Unlock The Potential Of GenAI With High Performing Monitors

Empowering Future GenAI-Driven Workflows With Monitors Tailored To Users' Needs

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Executive Summary

Generative AI (genAI) has changed the way we interact with technology and is expected to become the fulcrum that will accelerate business growth over the next decade.[1] As genAI tools continue to evolve rapidly and organizations continue to expand genAI use cases across industries, having a reliable and efficient hardware ecosystem becomes increasingly vital for supporting genAI-driven workflows. In particular, organizations can keep pace with the rapid advancements in genAI tools by providing high-performing monitors with best-in-class visualization capabilities and ergonomic designs, as well as helping employees understand how to leverage these monitors for effective display of genAI content.

Monitors play a critical role in enhancing the productivity of knowledge workers — monitors enable them to multitask with different software simultaneously and help them better visualize, review, and manage genAI inputs and outputs. Many users yearn for an overall upgrade in monitors, as features like higher resolution, faster refresh rate, and better connectivity can further optimize their use of genAI. By addressing their employees' needs for better monitors, decision-makers can empower their workforce, and confidently scale genAI moving forward.

In August 2024, Dell commissioned Forrester Consulting to explore the role of external monitors in genAI-enabled business workflows. Forrester conducted an online survey with 622 global knowledge workers from large enterprises across different industries who utilize genAI in their daily work, along with 12 interviews with knowledge workers and decision-makers from the same firmographics.

Key Findings

GenAI adoption is expanding rapidly. More than 70% of respondents said their organizations are already implementing genAI. Knowledge workers across different industries in NA, EMEA, and APAC are integrating various genAI technologies into their daily workflows, especially those that aid the generation of text, image, and data analysis.

Knowledge workers expect monitor upgrades, demanding higher resolution, faster refresh rate, and better connectivity. Monitors are already a critical part of the workspace: Nearly 70% of respondents connect their PCs to at least two external monitors. To leverage genAI more effectively, users seek monitor upgrades like more advanced visualization capabilities and better ergonomic designs.

Monitors are essential for optimizing genAI benefits. Knowledge workers will be able to bolster genAI benefits — like multitasking capabilities, improved accuracy of work outcomes, and higher productivity — extensively, if equipped with high-performing monitors that offer clearer images and smoother motion. Therefore, business and IT leaders must pay attention to employees' needs for monitor upgrades.

The role of monitors in supporting genAI-driven workflows will only continue to strengthen. Ninety-five percent of respondents expect to see their organizations' genAI adoption increase in the next 12 months. Organizations need to plan ahead and equip their employees with the best-in-class monitors to fully support the expansion and growing complexity of genAI in daily operations.
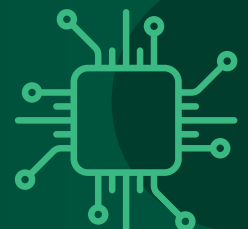
GenAI is gaining momentum globally.[2] Forrester defines genAI as a set of technologies and techniques that leverage massive corpuses of data, including large language models, to generate new content. Inputs may be natural language prompts or other non-code and non-traditional inputs. Forrester's research shows that over 90% of global enterprise decision-makers have concrete plans to implement genAI for internal and customer-facing use cases.[3] Knowledge workers across different verticals are integrating various genAI tools into their daily tasks, and such workflows are often supported by external monitors.

For the purpose of this study, Forrester surveyed 622 knowledge workers who use genAI extensively in their day-to-day workflows. These respondents come from technical, data-intensive, creative, as well as generalist roles at large enterprises across North America, EMEA, and APAC, with majority (66%) of them being millennials (demographic details can be found in Appendix A). Qualitative interviews were also conducted with several decision-makers and knowledge workers to gather additional insights. Our study shows that:

- **The level of genAI adoption has been growing rapidly.** More than 70% of respondents noted their organizations already implement genAI experimentally or in production applications, and many noted their organizations are continuing to explore the opportunity to adopt genAI (see Figure 1). Forrester's iterative AI Pulse Surveys corroborate that genAI is gaining traction quickly: In September 2023, over 60% of respondents indicated that their organizations are implementing genAI, while less than 30% said their organizations are planning to do so.[4] By April 2024, around 80% of respondents noted that their organizations are already experimenting or expanding applications with genAI.[5]

FIGURE 1

Adoption Phase Of GenAI

🟢 Internal genAI use cases   🟢 External genAI use cases
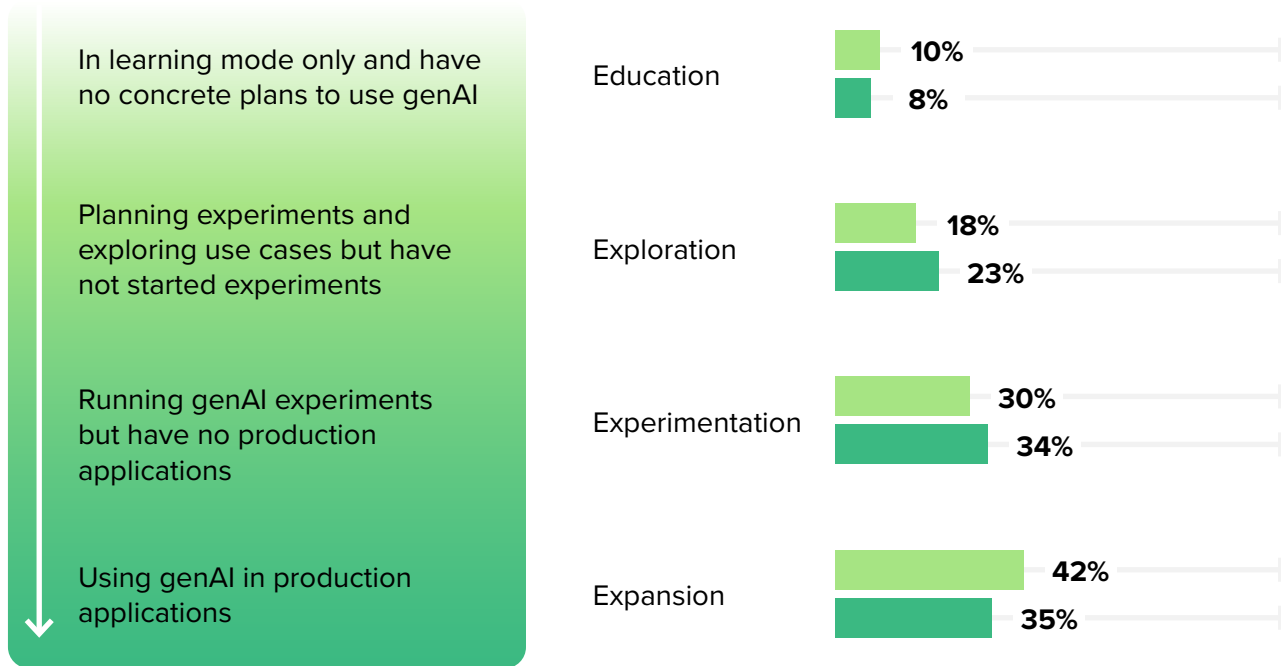
Base: 622 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI in their day-to-day work
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

- **Organizations are encouraging the use of genAI by providing employees with access to tools and training.** Over 90% of genAI tools used are supplied by organizations, leveraging capabilities from both third-party vendors and in-house IT teams. Interviewees shared that their organizations are providing employees with training courses and sessions to introduce the latest genAI tools and improve their employees' ability to write prompts.

- **The most commonly used genAI tools across all industries are for the generation of text, image, and data analysis.** There are other types of tools that tend to be targeted at specific industries. For example, video generation tools are more commonly used by creative/media companies

(52%), and code generation tools are the top choice for respondents from financial services and insurance (FSI) and software development companies (41%) (see Figure 2). While the most common use cases across all verticals are data analytics (62%) and enhancing productivity (53%), genAI is also leveraged to drive product development and content curation.

> "Content creation is one of our distinct genAI priorities. We are [using genAI] to create text and images for personalized campaigns and marketing storyboards."
>
> **HEAD OF STRATEGY, RETAIL, AUSTRALIA**

FIGURE 2

Most Commonly Used Classes Of GenAI Tools To Complete Daily Workflows

Base: 622 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI in their day-to-day work
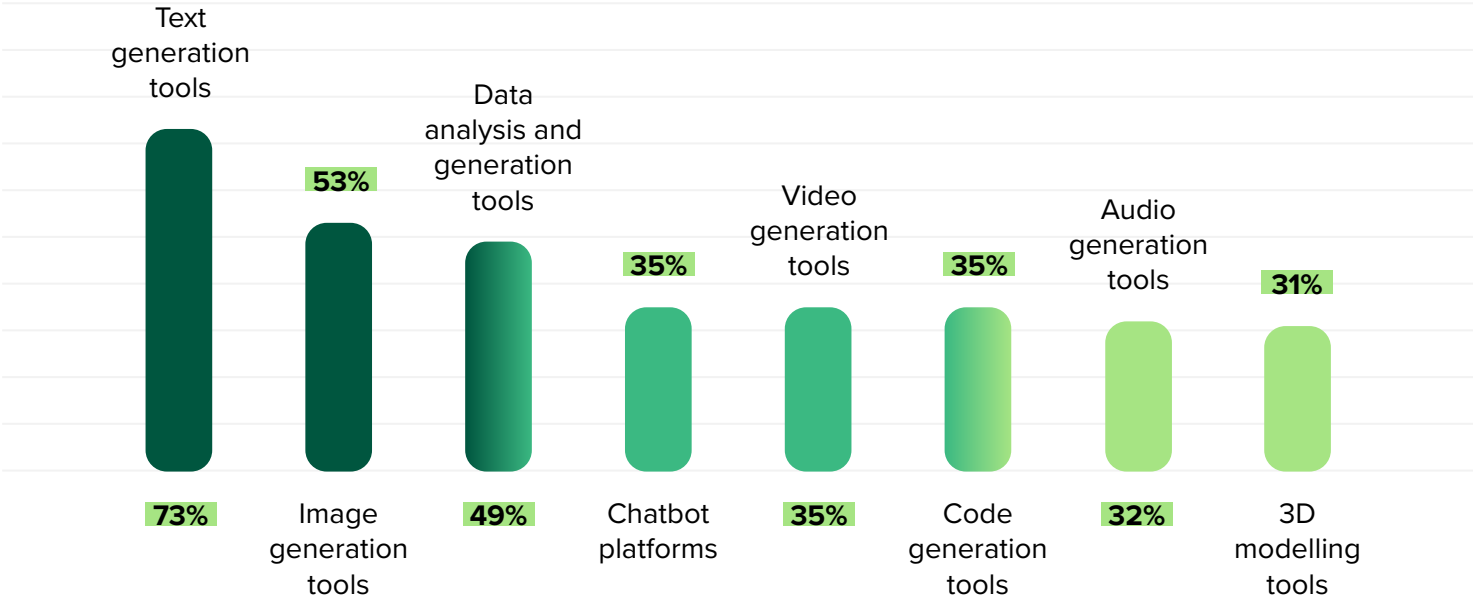Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

"We are using genAI extensively for drug discovery, including identifying drug targets based on biological datasets, generating potential molecular structures for drug design, and optimizing clinical trials."

SENIOR DIRECTOR OF ENTERPRISE TECHNOLOGY (DATA, AI, AND PLATFORM) AND PRODUCTS, MEDICAL IMAGING, UK

- **External monitors are part of the critical hardware ecosystem that supports genAI use cases.** Seventy-four percent of survey respondents are equipped with at least two personal computers (PCs) or specialized workstations, and nearly 80% of them have external monitors connected to their laptops or PCs, among which 69% are using two or more monitors (see Figure 3). It is safe to say that today's knowledge workers are well accustomed to using monitors at work. We also found that organizations with more advanced usage of genAI are more likely to utilize monitors: 24% of respondents from organizations in the expansion phase noted their employees use more than two monitors, as compared to 14% of those from organizations in the education phase. This may indicate that the progressive increase in genAI usage calls for enhancements in workplace setup and hardware support.

"Our company provides a laptop, a desktop PC and two monitors per work desk. About 35% to 40% of our employees are using genAI on a daily basis, and we foresee this number to increase by at least 20% in the next 12 months."

SENIOR DIRECTOR OF ENTERPRISE TECHNOLOGY (DATA, AI, AND PLATFORM) AND PRODUCTS, MEDICAL IMAGING, UK

FIGURE 3

Current Workplace Setup

"Which of the following best describes your hardware setup when working with genAI technologies?"
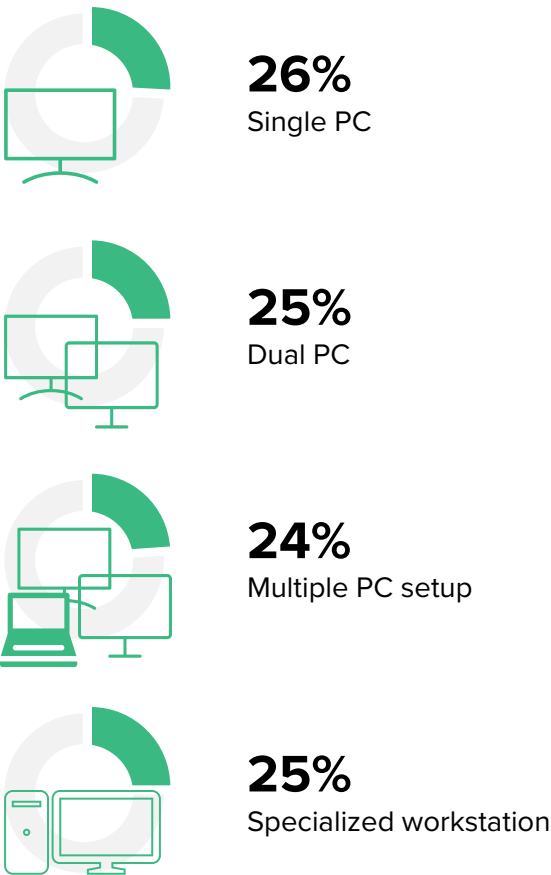
26%
Single PC

25%
Dual PC

24%
Multiple PC setup

25%
Specialized workstation

Base: 622 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI in their day-to-day work
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

Number Of External Monitors Utilized In Current Workspace
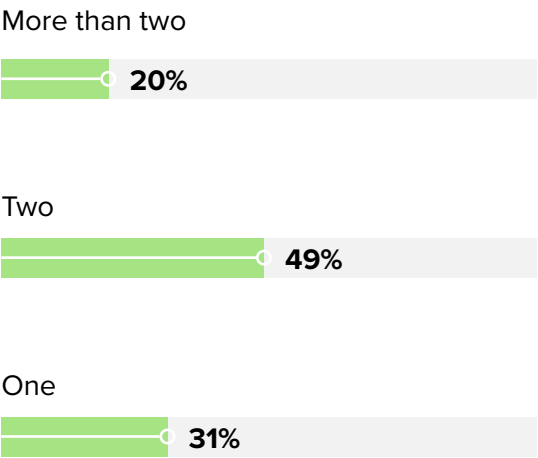
More than two
20%

Two
49%

One
31%

Base: 487 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI and external monitors in their day-to-day work
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

To Fully Harness The Benefits of GenAI, Organizations Must Keep Up With Evolving User Requirements For Monitors

LATEST MONITOR DEMANDS FOR SUPPORTING GENAI-DRIVEN WORKFLOWS

More than 90% of knowledge workers agree that the extra viewing space provided by monitors can enable them to work more effectively with genAI. IT decision-makers must stay attuned to the evolving needs of their workforce and equip employees with optimal monitors to better navigate genAI tools. This includes assessing how current monitors are performing in meeting users' growing expectations along with increasing use of genAI and identifying which specifications should be prioritized and which upgrades are most urgent.

- **With expanding genAI workloads, users will increasingly require a smoother, more accurate, and comfortable visualization experience with their monitors as they navigate increasingly complex genAI tools.** Fifty-five percent of knowledge workers rated high refresh rate and responsiveness as the most important feature to better facilitate their genAI-driven workflows. Next on the list comes high resolution (54%), color accuracy/gamut (46%), and connectivity (40%). A product and operations manager in gaming explained how their team is importing style guidelines into genAI models and prompting genAI to develop the appearance of new game characters or design skins for existing characters. As they input and repeatedly adjust details such as gender, clothing, hair style, and artistic design of characters, they require monitors to have a refresh rate of at least 100Hz to avoid blurry actions when the characters are put into motion. They also require 2K/4K resolution and a bright color gamut for their games to provide players with high quality graphics that are clear, sharp, and vivid.

    Apart from display capabilities, genAI users also value well-being features that reduce eye strain (e.g., blue light filter, ambient light sensor) and ergonomic design (e.g., adjustable stand) given the significant time

they spend looking at the screen (see Figure 4). Fifty-eight percent of knowledge workers are interacting with genAI during more than half of their daily working hours, among which 76% are using monitors. A senior director at a software development company also mentioned that bigger screens that help reduce harmful blue light emissions are desired so that end users can reduce eye fatigue.

"Our team encourages merchants to utilize genAI for product campaigns. Based on product information and marketing brochures, genAI can create short introductory videos to be posted on streaming media platforms. UI designers need to make sure the videos are eye-catching and lively enough to gain impact. This demands that our monitors provide vibrant and accurate color specifications."

SENIOR MANAGER OF USER GROWTH, E-COMMERCE, CHINA

Most Important External Monitor Features To GenAI Workflow

● Ranked first　● Ranked second　● Ranked third　● Ranked fourth　● Ranked fifth

Smooth and accurate visualization

High refresh rate and responsiveness	11%	11%	12%	10%	11%	**55%**
High resolution	14%	11%	10%	10%	9%	**54%**
Color accuracy/ gamut	7%	10%	11%	9%	9%	**46%**
Connectivity options	7%	9%	6%	9%	9%	**40%**

Human-centric UX design

| Well-being features | 7% | 7% | 8% | 9% | 8% | **39%** |
| Ergonomics/ adjustability | 7% | 9% | 9% | 5% | 9% | **39%** |
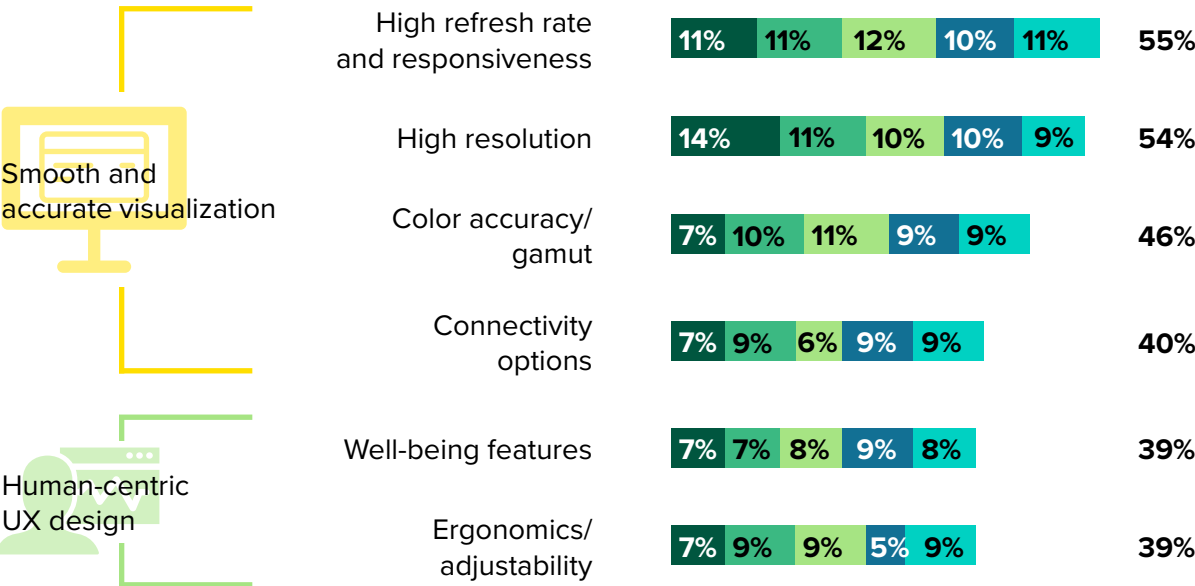
Base: 619 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI in their day-to-day work
Note: Excluding responses for "Don't know".
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

"When using genAI to create game characters, we often need to adjust prompts multiple times (e.g., change a piece of clothing, accessory, hair color, artistic style) and compare the mass outcomes. It's common to generate 20 images and cast them onto one screen for us to choose the final design. We definitely need larger display screens to fully visualize the details."

PRODUCT AND OPERATIONS MANAGER, GAMING, CHINA

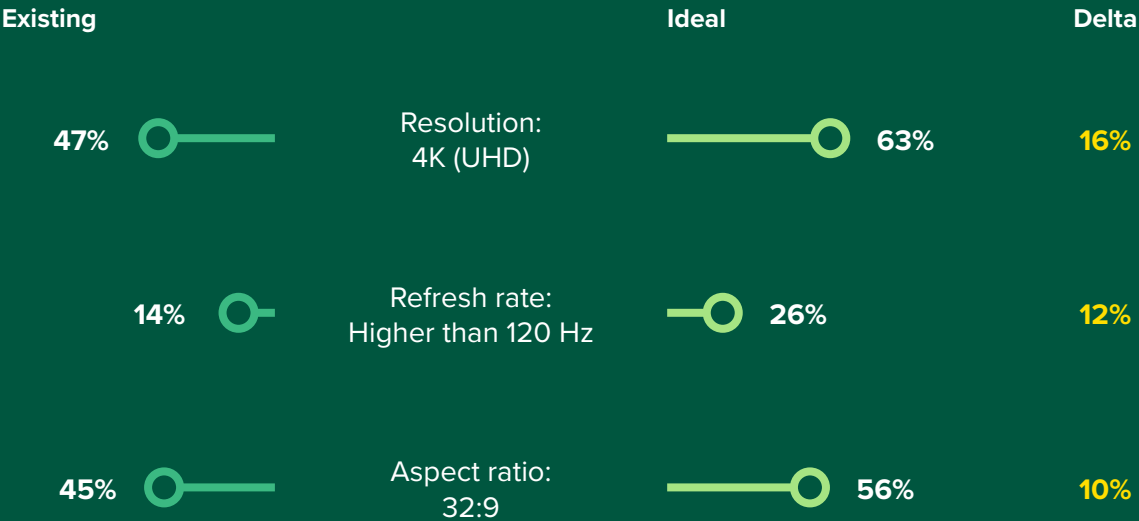- **Knowledge workers prefer more advanced monitors for their genAI tasks, especially with regards to resolution, refresh rate, and aspect ratio.** When asked to indicate their ideal monitor specifications to support genAI work, respondents indicated their preference for a screen size of 32" and above (75%), 4K (UHD) resolution (63%), a 32:9 aspect ratio (56%), resolution rate of at least 120Hz (65%), and richer color gamut (55%). Just as interviewees pointed out, employees view monitors as an indispensable tool at work and value upgrades that can enhance their performance. Our survey showed that the gap between current and ideal monitors is significantly wider at more than 10% in resolution, refresh rate, and aspect ratio. This means that more genAI users desire an upgrade from their current monitors to ultrawide (aspect ratio 32:9) screens that offer a smoother and clearer display (see Figure 5). This is no surprise as interviewees mentioned that they rely on external monitors to visualize and review genAI output. They process a variety of content, such as codes, data, images, videos, and 3D models, that are continuously growing in both volume and complexity. For instance, survey respondents who are using genAI for 3D modeling showed a higher preference for 4K resolution (71% vs. average of 63%) and ultrawide screens (66% vs. average of 56%).

"Our graphic designers use genAI to produce HD poster images for shows and movies on popular streaming platforms. That's why we are using 4K monitors. But for the images to look premium and attract more click-throughs, an upgrade to 8K would be ideal."

STRATEGY LEAD, MEDIA, US

FIGURE 5

Existing Vs. Ideal Monitor Specifications

Existing		Ideal		Delta
Existing		**Ideal**		**Delta**
47% ⟶	Resolution: 4K (UHD)	⟵ **63%**		**16%**
14% ⟶	Refresh rate: Higher than 120 Hz	⟵ **26%**		**12%**
45% ⟶	Aspect ratio: 32:9	⟵ **56%**		**10%**

Base: 487 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI and external monitors in their day-to-day work
Note: Only showing options where difference between existing specifications and ideal specifications is more than 10%.; and only showing percentage of respondents who are using monitors with the listed specifications, versus percentage of respondents who deem these specifications as ideal.
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

- **In-depth interviews with decision-makers suggest that not all business or IT leaders realize that better monitor features are critical to genAI users.** A chief architect from an FSI company admitted that he did not pay attention to how monitor specifications can affect genAI-enabled tasks. Similarly, a senior director of enterprise technology and products from the medical industry is unaware of employees' monitor needs. On the other hand, there are organizations that gather employees' feedback for hardware requirements. A strategy lead from the media industry noted that their organization has plans to upgrade monitors in the next 12 months based on the needs of their videography and graphic design teams.

"Upgrades in connectivity, color accuracy, and screen size can be very helpful. We also require more monitors or ultrawide and curved screens as genAI workload grows. Engineers are leveraging more genAI capabilities in plant design tools and inputting massive onsite data for genAI to calculate and visualize the most optimal routes for pipe installation, generating complex 3D models that require large and wide screens for full display."

PRINCIPAL PROCESS ENGINEER, ENERGY, UK

- **Key gaps observed by users in their current monitors when supporting genAI-driven workflows include limitations in resolution, refresh rate, and connectivity.** Aligned with how they prioritize visualization features, users offered feedback that the biggest limitations they faced in current monitors include resolution and refresh rate that are too low to optimally visualize inputs and outputs of genAI tools (36%), latency issues that prolong response time to visualize genAI work efficiently (34%), and compatibility/connectivity issues with hardware (31%). A strategy lead working in media production told Forrester that some of their organization's current monitors are incompatible with certain types of laptops or can only connect to drawing boards via third-party converters, causing a lag when their graphic designers are fine-tuning poster images created by genAI tools. Another product and operations manager also experienced monitor ghosting, when images seem to double or triple on their monitor screens due to latency issues, especially when he uploads existing images of game characters for genAI to produce images of a new posture, replace a piece of accessory, or change the artistic style.

- **In addition, some respondents do not have a strong understanding of monitor specifications, making it difficult for them to identify which specifications are most critical for optimizing the type of work they do.** In-depth conversations with knowledge workers revealed that some of them are unaware of latest monitor updates in the market. An executive product leader from a software development company shared that their organization is still exploring how to efficiently use screen real estate, including coming up with best practices to optimize for the highest resolution of external displays and leverage effective screen partitioning.

- **Notably, the setup and form factor of monitors also need to adapt to today's hybrid working scenarios.** Employees are not always seated at fixed office desks and may be required to travel between worksites. Twenty-six percent of respondents face challenges in a lack of monitor portability to support the ability to work with genAI from anywhere, signaling a need for organizations to consider equipping some of their more mobile employees with portable monitors (see Figure 6).

- **Those not currently using monitors may be seeking more flexible or compact setups.** Limited workspace is the primary barrier for the 22% of respondents who do not use monitors. This group might benefit from space-saving solutions, such as height-adjustable monitors, monitor arms, or lighter, thinner screens that work well for smaller work spaces.

FIGURE 6

"What challenges or limitations, if any, have you experienced when utilizing an external monitor while working with genAI tools and technologies?"

● Visualization   ● Practice

Resolution and refresh rate are too low to fully visualize inputs and outputs of genAI tools
36%

Latency issues that prolong response time to visualize genAI work efficiently
34%

Compatibility/connectivity issues with hardware that supports genAI workflows
31%

Lack of knowledge of which external monitor features could be adjusted/used to enhance experience working with genAI tools
31%

Unable to develop best practices of how to interact with external monitors efficiently when working with genAI tools
28%

Lack of portability to support genAI workflows during anywhere work
26%

Base: 487 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI and external monitors in their day-to-day work
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

MONITORS ENHANCE GENAI USAGE BY ENABLING MULTITASKING AND BOOSTING ACCURACY

- **Our study shows that knowledge workers have been reaping multiple benefits from infusing genAI into their daily work, including increased efficiency, innovation, and accuracy.** Incorporating external monitors into genAI-driven workflows can bolster these benefits further.

- **Monitors help knowledge workers reap more productivity gains from genAI.** The use of genAI in daily workflows has unlocked several benefits, increasing accuracy and saving time, effort, and cost. It is worth noting that within the group of respondents who are engaging with genAI tools extensively (i.e., during more than 50% of their daily work hours), 68% of monitor users saw improved efficiency from using genAI, compared to 58% of non-monitor users. Sixty-five percent of monitor users reported better ability to solve complex problems, which is 12% higher than that of non-monitor users. They are also 11% more likely to reduce costs of completing tasks (see Figure 7).

FIGURE 7

Benefits Experienced By Monitor Users Vs. Non-Monitor Users In Infusing GenAI Into Daily Workflows

● Using monitors ● Not using monitors*

Increased productivity and efficiency, saving time and effort to focus on higher-value tasks

68%
58%

Improved ability to solve complex problems

65%
53%

Reduced costs of completing tasks

58%
47%

Base: 273 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI and monitors in their day-to-day work
*Base: 88 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI but not using monitors in their day-to-day work
Note: Only showing results for 361 respondents who are using genAI extensively, (i.e., whose percentage of time spent on interacting with genAI tools and platforms within daily work hours is more than 50%).
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

"Monitors provide interfaces for field engineers to run large datasets on genAI models. When conducting root cause analysis for onsite troubleshooting, we need to work with several genAI tools, and test, post, and compare output of different models using multiple screens. As the LLM [large language model] complexity and data volume increase vastly, it would be hard to fit everything into a laptop screen."

PRINCIPAL PRODUCT MANAGER OF AI AND AUTOMATION, ENGINEERING, US

- **Monitors enhance genAI usage by facilitating multitasking and boosting accuracy.** Fifty-nine percent of respondents pointed out that external monitors allowed them to visualize multiple pieces of content simultaneously, including both genAI and non-genAI work. This need for multitasking may become more pronounced as the use of genAI tools and complexity of workflows increases and will become the most important benefit realized from using monitors in genAI-driven workflows. This echoes our findings from the interviews, that knowledge workers need multiple screens to display content of different software running in parallel, and often need to repeatedly switch between outputs, fix errors, and refine and test prompts. This process is partly attributed to genAI's probabilistic nature: Users do not know exactly what output they will receive when they submit their prompt, so extra interfaces to display genAI results separately becomes essential.[6]
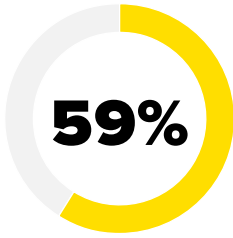
59% of knowledge workers believe that external monitors allow them to visualize multiple pieces of content simultaneously.

"GenAI tools need time to run and generate results, so users prefer putting it on a separate screen apart from their daily/core work. Recently, some of our employees are demanding a second monitor so that they can run genAI tools on one of the screens while working on their daily tasks [on another]."

EUROPE ZONE DATA AND ANALYTICS ARCHITECT, MANUFACTURING, FRANCE

- **Compared to being constrained within the smaller screen sizes of laptops, monitors also save time and effort by providing larger displays for users to better interact with genAI tools (58%).** Moreover, users get to more clearly examine the detailed input and output of genAI tools on these larger and clearer monitor screens, enhancing the accuracy of genAI work (56%). A senior manager of user growth in e-commerce believed that external monitors are essential for both individual work and team discussions. Larger screens facilitate small group discussions by allowing multiple employees to gather around desks and collaboratively view and analyze genAI-produced videos. When leveraging genAI to create app landing pages for major sales events, they need to display historical data and requirement documents on the side for reference. Monitors enable them to work with multiple apps simultaneously without having to switch between different windows, and they can easily zoom in

to scrutinize the details. UI designers need monitors to augment images so that they can fully review and correct tiny elements, especially since today's genAI is still prone to errors when exporting human-like figures, which can sometimes result in the wrong number of hands or fingers.

"Using genAI to create/edit images and videos can take multiple prompts, and outcomes can be quite unstable when we ask genAI to delete the green screens and generate a new background for a video footage. The video export can cost hours to load and render, so having monitors enables our administrative work to run in parallel while waiting for genAI outputs."

STRATEGY LEAD, MEDIA, US

Advanced Monitors Will Maximize The Gains From Future GenAI Adoption

Forrester predicts that genAI software spending will reach $124 billion by 2030, accounting for 55% of the AI software market. Forrester also expects 60% of global organizations to have explicit use of off-the shelf AI software in their business processes by then.[7] In line with this trend, knowledge workers in our survey are planning to expand their usage of genAI.

- **Knowledge workers foresee their genAI adoption to grow rapidly in the next 12 months.** In the survey, 95% of respondents believe their usage of genAI will increase by the end of 2025, and 72% noted their usage will increase significantly (see Figure 8). More than 50% will be exploring more business scenarios to utilize genAI and expand usage to more workflows. They are also planning to promote the use of genAI in day-to-day work within their teams and enhance their knowledge and skills in genAI technology.

FIGURE 8

Knowledge Workers Foresee Their Usage Of GenAI In Their Daily Workflows To Increase By The End Of 2025
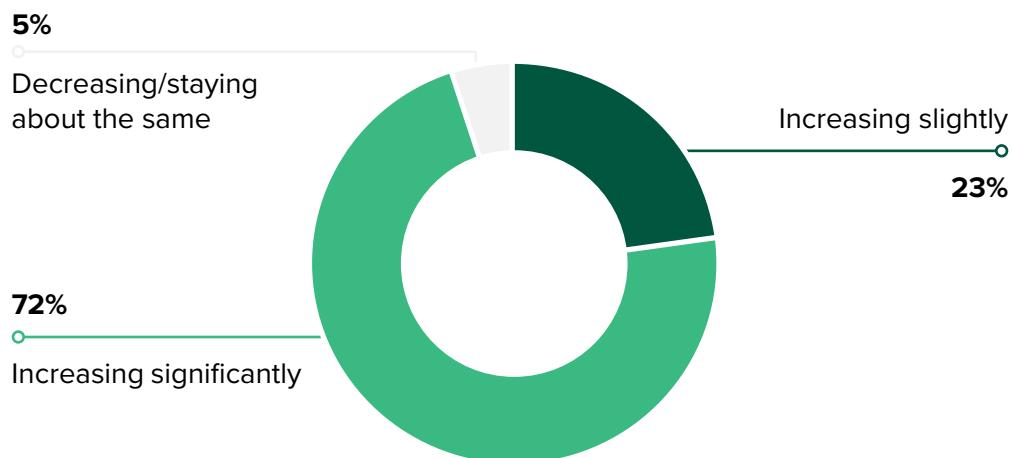
5%
Decreasing/staying about the same

Increasing slightly

23%

72%

Increasing significantly

Base: 622 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI in their day-to-day work
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

- **Progression of genAI adoption and monitor utilization complement each other.** Our data shows that as organizations move from the education phase, through the exploration and experimentation phases, and toward expansion, the likelihood of knowledge workers facing challenges in understanding monitor specifications and best practices in monitor usage to optimize for genAI tasks fell from around 40% to near 20% (see Figure 9). This implies that the utilization of genAI and monitors is complementary. Organizations that are more mature in genAI adoption find it easier to understand the value that monitors bring to their genAI-driven workflows. An increased volume and complexity of genAI workloads require them to display and examine different content simultaneously, therefore leading them to utilize monitors more often. With the expansion of genAI use cases, organizations will need to capture their employees' evolving monitor requirements and enhance their hardware infrastructure accordingly.

- **Knowledge workers welcome innovative external devices such as monitors, webcams, and docking stations that can potentially augment genAI processing power.** More than 90% of knowledge workers are interested in peripherals attached to their PCs/laptops that can substantially augment genAI processing power (i.e., support offload and processing of AI workload for better performance). The potential of monitors is limitless, as the market has already seen monitor products integrating intelligent webcams, audio devices, and touch screen function. As the digital workplace transition to AI PCs (i.e., artificial intelligence on the personal computer) in the near future, the proliferation of AI-infused hardware may reinforce AI use cases, and encourage exciting innovations in monitors.[8]

"We envision future genAI prompts to be spoken or gestured, so our monitors need to integrate advanced motion capturing and voice recognition functions."

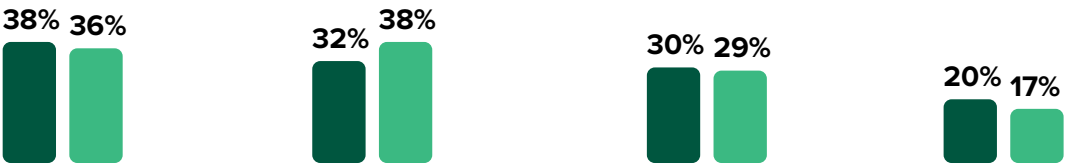EUROPE ZONE DATA AND ANALYTICS ARCHITECT, MANUFACTURING, FRANCE

FIGURE 9

Challenges And Limitations In Utilizing An External Monitor When Working With GenAI Tools And Technologies

● Internal genAI use cases   ● External genAI use cases

Lack of knowledge of which external monitor features could be used to enhance experience working with genAI tools

	Education	Exploration	Experimentation	Expansion
Internal	42%	33%	37%	22%
External	36%	37%	30%	27%

Unable to develop best practices on how to interact with external monitors efficiently when working with genAI tools

	Education	Exploration	Experimentation	Expansion
Internal	38%	32%	30%	20%
External	36%	38%	29%	17%

Base: 487 knowledge workers from large organizations across NA, EMEA, and APAC who use genAI and external monitors in their day-to-day work
Source: Forrester's Q3 2024 GenAI and External Monitors Survey [E-60673]

"The double-edged sword of external monitors allowing for greater multitasking capabilities is that doing so increases system demand. The clear thing that we are focusing on is the hardware utilization. We want to make sure that the AI models are running on hardware that is capable of handling the computational demands fairly efficiently."

EXECUTIVE PRODUCT LEADER, SOFTWARE DEVELOPMENT, US

Key Recommendations

To realize the full potential of genAI, knowledge workers and their organizations need to understand how an effective hardware ecosystem, including monitors, can optimize genAI-driven workflows. Drawing on Forrester's insights, organizations can start aligning their hardware strategy with genAI adoption plans by taking the following actionable steps:

Keep your knowledge workers informed of the latest monitor technology updates. By staying up-to-date on monitor advancements, knowledge workers will be able to identify gaps and limitations in their current workplace setups and select monitors that better support their genAI-driven workflows. This will help them determine which upgrades (e.g., a larger screen size, higher resolution, enhanced color accuracy, or faster refresh rates) are needed to realize the full potential of genAI tools.

Identify the lagging factor in today's hardware ecosystem when building your organization's genAI roadmap. As genAI rapidly expands to more complex use cases, organizations are building ambitious plans. However, beyond fine-tuning LLM models and training employees, outdated hardware can hinder performance in genAI-driven workflows. Monitors, in particular, play a crucial role in directly impacting users' interaction with genAI tools. Ensuring that employees have the right monitors is essential for maximizing the benefits of genAI advancements.

Prioritize end-users' needs when evaluating and implementing hardware strategies. People are the key to succeeding with AI. To provide knowledge workers with the best support, IT and business leaders should actively seek employee feedback on monitor requirements for different genAI use cases and focus on enhancing the user experience. This ensures that employees are equipped with the right monitors tailored to their needs, optimizing both productivity and comfort in AI-driven workflows.

Appendix A: Methodology

In this study, Forrester conducted an online survey of 622 knowledge workers who use genAI extensively in their day-to-day workflows. Survey participants come from large organizations across NA, EMEA, and APAC. Questions provided to the participants asked about their genAI adoption and the role of monitors within these use cases. Respondents were offered a small incentive as a thank you for time spent on the survey. The study began in April 2024 and was completed in August 2024.

Appendix B: Demographics

COUNTRY	
United States	**41%**
United Kingdom	**21%**
France	**10%**
Germany	**10%**
China	**7%**
Singapore	**5%**
Australia	**3%**
New Zealand	**2%**

REVENUE	
$100 million to $199 million	**0.5%**
$200 million to $299 million	**0.3%**
$300 million to $399 million	**0.2%**
$400 million to $499 million	**1%**
$500 million to $999 million	**42%**
$1 billion to $5 billion	**40%**
More than $5 billion	**17%**

ROLE	
Generalist	**29%**
Data-intensive specialist	**25%**
Creative specialist	**23%**
Technical specialist	**22%**

NUMBER OF EMPLOYEES	
500 to 999 employees	**21%**
1,000 to 4,999 employees	**37%**
5,000 to 19,999 employees	**28%**
20,000 or more employees	**14%**

INDUSTRY	
Manufacturing	**13%**
Financial services and insurance	**13%**
Graphic design and multimedia	**12%**
Software development	**12%**
Marketing and creative	**11%**
Video production and editing	**10%**
Research and data analysis	**9%**
Product design	**6%**
Engineering	**5%**
Energy	**4%**
Architecture	**2%**
Medical imaging	**2%**

Note: Percentages may not total 100 due to rounding.

Appendix B: Demographics

POSITION	
Project manager	**62%**
Full-time practitioner	**38%**

FREQUENCY OF GENAI UTILIZATION	
Use genAI frequently in day-to-day work	**74%**
Rely on genAI heavily and use it consistently as a core tool in day-to-day work	**26%**

WORKSPACE SETUP	
Desktop computer and external monitor	**39%**
Laptop and external monitor	**40%**
Laptop with no external monitor	**22%**

AGE GROUP	
Generation Z	**8%**
Millennial	**66%**
Generation X	**25%**
Baby boomer	**1%**

PERCENTAGE OF TIME SPENT ON GENAI IN A DAY	
20% to 49%	**42%**
50% to 79%	**49%**
80% to 100%	**9%**

Note: Percentages may not total 100 due to rounding.

Appendix C: Supplemental Material

RELATED FORRESTER RESEARCH

Prepare Your Entire Workforce For AI Now, Forrester Research, Inc., March 27, 2024.

The Forrester Artificial Intelligence Quotient (AIQ) Assessment, Forrester Research, Inc., March 27, 2024.

Appendix D: Endnotes

[1] Source: The Generative AI Advantage, Forrester Research, Inc., November 29, 2023.

[2] Forrester defines genAI as "a set of technologies and techniques that leverage massive corpuses of data, including large language models, to generate new content. Inputs may be natural language prompts or other non-code and non-traditional inputs." Source: Generative AI: The Top Six Things Tech Executives Need To Know, Forrester Research, Inc., April 17, 2023.

[3] Source: The State Of Generative AI, 2024, Forrester Research, Inc., January 26, 2024.

[4] Source: Forrester's September 2023 Artificial Intelligence Pulse Survey.

[5] Source: Forrester's Q2 AI Pulse Survey, 2024.

[6] Source: Forrester's 2023 Generative AI Jobs Impact Forecast, US, Forrester Research, Inc., August 30, 2024.

[7] Source: Global AI Software Forecast, 2023 To 2030, Forrester Research, Inc., September 5, 2023.

[8] Source: The Year Of The AI PC Is 2025, Forrester Research, Inc., March 28, 2024.

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