

Boost Notebook Users' Productivity, Collaboration, And Comfort With Monitors

The future of work just became today's reality. The disruptive forces of 2020 and 2021 have compelled organizations to leap forward and enable hybrid workforces in a single bound. Investing in the right technology is crucial to enabling employees to work and learn from anywhere — but are companies doing enough?

Dell Technologies commissioned Forrester Consulting to explore the role technology played in enabling anywhere-work experience for notebook users. We found that using external monitors powers up their productivity, collaboration, and level of comfort.

KEY FINDINGS

Forrester's study yielded the following key findings:

- **Employees' technology needs have evolved and are more complex than ever.** One out of three knowledge workers report working from multiple locations on a regular basis. As employees become increasingly mobile, they need technology that enables anywhere work. Employees rely on a large variety of tools and applications to perform their day-to-day work, connecting eight devices on average to their portable computers. With 62% of survey respondents saying that the technology, tools, and devices they use determine the quality of their work experience, it is more important than ever for

organizations to sustain a positive employee experience and address these quickly evolving technology needs.

- **Notebook users ill-equipped with external monitors are less productive.** Worryingly, more than half of notebook users (55%) are not fully satisfied with their remote setup. Equipping them with external monitors is essential for them to conduct their day-to-day work, since notebooks' small screen sizes make it difficult for users to perform advanced tasks such as content design (45%) and data analysis (42%).
- **External monitors are critical assets to achieve productivity, collaboration, and comfort.** Sixty-eight percent of notebook users with an external monitor report feeling productive and empowered to get their work done against only 38% of workers not using a monitor. Improved collaboration is another top benefit of using external monitors as it provides the ability to present and share screens during calls (59%). Physical comfort is also improved from using external monitors with 54% of employees saying it improves workstation ergonomics.



Employees Needs Have Evolved: They Want Technology For Anywhere Work

Companies that focus more on anywhere work score more highly on employee experience (EX) metrics than their peers.¹ These leading organizations have embraced the shift from remote work to anywhere work by providing their employees with the right technological resources to work from any location. This includes portable computers paired with external monitors, which are both key assets knowledge workers widely use.² Our survey of 300 knowledge workers based in APAC, Europe, and North America found that:

- **Workplaces are rapidly evolving, accelerating the expansion of hot-desking.** One-third of knowledge workers have adopted hybrid-working arrangement as their new normal, working from multiple locations on a regular basis.³ Adapting to these changes, our 2020 research revealed that 57% of respondents noted their organizations planned to adopt or expand hot-desking over the next 12 to 24 months.⁴ This trend is continuing in 2021. According to 72% of respondents, hot-desking will become more prevalent in their organizations with 30% of respondents reporting that their organizations have already implemented hot-desking and 42% plan to do so in the next 12 months.⁵

“Our company was ahead of its time with a hot-desk-only policy. We use virtual desktops for employees to log in and two 24-inch, arm-mounted monitors equip each desk.”

Senior solution architect, financial services, Canada

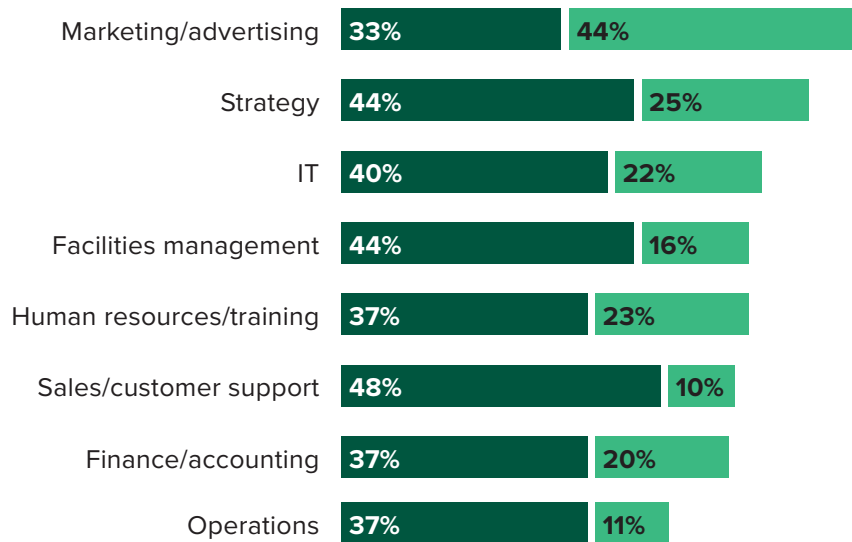
- **Technology is a key factor determining EX quality.** There is a strong relationship between having the right technology for a workstation setup and workers feeling empowered to get work done. This is particularly true in a virtual working environment as 62% of survey respondents say the technology, tools, and devices they use determine the quality of their work experience (see Figure 1).

Figure 1

“How strongly do you agree with the following statements?”

Technology/tools/devices that I use determine the quality of my work experience.

● Agree ● Strongly Agree



Base: 300 knowledge workers based in APAC, Europe, and North America

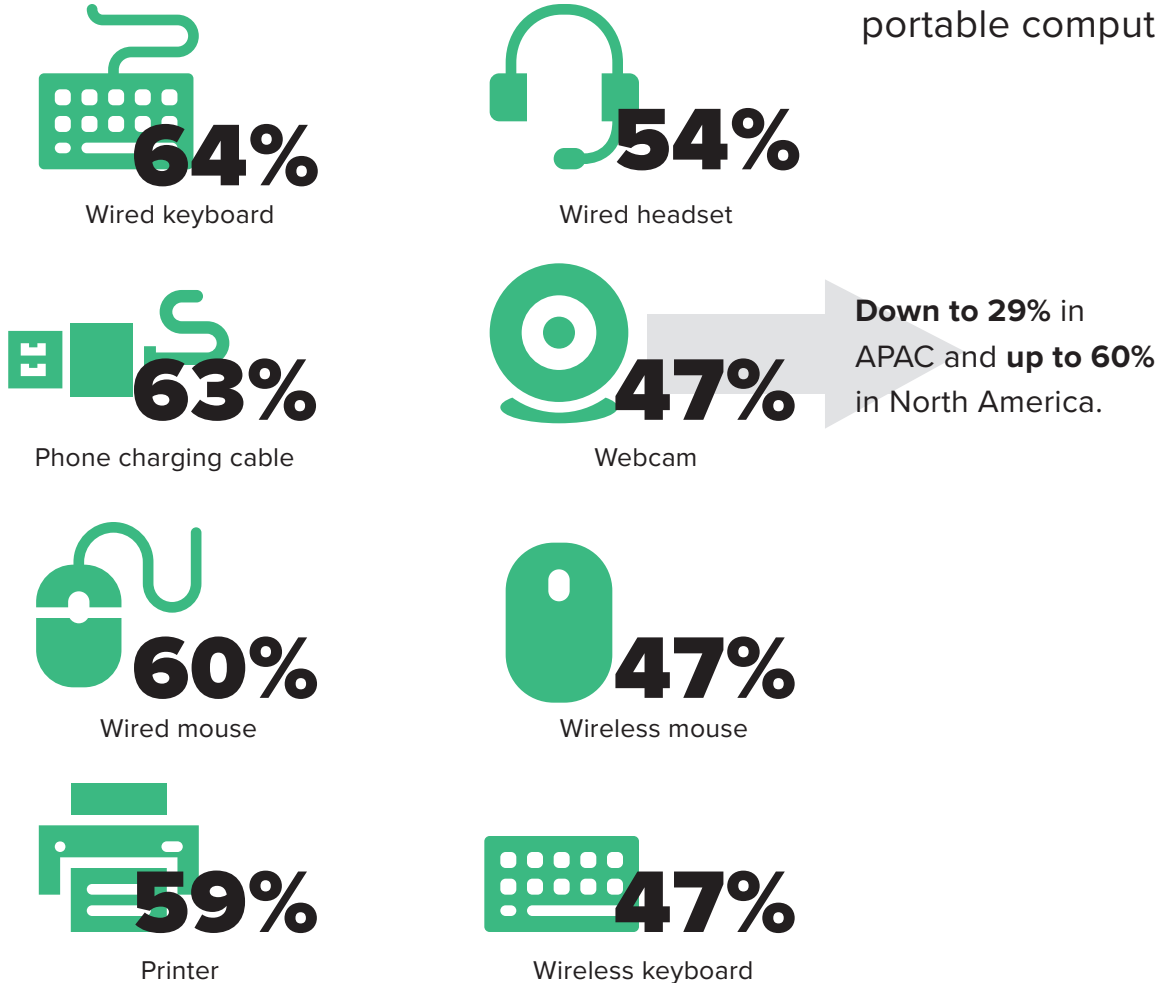
Source: A commissioned study conducted by Forrester Consulting on behalf of Dell Technologies, September 2021

- **Anywhere work has increased employees’ need for mobility and simplicity.** Notebook users are adapting to hybrid working arrangements by relying on a large variety of personal devices; they report connecting eight devices on average to their portable computers (see Figure 2). Simplifying that environment has become top of mind for them as 67% want to use more work-and-learn-from-anywhere technologies.⁶
- **External monitors are critical for notebook users to perform day-to-day work.** Notebook users have widely adopted external displays with 71% having some form of monitor at home to complement their portable computers. Amongst that 71%, 46% have reported they use a single monitor. For instance, a Canadian senior solution architect interviewed for this study said, “I would not be able to perform coding tasks as efficiently without my external monitor and its ability to change the display between landscape and portrait.”

Figure 2

“Which of the following devices and peripherals do you connect your portable computer to on a regular basis to perform your work?”

Knowledge workers connect **an average of eight** personal devices to their portable computers.



Base: 240 knowledge workers based in APAC, Europe, and North America
Source: A commissioned study conducted by Forrester Consulting on behalf of Dell Technologies, September 2021

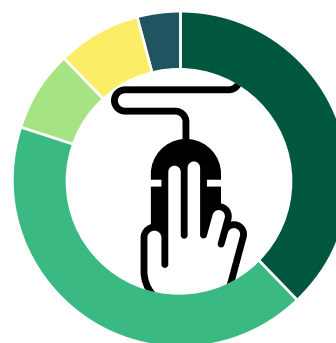
Notebook Users Are Anywhere-Work Users, And Firms Must Cater To Their Specific Needs

Organizations used to have the luxury of designing only one workspace — the office. The shift to anywhere work demands firms rethink what their employees' working locations look like, and the challenges they face when working away from a well-equipped office. As firms navigate hybrid working arrangements, they will need to be strategic rather than reactionary to their employees' specific needs. More particularly for notebook users, they must provide them with the right technology and devices to enable them to work from and shift between multiple locations without disrupting their working experience. For that, organizations must consider:

- **Most notebook users are hybrid on-site and remote workers.** Notebook users are adopting hybrid working arrangement en masse. They expect to spend 38% of their time working from the office in the next six months, and 42% of their time working from home. They also expect to spend on average of one day per week working from other locations (e.g., coworking office spaces, satellite offices, public spaces) (see Figure 3).

Figure 3

“Please estimate which share of time you expect to be working from each of the following locations in the next six months.”



38%	●	Main office/onsite
42%	●	Home
8%	●	Coworking office space ⁷
8%	●	Satellite office/suboffice ⁸
4%	●	Public spaces

Base: 300 knowledge workers based in APAC, Europe, and North America
Source: A commissioned study conducted by Forrester Consulting on behalf of Dell Technologies, September 2021

“I currently use two portable computers and have two 24-inch monitors for my home setup, but I’m considering switching to a 32-inch monitors. That way, I can leverage split screen and have an experience that is more flawless, consistent, and unified.”

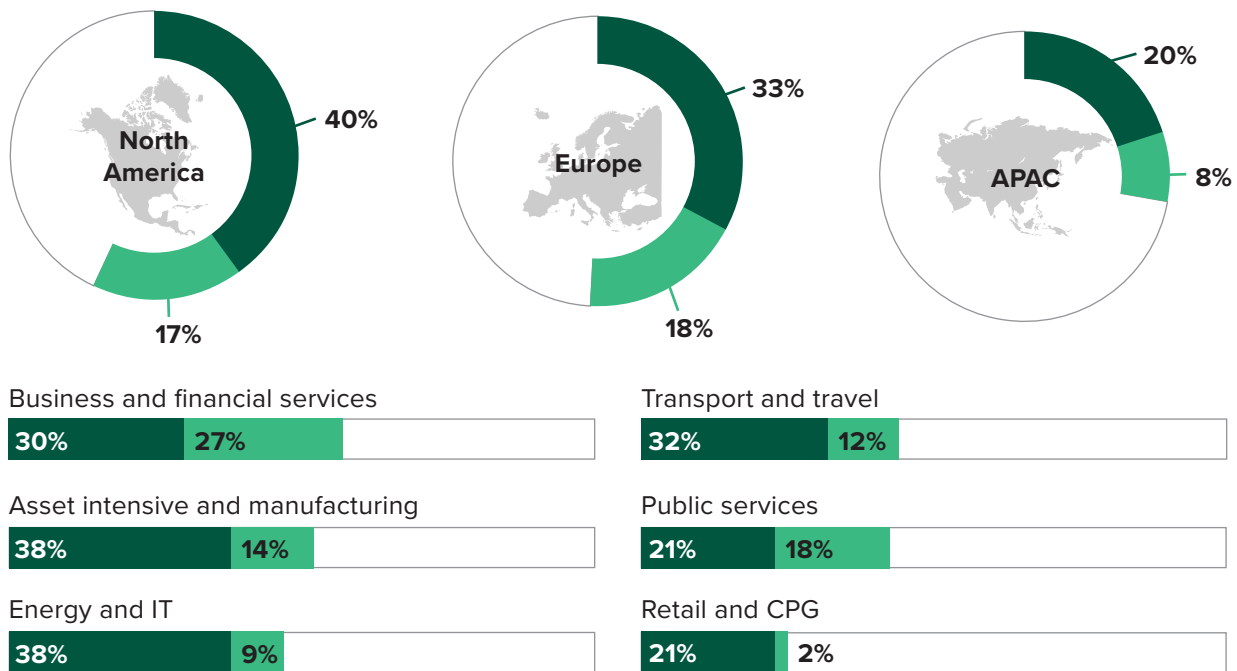
Senior solution architect, financial services, Canada

- Employees are not satisfied with their workspace setups and want adequate monitors.** Although 59% of notebook users say that an external monitor is important for them to be productive at home, only 45% say they received an adequate subsidy from their companies to install their ideal monitor setup at home. As a result, less than half of knowledge workers are satisfied with their remote setup (down to 28% in APAC and 23% in the retail and the consumer packaged goods industry) (see Figure 4). For example, a product design specialist based in the UK shared: “[My] setup is not great at home, especially for online collaborative workshop. Making the workshop engaging requires me to stand up and walk around but my screen is not large enough to do that and still see what is being presented.” Employees expect their employers to equip them with devices catered to their specific needs and are asking for more work-anywhere technologies, allowing them to work seamlessly from home, office, or other locations.

Figure 4

“How satisfied are you with your workspace setup at home?”

● Somewhat satisfied ● Very satisfied



Base: 300 knowledge workers based in APAC, Europe, and North America

Source: A commissioned study conducted by Forrester Consulting on behalf of Dell Technologies, September 2021

- **One out of three notebook users do not receive sufficient support to equip their home setup with external monitors.** Notebook users who have not equipped their home setup with a monitor report different barriers, including not having sufficient space to install the monitor (33%), not receiving funding from their employers and not having the personal budget to purchase one (30%), and not having identified a need for it (35%).
- **Cumbersome peripherals connectivity distract employees from their work and decrease productivity.** Notebooks provide greater flexibility, but when notebooks are used with a multitude of peripherals, they pose new challenges that undermine employees' productivity. Forty-nine percent say they lose time and productivity connecting peripherals to their laptops, and 44% say their laptops have insufficient number of ports to connect peripherals. Most employees spend up to 15 minutes each day to set up their workstations and connect devices, with 42% spending 16 minutes or more. This time lost on setting up and connecting notebooks to peripherals is the top pain point employees report. It distracts them from their work and saps their cognitive capacity, forcing them out of the “flow zone.”⁹
- **An external monitor is essential for notebook users to perform advanced tasks.** External displays offer larger screens that most portable computers lack. This helps employees overcome the limitations of their portable computers and enables them to perform advanced tasks effectively. Employees say a small screen size makes it difficult to perform advanced tasks, such as content design, other creative graphical tasks (45%), and data analysis (42%).

“I have three screens and screen size is most important as I need to use multiple windows simultaneously for comparisons and access large databases.”

Business engineer, manufacturing, China

Monitors Are Critical For Notebook Users' Productivity No Matter Where They Work

Companies that want engaged employees should ensure their employees are well equipped to do their best work. Subpar technology hinders employees' productivity, collaboration, and physical comfort. Our study revealed that features external monitors offer are key for a positive employee experience, since it improves notebook users' productivity, enables collaboration, and increases comfort levels. We found that:

- **Notebook users currently using external monitors report higher productivity than their peers.** External monitors increase notebook users' productivity as they report greater accuracy when completing tasks (52%), and a greater ability to multitask (48%). Furthermore, 68% of knowledge workers using an external monitor report feeling productive and empowered to get their work done against only 38% of workers not using a monitor (see Figure 5).
- **Monitor features that improve collaboration are key selection criteria for notebook users.** As the amount of time spent in virtual meetings increases, notebook users want monitors that improve their ability to collaborate. When using external monitors with a laptop, employees report an increase in their ability to present and share screen during calls (59%), easily collaborate (56%), and efficiently conduct virtual training (31%). When working from home, employees report that their monitors' collaboration features increase productivity. This includes features like a built-in camera and microphone (68%), a video-conferencing certification (60%), and dedicated video-conferencing buttons integrated to the monitor (59%). In addition, 59% of employees prioritize monitors that have

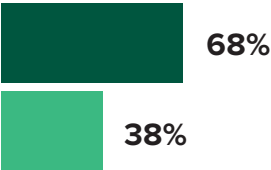
Figure 5

“How strongly do you agree with the following statement?”

(Showing “Agree” and “Strongly agree”)

- Use a monitor
- Do not use a monitor

I feel productive and empowered to get my work done.



Base: 300 knowledge workers based in APAC, Europe, and North America
Source: A commissioned study conducted by Forrester Consulting on behalf of Dell Technologies, September 2021

integration with collaboration application features (e.g., shortcuts, buttons) when selecting a monitor for their home setup.

“Monitors with special comfort view settings are a game changer for me since I’m easily subject to eye strain, causing headaches.”

Senior solution architect, financial services, Canada

- **Monitors improve the level of comfort and ergonomics of notebook users.** Employees using external monitors report having a more comfortable workstation as 54% say using a monitor to complement their portable computer improves ergonomics and comfort. In addition, three-quarters say their monitors help minimize blue-light emissions.
- **Pairing lower processing power computers with external monitors transform the user experience.**¹⁰ Users of computers with lower processing power are seeing large benefits from using external monitors. Connecting their device to an external monitor to conduct their day-to-day work significantly improve productivity (43%), collaboration (56%), and ergonomics (63%) for users of lower processing power computers (see Figure 6).

External monitors increase notebook users’ ability to collaborate, present and share screen during calls, and conduct virtual training sessions.

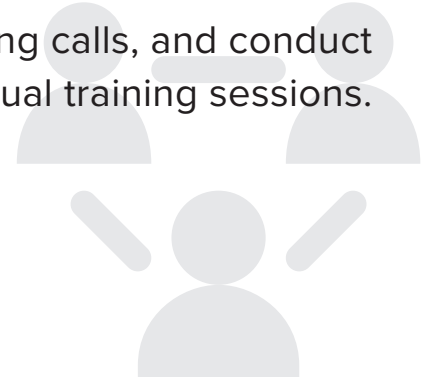
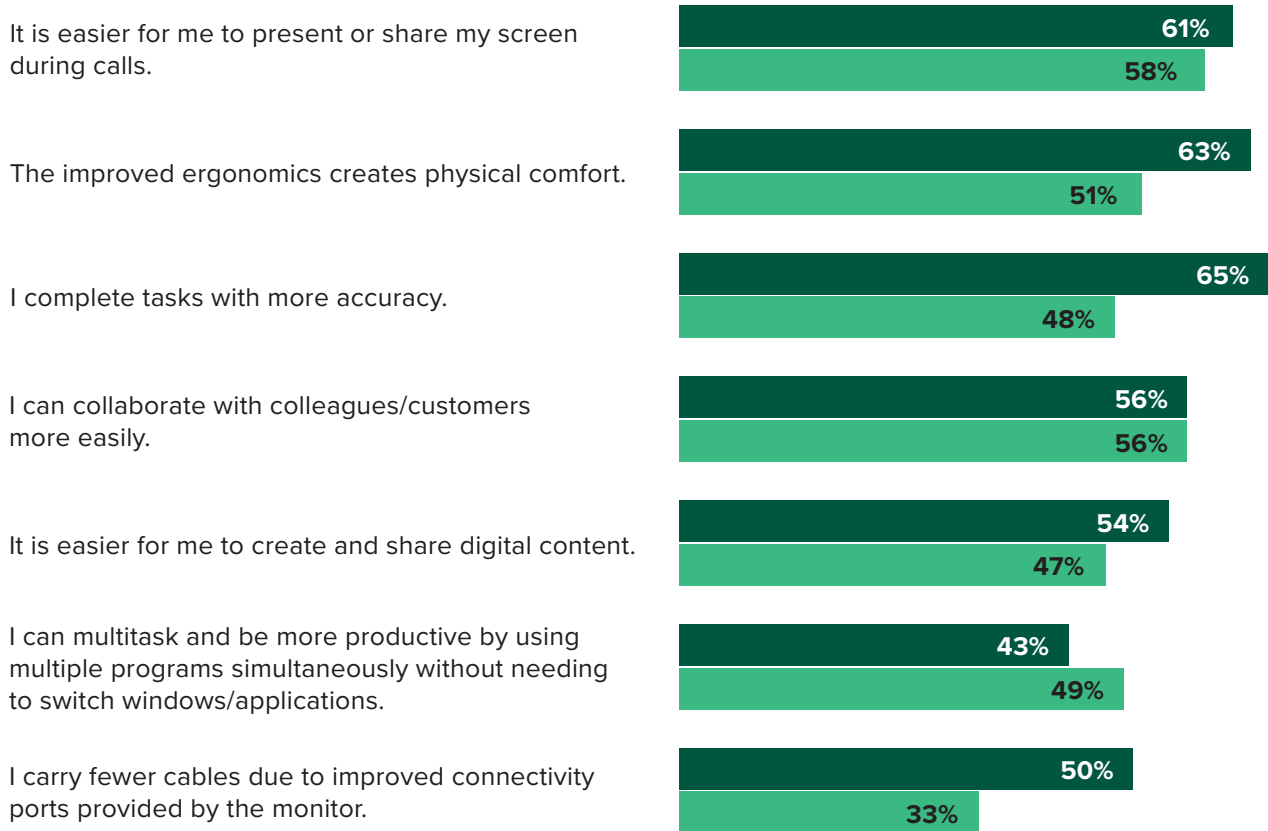


Figure 6

“What are some of the benefits associated with using your monitor with your portable computer?”

● Lower processing computer users ● Standard laptop/notebook users



Base: 240 knowledge workers based in APAC, Europe, and North America

Source: A commissioned study conducted by Forrester Consulting on behalf of Dell Technologies, September 2021

Key Recommendations

Providing a positive employee experience is key for business success. To foster an empowered and engaged workforce, organizations must pursue an anywhere-work strategy, and equip employees with technology and tools catered to their ever-evolving needs. This demands small technological investments today that pay compounded benefits over time.

Forrester's in-depth survey of 300 notebook users based in APAC, North America, and Europe yielded several important recommendations:

Listen to your employees to shock-proof your organization.

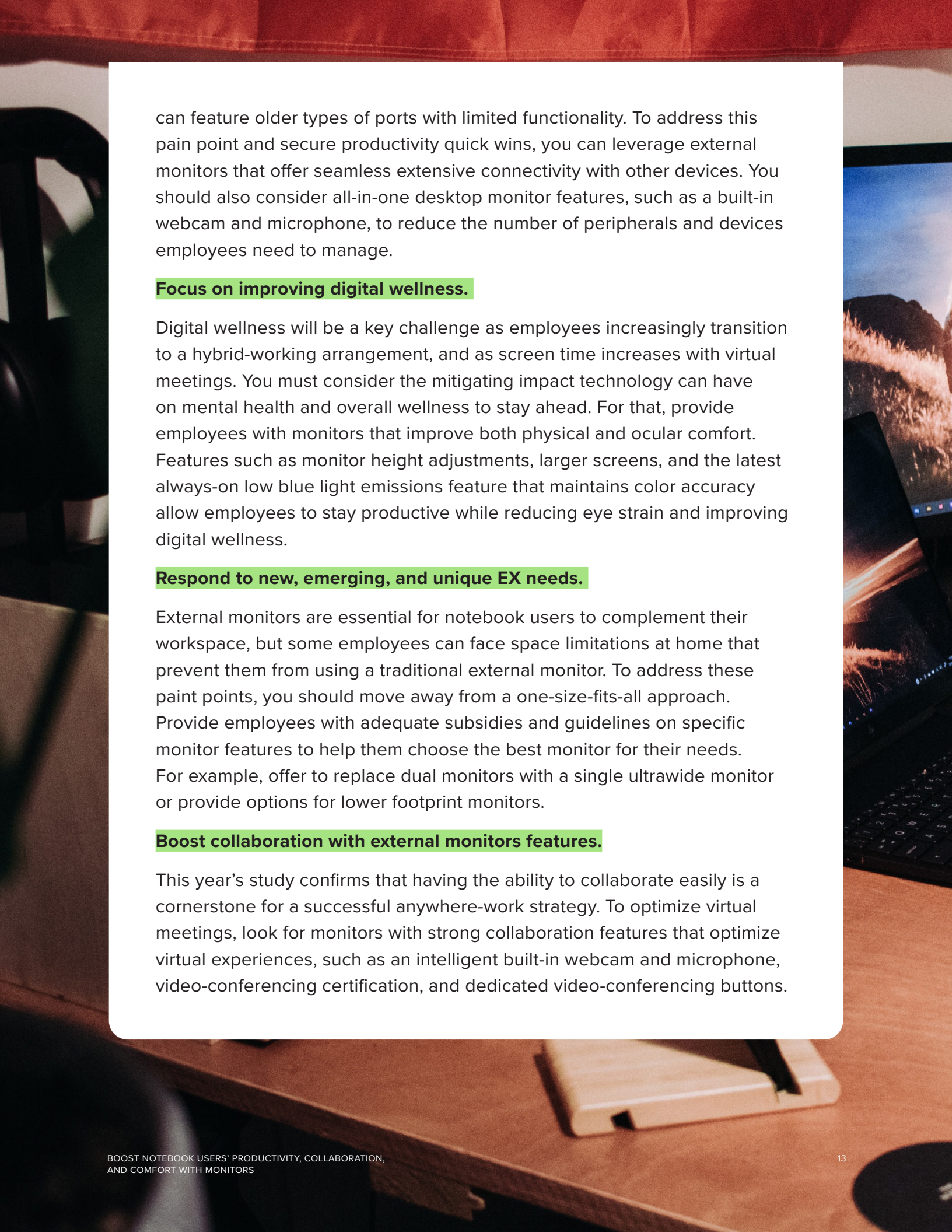
Do not assume you know better. Learn from your employees' expertise and show that you care about their input. Employees that are directly involved and have influence over their work — and how they work — are more empowered and engaged. Augment surveys with actual observations and contextual interviews of your employees to better understand what improvements in their working styles and conditions would really make a difference. And, based on these findings, decide which technology you should deploy and when.

Invest in anywhere-work technologies.

Our research found that most notebook users are hybrid workers; they shuttle between their home, office, and/or other locations. It is imperative for organizations to invest in technologies that enable these employees to work and learn from anywhere. For instance, providing these mobile employees with portable monitors will help enhance their productivity with a second screen while they are on the move.

Address challenges associated with poor device connectivity, time lost, and decreased productivity.

While good technology investments can improve EX, bad ones can inhibit it. For example, poor anywhere-work tech provisioning can contribute to employee burnout. When employees waste time and energy trying to connect peripherals to their devices, they are going to feel frustrated. But organizations often overlook these connectivity challenges. Notebooks issued to employees typically have an insufficient number of ports and



can feature older types of ports with limited functionality. To address this pain point and secure productivity quick wins, you can leverage external monitors that offer seamless extensive connectivity with other devices. You should also consider all-in-one desktop monitor features, such as a built-in webcam and microphone, to reduce the number of peripherals and devices employees need to manage.

Focus on improving digital wellness.

Digital wellness will be a key challenge as employees increasingly transition to a hybrid-working arrangement, and as screen time increases with virtual meetings. You must consider the mitigating impact technology can have on mental health and overall wellness to stay ahead. For that, provide employees with monitors that improve both physical and ocular comfort. Features such as monitor height adjustments, larger screens, and the latest always-on low blue light emissions feature that maintains color accuracy allow employees to stay productive while reducing eye strain and improving digital wellness.

Respond to new, emerging, and unique EX needs.

External monitors are essential for notebook users to complement their workspace, but some employees can face space limitations at home that prevent them from using a traditional external monitor. To address these pain points, you should move away from a one-size-fits-all approach. Provide employees with adequate subsidies and guidelines on specific monitor features to help them choose the best monitor for their needs. For example, offer to replace dual monitors with a single ultrawide monitor or provide options for lower footprint monitors.

Boost collaboration with external monitors features.

This year's study confirms that having the ability to collaborate easily is a cornerstone for a successful anywhere-work strategy. To optimize virtual meetings, look for monitors with strong collaboration features that optimize virtual experiences, such as an intelligent built-in webcam and microphone, video-conferencing certification, and dedicated video-conferencing buttons.

Appendix A: Methodology

Dell Technologies commissioned this study to understand how notebook users are adapting to a post-pandemic world, and to explore the role of technologies and monitors in enabling these new working arrangements. To achieve these objectives, Forrester conducted an online survey with 300 knowledge workers based in APAC, North America, and Europe who use portable computers to perform their day-to-day work.

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Appendix B: Demographics

GEOGRAPHY	
Australia	5%
Canada	10%
China	8%
Denmark	3%
France	7%
Germany	7%
Japan	8%
New Zealand	3%
Norway	3%
Singapore	8%
Sweden	3%
United Kingdom	10%
United States	23%

COMPANY SIZE	
100 to 499 employees	1%
500 to 999 employees	10%
1,000 to 4,999 employees	35%
5,000 to 19,999 employees	34%
20,000 or more employees	20%

RESPONDENT DEPARTMENT	
IT	15%
Marketing/advertising	14%
Facilities management	14%
Operations	13%
Finance/accounting	12%
Human resources/training	12%
Strategy	11%
Sales/customer support	10%

INDUSTRY	
Asset intensive and manufacturing	25%
Business and financial services	21%
Energy and IT	15%
Retail and consumer packaged goods	14%
Transport and travel	14%
Public services	11%

Note: Percentages may not total 100 because of rounding.

Appendix D: Endnotes

¹ +7pp likelihood to score highly for EX engagement using Forrester's EX Index engagement model. Source: "Don't Miss Your Anywhere-Work Opportunity," Forrester Research Inc., March 29, 2021.

² Portable computers includes standard portable computers such as laptop or notebook. This includes, including ultrabooks and mobile workstations. They usually feature an Intel i3/5/7/9 series processor or equivalent AMD processor. Portable computers also include portable computers with lower processing power. Compared to laptops and notebooks, they typically feature lower price point, lower processing power, and are cloud based to overcome processing power, storage, and memory limitations.

³ Source: "Power Up Your Hybrid Workplace With Monitors," a commissioned study conducted by Forrester Consulting on behalf of Dell Technologies, June 2021.

⁴ Source: Ibid.

⁵ Source: Ibid.

⁶ Source: Ibid.

⁷ A coworking office space refers to using an external shared working space. This location is often provided and managed by a third party.

⁸ Satellite office/suboffice refers to a branch of a larger company that is physically separate from the organization's main office.

⁹ Source: "Optimize Your Hybrid Workforce With Flexible Work-From-Home Policies And Monitors," a commissioned study conducted by Forrester Consulting on behalf of Dell Technologies, July 2020.

¹⁰ Compared to laptops and notebooks, computers with lower processing power typically feature lower price point, lower processing power, and are cloud based to overcome processing power, storage, and memory limitations.

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