46%	63%	73%
Webcam	31%	58%	41%	70%
Docking station	21%	32%	40%	58%
Keyboard and mouse	20%	26%	44%	51%
Scanner	17%	27%	44%	49%
Additional external displays	12%	20%	37%	68%

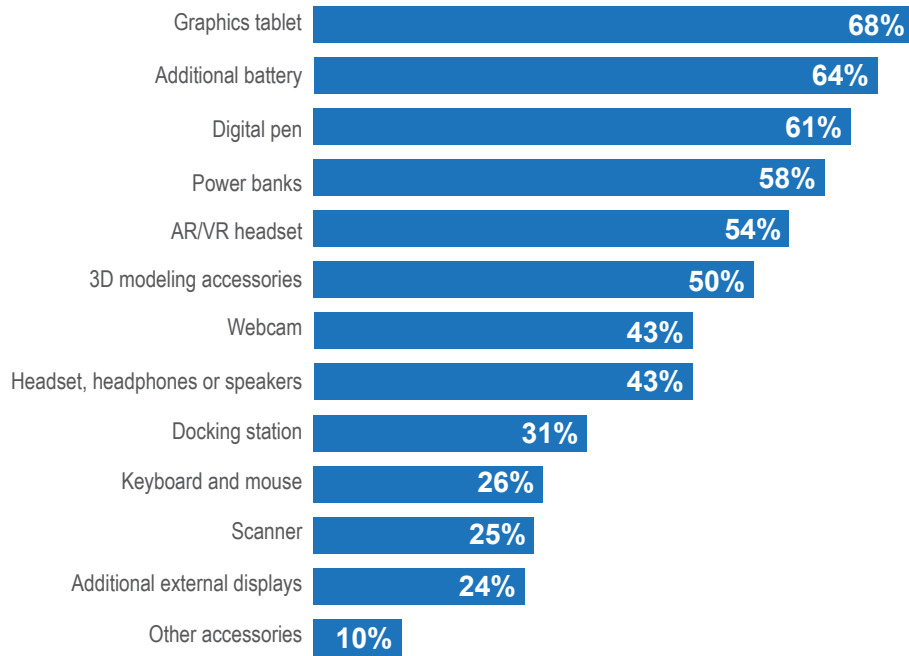
What additional equipment do you use while working to be fully productive?



With such a high level of mobility, it's not surprising that many in this region report using rugged devices including more than 27% of laptops and 51% of company phones. In particular, survey respondents using digital pens, additional batteries and graphics tablets say they need these devices to work in tech-hostile environments [see chart on next page].



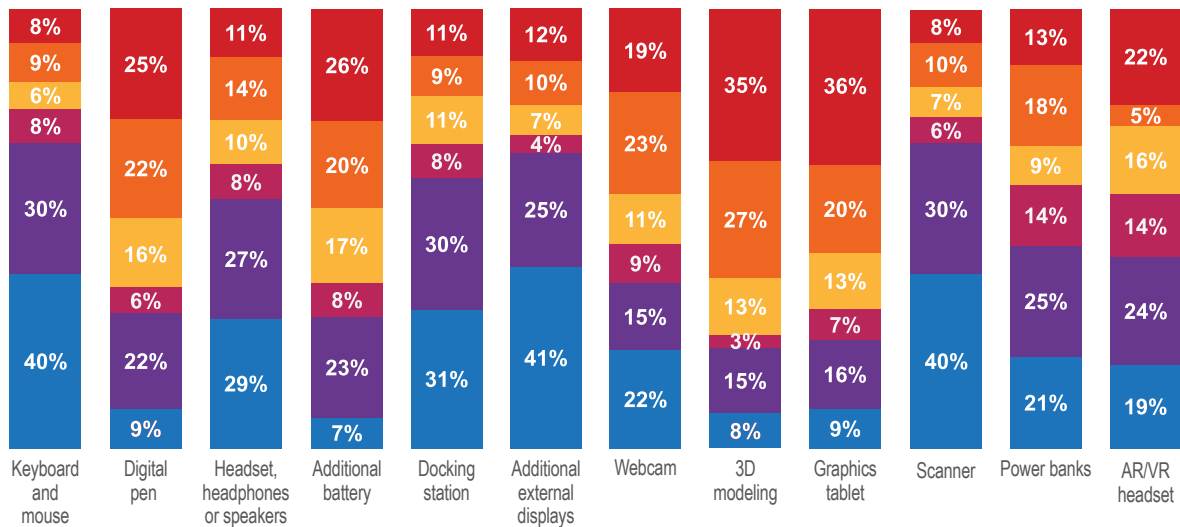
Did you purchase any of the devices listed below yourself for work-related purposes, whether you were reimbursed or not?



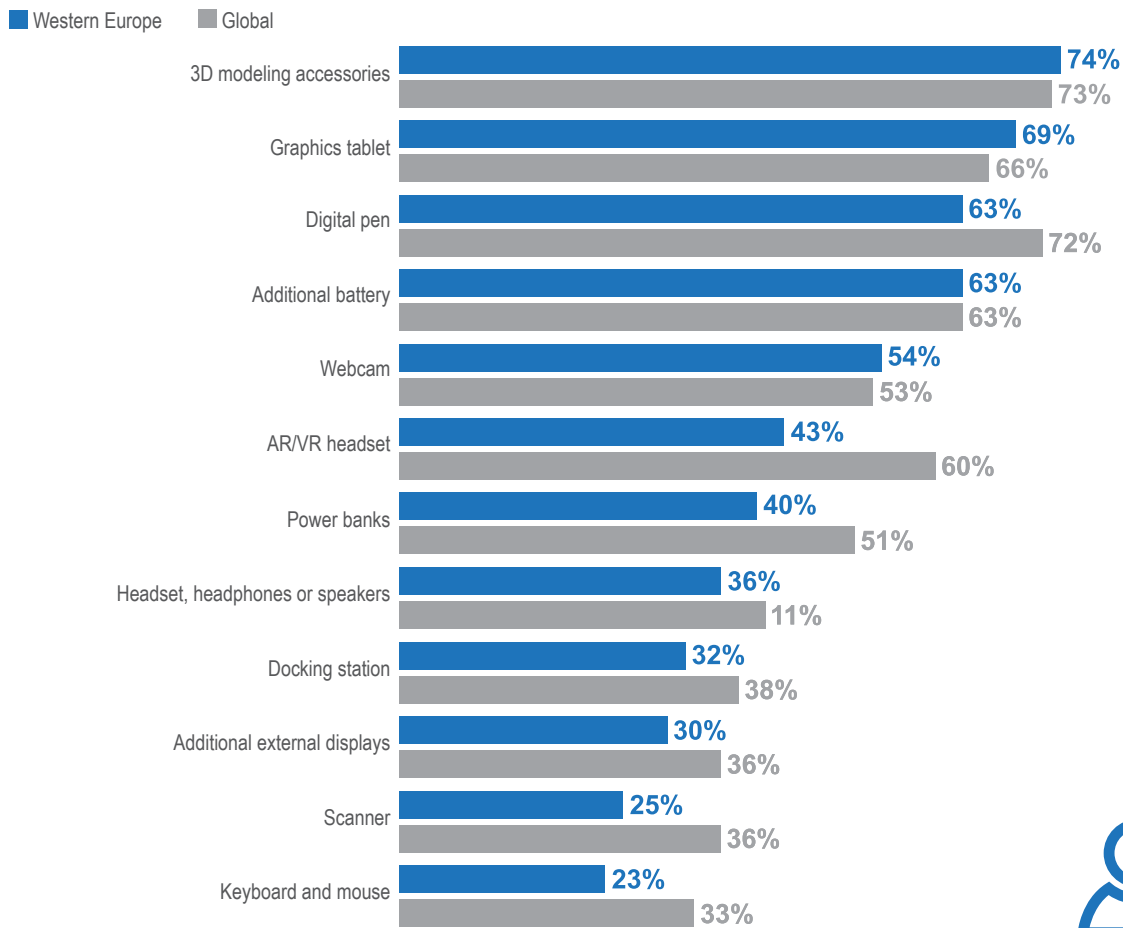
When you think about how you use your equipment when working, how durable does it need to be?

Western Europe

- It only needs to work after an occasional drop or scratch
- It should be able to survive occasional bumps and shocks
- It should be safe to use for a day trip outdoors
- It should have anti-microbial treatment and operate in warm summer or in a freezer
- It must be a sealed device to operate in the rain or dusty/dirty environments
- It must be able to operate in tech-hostile environments (salted fog, explosive atmospheres, corrosive chemicals)



% Rugged Devices



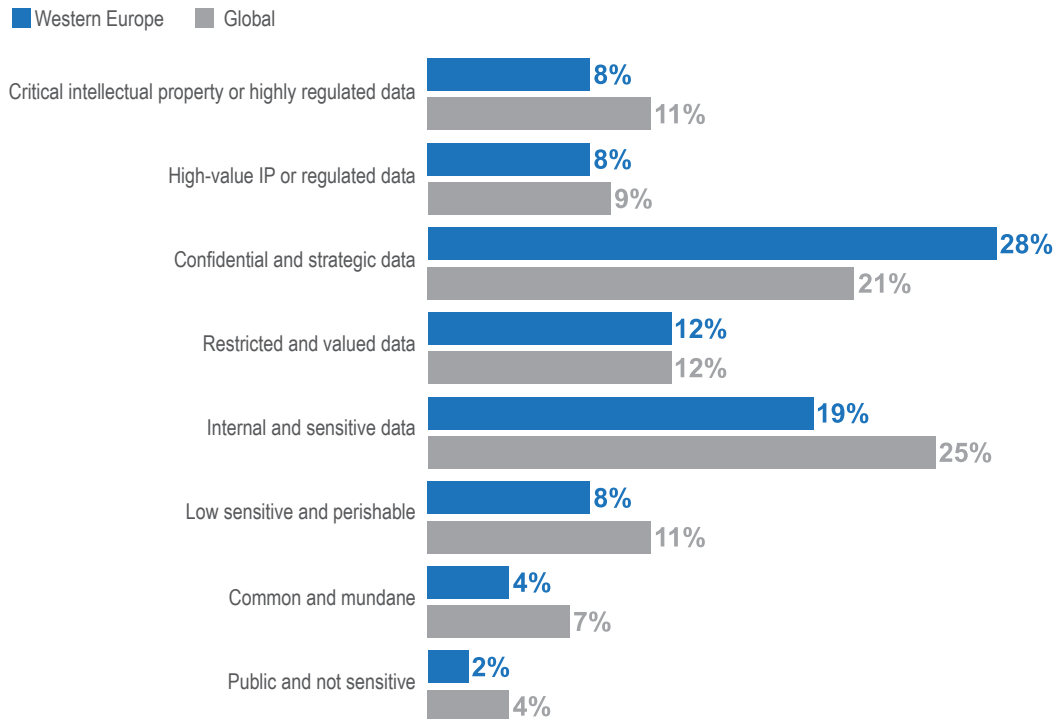
Western Europeans often work with sensitive data, but they are the least likely to share data with the two highest security levels.

Further, Western Europeans often work with sensitive data: 76% say they share confidential, restricted or internal data when collaborating, though they are the least likely region to share data with the two highest security levels (16% in Western Europe do so, versus the global average of 20%).

Like their North American counterparts, Western Europeans are on the move. They need devices that fit a mobile workstyle, enabling them to be productive while in transit particularly. In addition, technology decision makers should consider providing their workers an expanded ecosystem with more supported accessories, as 78% would like that to happen. The tendency of Western European workers to handle sensitive information indicates that end-point security is particularly important for this workforce.



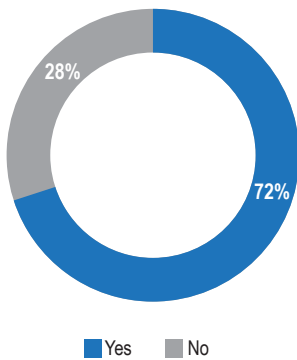
What is the highest level of data that you share/collaborate over the organization's network?



India

The most notable finding among Indian workers is the frequency with which they work outside organizational security protocols to get work done. Fully 72% say they do this, far more than is the case in other regions. On-the-go pros (92%) and workers in the Manufacturing Logistics & Retail vertical (87%) are the most likely to circumvent corporate security.

Do you sometimes find it necessary to work outside your organization's security protocol?



Working outside security protocol

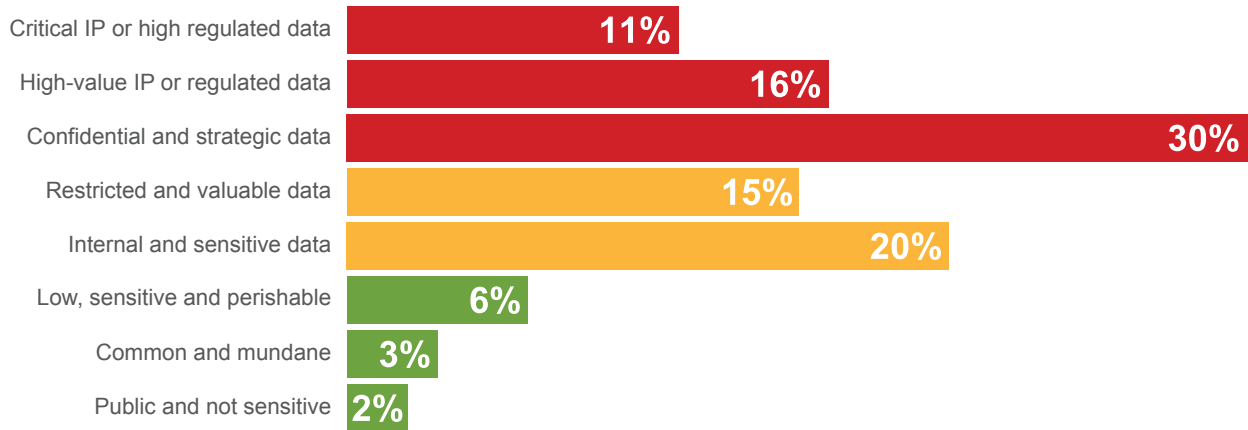
Vertical						
Media & Entertainment	Finance	Healthcare	Energy	Education	Mfg Logistics/ Retail	Tech/R&D
72%	73%	62%	73%	64%	87%	63%

Type of Worker			
Desk-centric worker	Corridor warrior	Remote worker	On-the-go pro
67%	74%	77%	92%



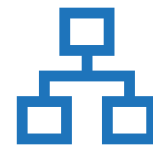
Given this tendency, the sensitivity of data shared by Indian workers should be of particular concern. A very high percentage (94%) share sensitive data across their organization's network. 57% of data is in the top three categories of sensitivity [see chart below].

What is the highest level of data that you share over the organization's network?



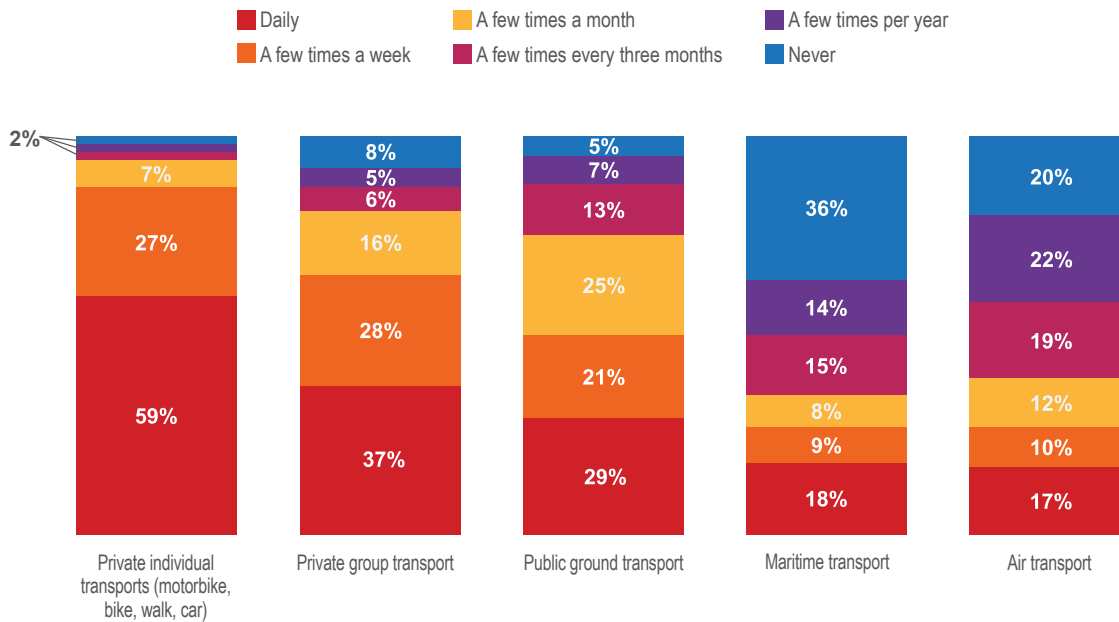
When data is shared outside corporate security, the most frequent practice is to share work-related data using private email or a private cloud sharing account.

Other salient findings among Indian workers are the frequency of private device usage. While 99% of workers use company-provided devices, 88% also use private gear. In addition, although 80% say their primary work location is an office, Indian workers frequently use transportation for work. For example, 95% use public ground transportation and 98% use private individual transportation [see chart on next page].



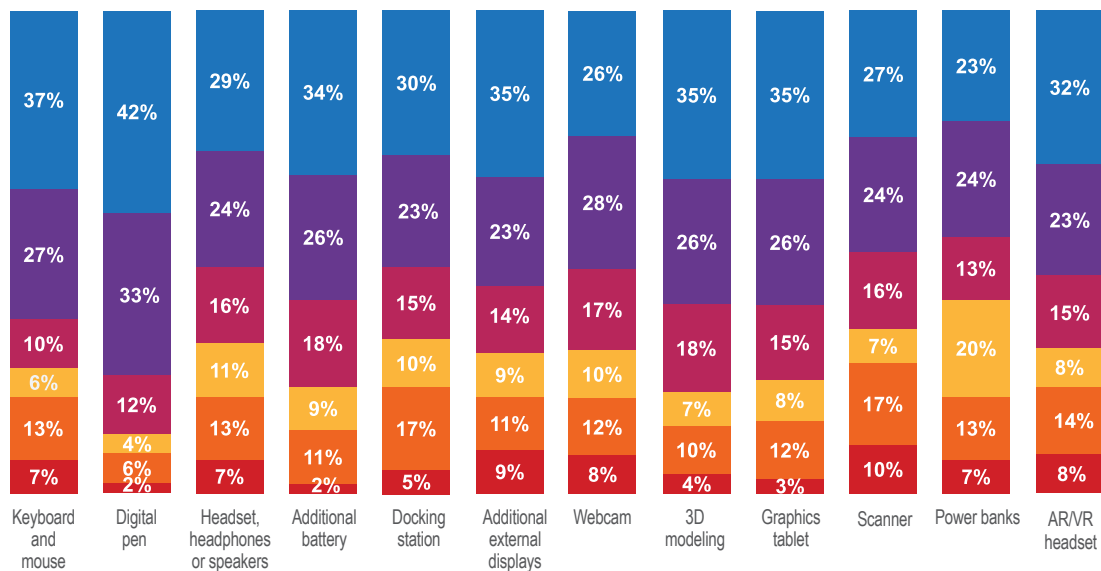
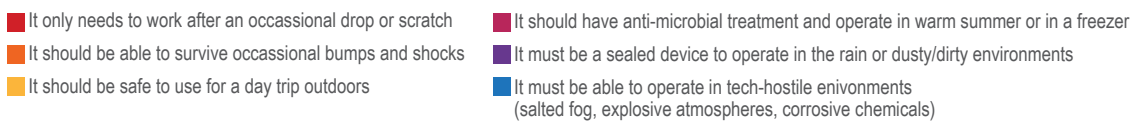
94% of Indian workers say they share sensitive data over their organization's network.

On average how often do you use the following modes of transportation below for work?



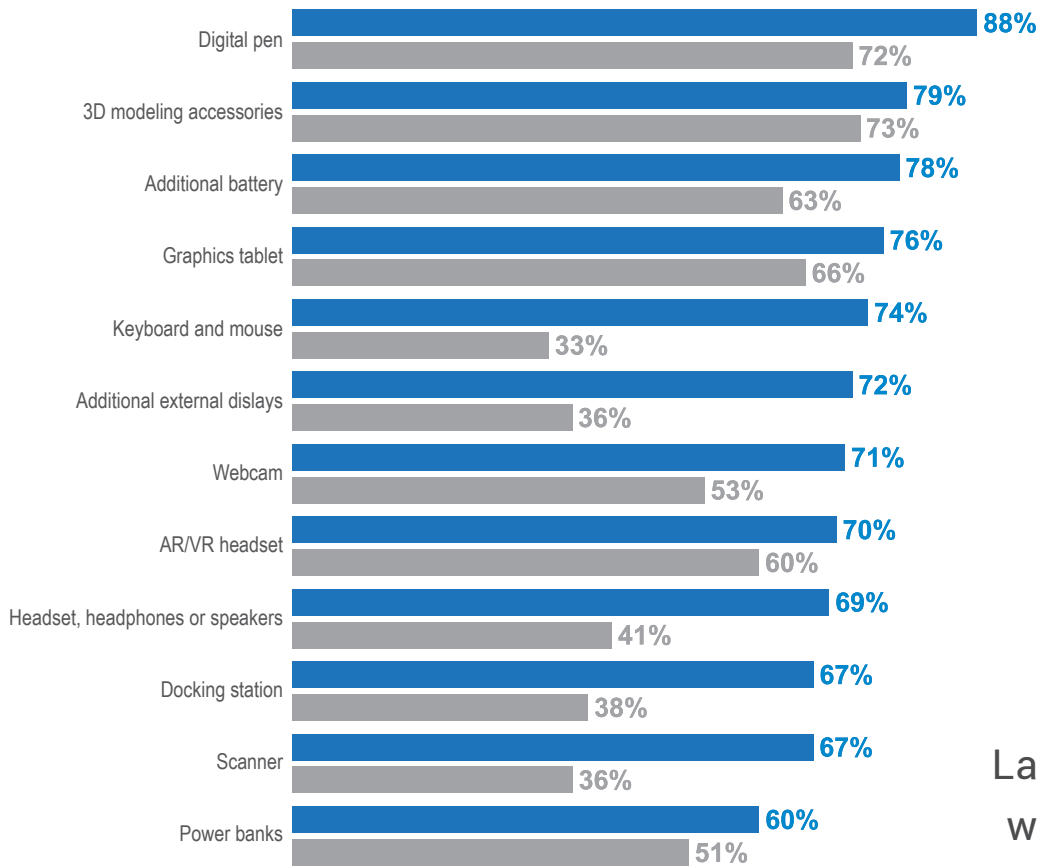
And with such a mobile workforce, it's not surprising that high durability is needed for additional devices and accessories [see chart below].

When you think about how you use your equipment when working, how durable does it need to be?



Fully Rugged

India Global



Technology decision makers serving the Indian workforce face demanding requirements. Security for end-user equipment is at a premium, as organizational protective measures are bypassed even as users share sensitive data, often on their own private devices. Because workers are often users of transportation, bringing their equipment to tech-hostile environments, a high degree of durability is expected.

Latin America

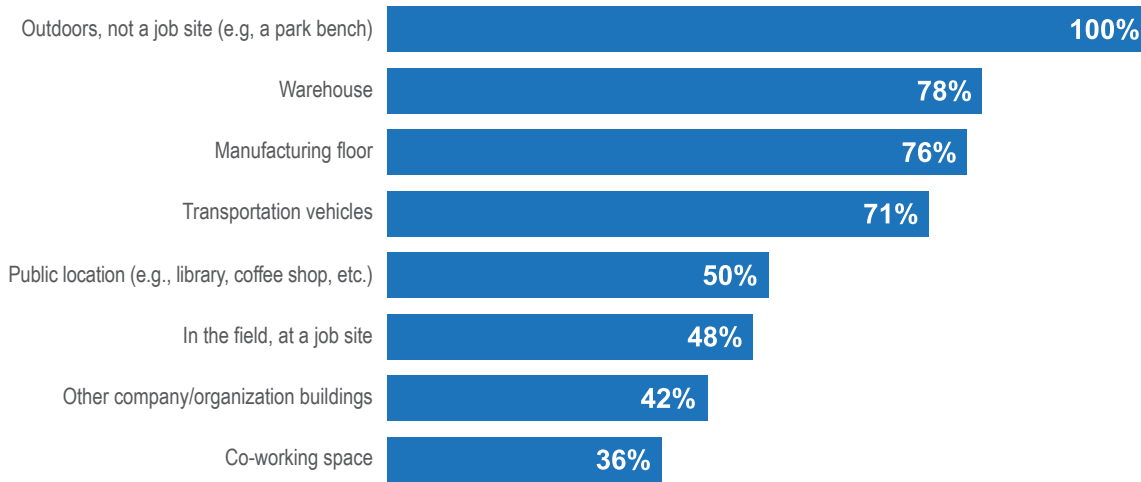
Although 81% of Latin American workers labor most frequently in an office, many state a need for highly durable equipment and accessories. This would indicate that although fewer people are working outside the office in traditionally tech-hostile environments, those locations might be more tech-hostile than those in other regions. Thus, for the smaller group of people working in difficult environments, the need for durable equipment is greater.



Latin American workers labor most frequently in an office, but many state a need for highly durable equipment and accessories.



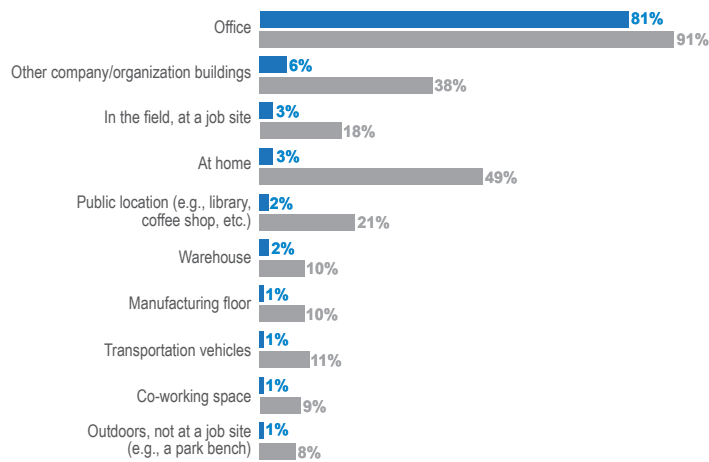
Thinking about each work location, are you exposed to any of the following: freezing temperatures, extreme heat, dust, chemicals or explosive atmosphere (gas, detergents, oil)?



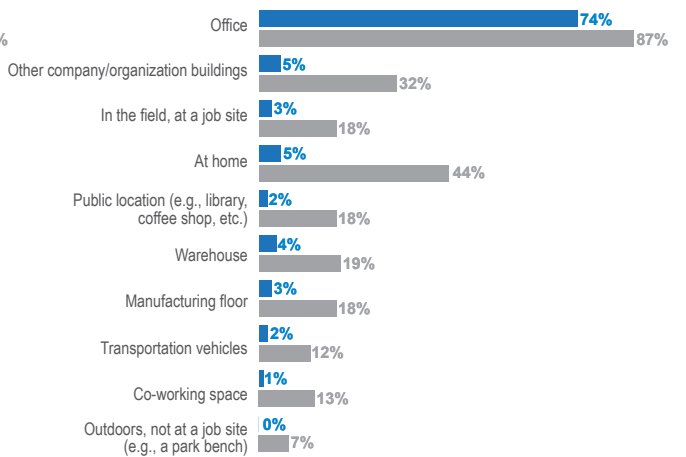
What types of locations do you work at?

Latin America

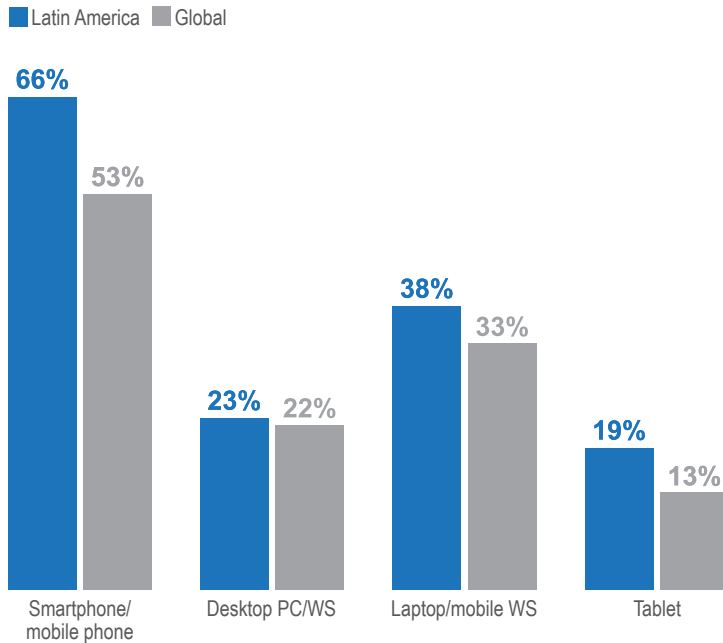
■ Primary ■ All



Global



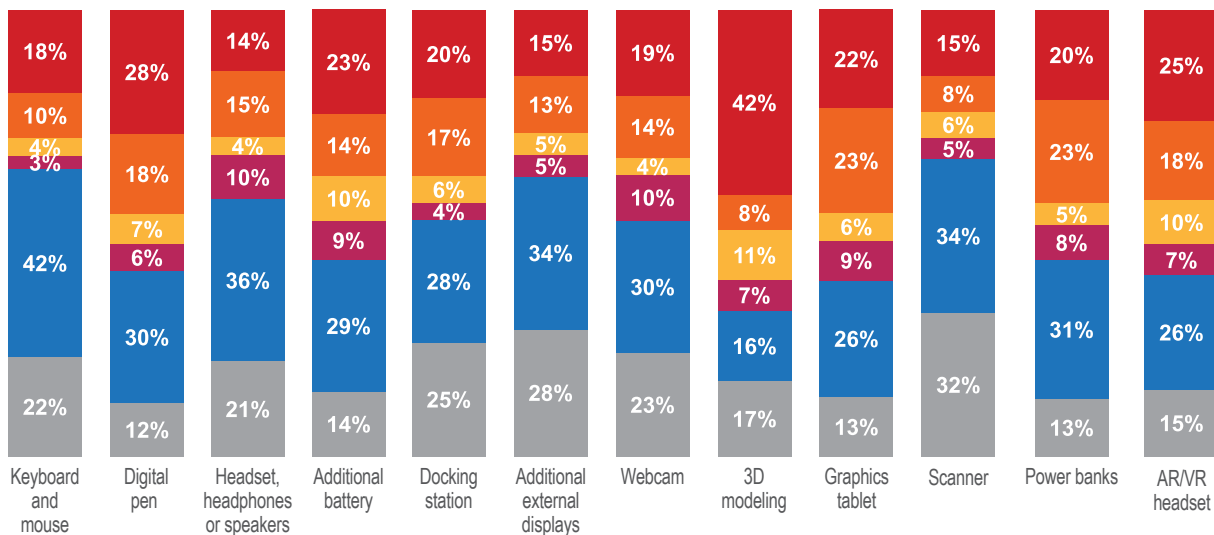
Which of the following devices do you use to conduct work-related activities or tasks?



In Latin America, workers are more likely to conduct work activities and tasks on their smartphones than workers in other regions.

When you think about how you use your equipment when working, how durable does it need to be?

- It only needs to work after an occasional drop or scratch
- It should be able to survive occasional bumps and shocks
- It should be safe to use for a day trip outdoors
- It should have anti-microbial treatment and operate in warm summer or in a freezer
- It must be a sealed device to operate in the rain or dusty/dirty environments
- It must be able to operate in tech-hostile environments (salted fog, explosive atmospheres, corrosive chemicals)



In contrast to the Indian region, only 34% work outside organizational security protocols. However, in a finding consistent with other regions, on-the-go pros are most likely to do so (54%). The reason given is also reflective of other areas, 41% say it enables them to work more efficiently and effectively.

In other findings, 98% use company-provided devices and 76% use private devices, including mostly private phones, for work. Financial sector workers (57%) are less likely than those in other verticals to do this.

As for the sensitivity of data shared over an organization's network, Latin Americans are on a par with other regions, as 19% share critical intellectual property or high-value intellectual property, 60% share confidential, restricted or internal data, and 21% share data that is of low sensitivity.

When additional work environments are considered (in addition to the primary work environment), 49% of Latin American workers say they do some work from home on a weekly basis, where 23% work on a private PC and 38% work on a private laptop – slightly more often than in the rest of the world. These findings suggest that the home technology ecosystem, including such additional equipment as displays, keyboards, mice and digital pens, as well as security should be given special attention.

Overall, technology decision makers in Latin America face user needs similar to those in other areas, but should pay particular attention to the need of workers for durable equipment as well as the need for security when work is done outside the office.



**In Latin America,
only 34%
work outside
organizational
security protocols.
However, on-the-
go pros are most
likely to do so.**

Additional resources

www.dellemc.com/workforce

www.dellemc.com/en-us/pc-lifecycle

End notes

- 1 Vertical reports on Education, Healthcare, Media & Entertainment, Technology and R&D, Finance, Manufacturing Logistics & Retail, and Energy to be released in 2019.
- 2 "Digital Transformers Versus Controllers Opportunity Snapshot," a commissioned study conducted by Forrester Consulting on behalf of Dell, February 2018.
- 3 "Total Economic Impact of Dell & Partner Workforce Enablement Solutions," a Forrester Total Economic Impact™ Study commissioned by Dell, December 2018.
- 4 "Transform the Employee Experience to Drive Business Performance," by David K. Johnson and Christopher Voce, Forrester Research, February 2018.
- 5 "Total Economic Impact of Dell & Partner Workforce Enablement Solutions," a Forrester Total Economic Impact™ Study commissioned by Dell, December 2018.

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