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The Cost of Aging PCs and the Case for a Three-Year Refresh Cycle



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PC Impact study highlights

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14% lower total cost, three-year refresh versus five-year refresh

$1,993 five-year savings per PC, three-year refresh versus five-year refresh

20% lower OS, software, and security solution costs

22% lower staff time requirements

44% lower cost of PC performance problems

Change in costs: Year 5 versus year 1

63% higher hardware, firmware, and software costs

187% higher PC replacement costs

87% more staff time for PC management

94% more PC help desk tickets

177% higher costs, unplanned downtime

155% higher productivity losses, other performance issues



Executive summary

IT decision-makers are navigating one of the more difficult budget environments in recent memory. Pressure to fund AI initiatives is competing with the cost of routine infrastructure maintenance, and staff reductions at many organizations mean fewer people are available to manage increasingly complex environments. Now, a new complication is pushing PC refresh costs higher at exactly the wrong moment: surging memory prices driven by AI infrastructure demand.

The response from many IT organizations has been predictable. Organizations are extending PC life cycles, holding devices for four or five years rather than the three-to-four-year cadence that most IT professionals consider optimal. The logic seems straightforward: Defer the hardware spend, buy time, and deal with the consequences later. The consequences, it turns out, are expensive.

While organizations may believe that extending the life of PCs as long as possible is financially prudent, IDC's research demonstrates that they incur escalating costs as their devices age. Beyond direct costs that include higher spending on OS, firmware, and security solutions, as well as growing demands on IT staff time for management and help desk support, aging PCs also impose mounting business costs in the form of user productivity losses, lost revenue due to unplanned downtime, and an inability to fully leverage AI tools and other productivity-enhancing technologies.

IDC's analysis based on a survey of 735 organizations shows that these cumulative costs accelerate after year three, ultimately exceeding the cost of investing in a new device. The result is that organizations that refresh PCs on a three-year cycle spend 14% less ($1,993 less per device) over a five-year period compared to those that hold PCs for a full five years.

IDC's findings show that having a faster cadence for PC refreshes brings benefits such as:



Lower device software and security solution costs, with newer hardware maintaining full OS and firmware support, reducing manual patching and endpoint security overhead



IT team efficiencies, with newer PCs requiring less management time and generating significantly fewer help desk support tickets



Improved PC performance, enabling higher employee productivity, fewer outages, and full access to AI tools and modern business applications



Situation overview

There has not been a normal year for enterprise IT in quite some time. The pandemic hit, and organizations scrambled to source any PC they could find, paying inflated prices and accepting long lead times just to keep remote workers functional.

When supply finally loosened, IT teams were left managing bloated, heterogeneous fleets, devices they acquired opportunistically rather than strategically, with inconsistent specs, varying warranty timelines, and no clean refresh baseline to work from.

Then came the race to migrate from Windows 10 to Windows 11, a transition complicated by hardware incompatibility, compressed timelines, and the added pressure of tariff-driven cost uncertainty on new hardware purchases. None of this happened in isolation. These were sequential crises, each one landing before organizations had fully recovered from the last.

Now, IT is facing another headwind. Memory prices have surged sharply due to dynamic random-access memory (DRAM) suppliers redirecting fab capacity toward the high-bandwidth memory powering AI infrastructure, tightening supply for

conventional PC components and pushing new device costs higher across the board. For IT decision-makers already operating under tighter budgets, reduced headcount, and mounting pressure to fund AI initiatives, the timing could hardly be worse.

AI adds another layer of uncertainty to an already complicated picture. With agentic AI on the near-term horizon, the hardware implications are still taking shape. Which workloads will run locally, which will stay in the cloud, and what specifications will be required to support them are questions without settled answers. For IT leaders trying to justify hardware spend, that ambiguity is a real and legitimate complication.

Early adopters in IDC's recent qualitative research cited Snapdragon's battery life, heat dissipation, and on-device AI performance via dedicated NPUs as standout attributes.

Perspectives are drawn from qualitative focus group interviews that IDC conducted separately with IT professionals at organizations that have deployed or evaluated Qualcomm Snapdragon–powered PCs, conducted independently of the quantitative survey.



The predictable response has been to hold on to PCs longer. Companies are contemplating extending refresh cycles that should run three to four years out to five years and beyond.

The focus groups IDC conducted with IT professionals managing fleets ranging from 300 to more than 4,000 devices made clear how much this decision can cost organizations. One IT director described watching a planned two-month Windows migration stretch to five months of chasing down aging, non-compliant machines. Another noted that without a refresh cycle keeping the fleet current, a supply disruption can leave an organization stuck holding onto a large number of machines for another year or two beyond their intended lifespan.

The organizations that had maintained a steady refresh cycle absorbed these pressures far better than those that hadn't. The difference wasn't subtle. IT leaders managing large fleets were clear that security doesn't pause while budgets get sorted out and that aging hardware makes the security burden heavier, not lighter. For teams already stretched thin by staff reductions, that's not an abstraction. It consumes the finite hours of skilled people who could be focused on higher-value work. Every ticket generated by a failing four-year-old machine is time that doesn't go toward modernization. That pressure doesn't go away by deferring hardware spend. It compounds.



The cost of aging PCs and the case for a three-year refresh cycle

Research overview

To quantify the cost and business impact of PC aging, IDC conducted an online quantitative survey of 735 IT managers and IT decision-makers at organizations in eight countries (the United States, the United Kingdom, Germany, France, Spain, India, Italy, and Australia) with Windows PC installed bases of 50 or more devices (average of 1,669 Windows-based PCs). Respondents represented a cross-section of company sizes and industries, spanning organizations with 50 to more than 10,000 employees and sectors, including software and IT services, business and professional services, healthcare, manufacturing, retail, and financial services.

The survey required study participants to report their organizations' actual experience with PC management costs, help desk activity, unplanned downtime, device replacement frequency, software and security expenditures, and user productivity, segmented by the age of the PCs in question. IDC used this data as the foundation for a financial model that compares the five-year total cost of ownership for organizations that replace PCs on a three-year cycle versus those that hold PCs for five years. The survey sample was broadly distributed by geography, with the largest share (approximately 41%) based in the United States, followed by the United Kingdom (11%) and Germany (8%). Industry representation was led by software and IT services (14%), business and personal services (13%), and healthcare and manufacturing (11% each). By Windows PC installed base, approximately 31% of respondents managed fleets of 50–249 PCs, 35% had 250–999 PCs, 26% managed 1,000–5,000 PCs, and 8% managed more than 5,000 devices. Please see **Appendix B (page 28)** for detailed information about survey participants' geography, industry, size, and Windows PC installed base.

The costs of aging PCs

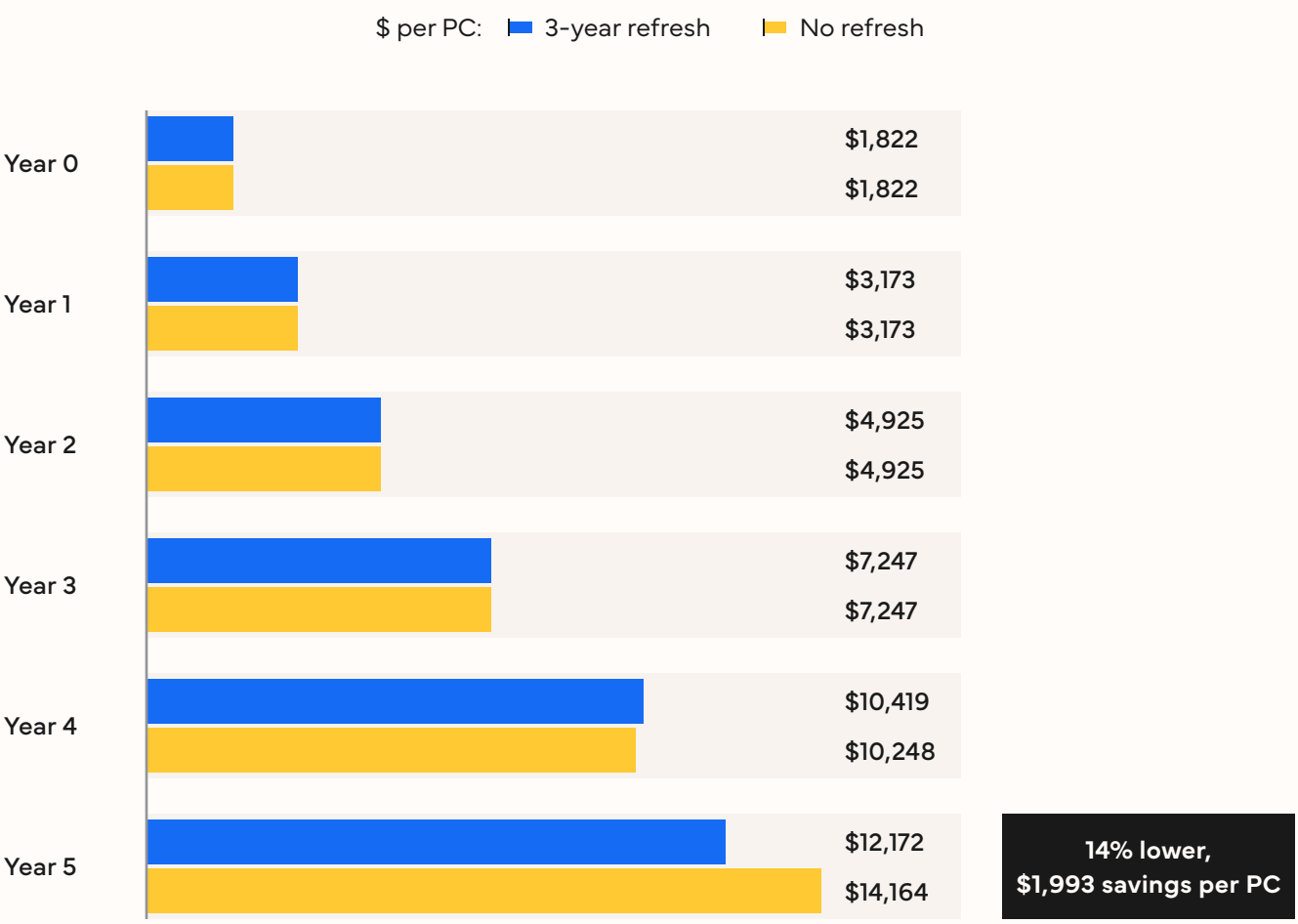
IDC's research reveals a consistent pattern: The total annual cost of running and maintaining a PC rises sharply as devices age past year three, driven by substantial increases in software and security solution costs, IT staff time requirements, unplanned downtime, and user productivity losses. Across every cost dimension measured in the study, study participants reported that costs are materially higher in years four and five than in years one through three of their PCs' life cycles. While organizations naturally seek to maximize hardware investment by extending PC lifespans, IDC's analysis demonstrates that the cumulative operational costs of doing so outweigh the avoided hardware spend.

IDC's analysis shows that organizations refreshing PCs after three years reduce their five-year per-device total cost of ownership by 14%, or $1,993 per PC, compared to organizations that hold the same device for five years, even after accounting for the full cost of purchasing and deploying a new PC at the beginning of year four **(Figure 1, next page).**

Figure 1

Total five-year costs, three-year refresh versus no refresh

See the figure data in an accessible table format.



n = 735; Source: *IDC Quantitative Survey,* May 2026

Table 1 (next page) demonstrates how cost categories analyzed for this study change for study participants from year one to year five, with year one representing a 100% baseline.

Table 1

Change in PC costs by category (years one to five)

Cost by category	Year 1	Year 2	Year 3	Year 4	Year 5
Cost of OS and other security solutions	100%	109%	119%	140%	163%
Cost of replacing PCs	100%	129%	159%	221%	287%
Cost of IT staff time, management	100%	128%	155%	169%	187%
Cost of IT staff time, help desk support	100%	118%	137%	189%	272%
Cost of unplanned downtime, direct costs	100%	115%	131%	184%	277%
Cost of unplanned downtime, lost productivity	100%	141%	189%	356%	706%
Cost of lost productivity, performance problems	100%	122%	144%	193%	255%

n = 735; Source: *IDC Quantitative Survey,* May 2026

Increased software and security solution costs

As PCs age, the costs associated with maintaining OS integrity, firmware functionality, and security coverage increase substantially. PC support life-cycle policies can mean that older hardware platforms lose eligibility for OS upgrades and security patches, forcing organizations to invest in manual patching workflows, extended security contracts, or third-party endpoint management tools to maintain acceptable risk postures. Aging hardware also tends to generate more security vulnerabilities because manufacturers reduce driver and firmware update cadences for older device generations, leaving gaps that endpoint security solutions must compensate for at increasing cost.

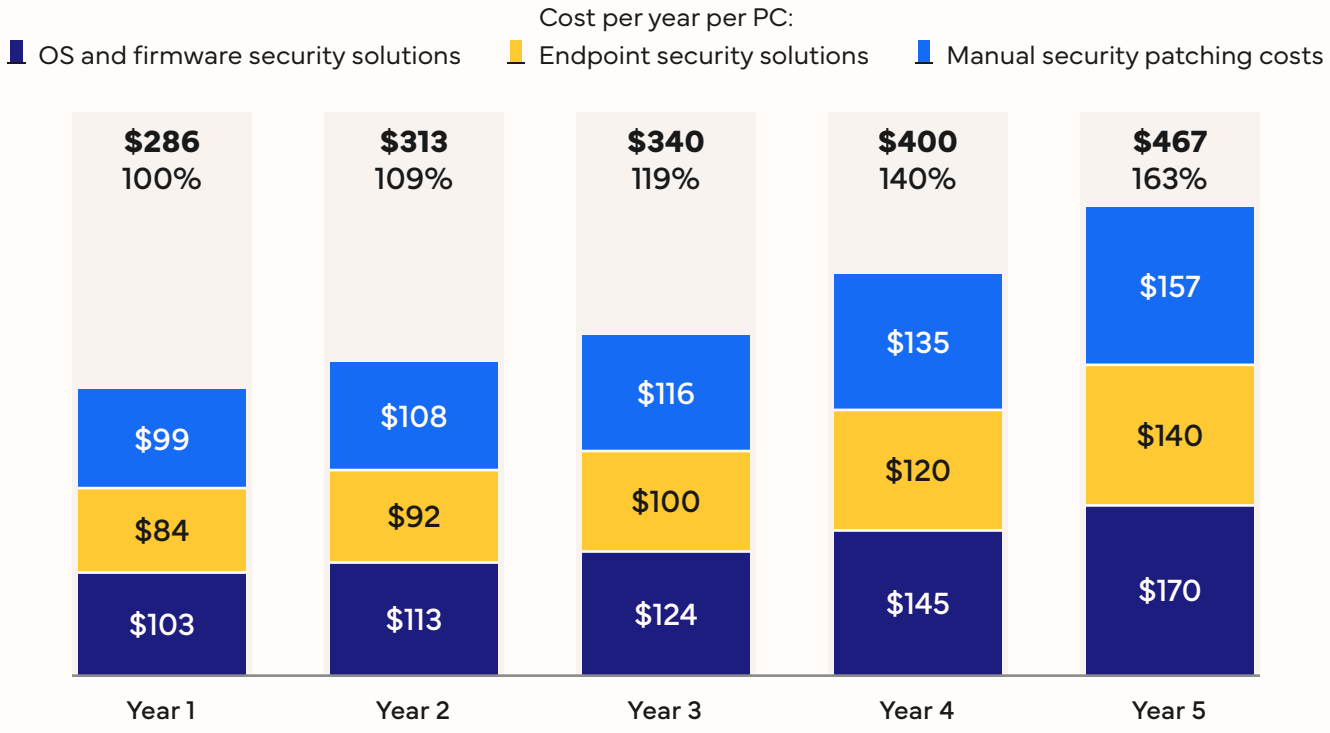
IDC's survey research confirms that organizations consistently report higher annual expenditures on OS, firmware, and security solutions for older PCs than for newer ones. This dynamic becomes increasingly evident as devices move from year three into years four and five of operation.

As shown in **Figure 2 (below),** IDC's survey data illustrates that annual per-PC costs for OS, firmware, and security solutions climb steadily with device age, reaching 163% of year one levels by year five. This represents a 63% cost premium that organizations holding aging PCs absorb as avoidable overhead. Keeping these costs in check is strategically important: Software and security expenditures compound across large PC fleets and, if left unaddressed, divert budget from other IT investments while widening the organization's attack surface.

Figure 2

Impact on cost of OS and security solutions

See the figure data in an accessible table format.



n = 735; Source: *IDC Quantitative Survey,* May 2026

More staff time required for management and support

Older PCs place a disproportionate burden on IT teams, requiring more time for routine management tasks, break-fix diagnostics, and help desk incident resolution as hardware components wear and system stability declines. Aging endpoints generate higher volumes of IT support tickets and longer mean time to resolution compared to newer devices, reflecting the complexity of troubleshooting hardware failures and the labor involved in temporary workarounds and repeated interventions. The increasing frequency of component failures and software compatibility issues in older PCs also pulls skilled IT staff away from higher-value initiatives, representing a hidden opportunity cost that compounds the direct labor expense. IDC's research for this study corroborates these dynamics, with survey respondents reporting that both proactive management hours and reactive help desk support requirements rise steadily and sharply as PC fleets age beyond the three-year mark.

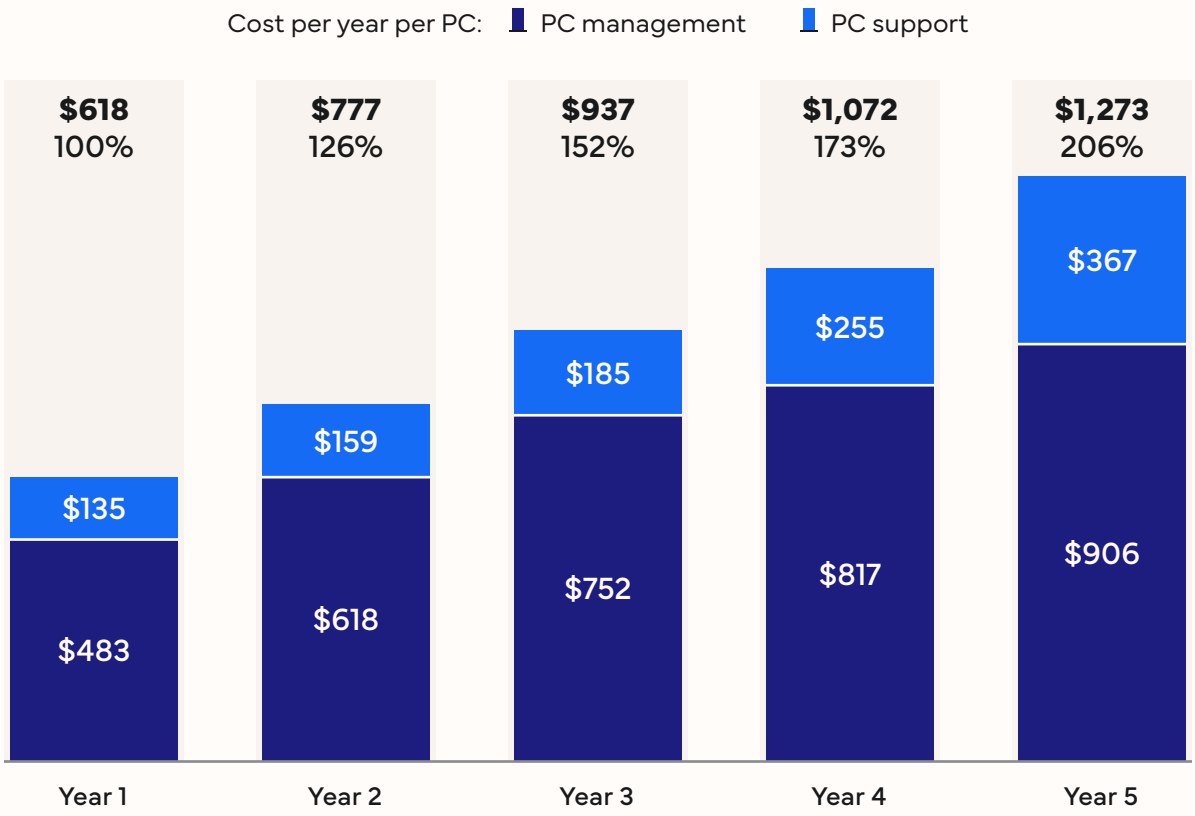
Figure 3 (next page) quantifies the IT labor burden that aging PCs impose, showing that combined management and support costs reach 206% of year-one levels by year five. **This increase is driven by PC management, with an 87% increase in management hours required and 94% more support tickets** driving a 172% increase in help desk support hours per device compared with year one. IT staff time is a finite and expensive resource, and every hour consumed by aging hardware is an hour unavailable for strategic projects and modernization initiatives.



Figure 3

Impact on IT staff management and support time costs

See the figure data in an accessible table format.



n = 735; Source: *IDC Quantitative Survey,* May 2026

More frequent problems with device performance and suitability for new technologies and software

The performance of aging PCs typically deteriorates as hardware components wear, storage slows, and system resources are consumed by increasingly demanding OS and application updates. This degradation translates into measurable productivity losses for end users: Slower boot times, application lag, and more frequent crashes all erode the effective working hours of employees and, in revenue-generating roles, can lead to lost business transactions and missed deadlines.

Beyond individual productivity, hardware failures in aging PCs cause unplanned downtime events, generating direct business costs in the form of lost revenue and idle labor that accumulate significantly as failure rates accelerate in years four and five. IDC's research shows that the cost of unplanned downtime per device grows considerably with PC age, reflecting higher incident frequency and longer resolution times for more complex hardware failures.

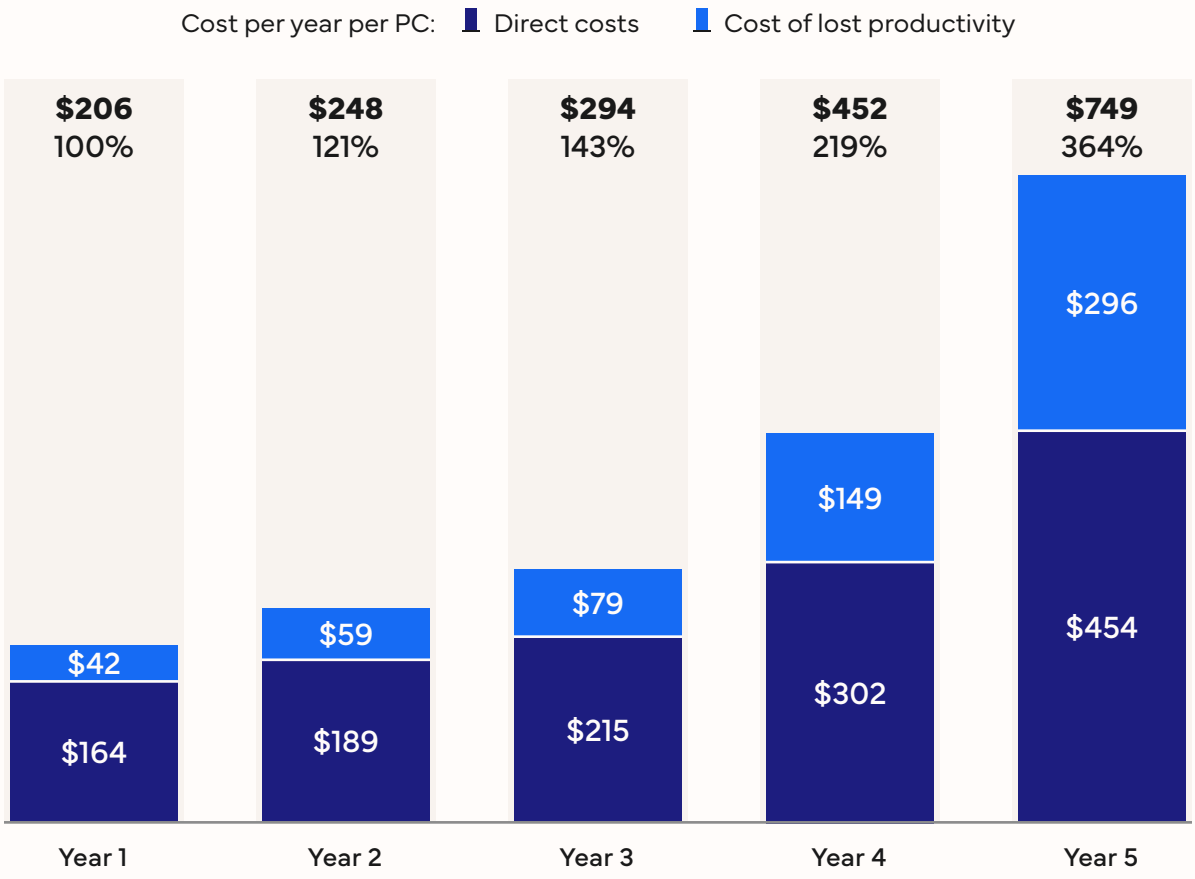
A further dimension of performance risk with aging PCs is the potential for a growing inability to run modern software and AI-powered productivity tools that require recent hardware capabilities. Emerging workplace technologies, which today include AI agents, AI-accelerated creative and analytical applications, and advanced collaboration platforms, increasingly rely on dedicated neural processing units, higher memory thresholds, and modern connectivity standards that are absent from older device generations. Organizations that defer PC refreshes may therefore face a growing competitive disadvantage as their employees struggle to make optimal use (or even use) of tools that can materially improve decision speed, content quality, and operational efficiency. IDC's survey data confirms that respondents consistently report this dynamic, with a significant share experiencing meaningful productivity losses attributable specifically to their inability to adopt new software solutions on aging hardware.

Figure 4 (next page) shows the steep trajectory of unplanned downtime costs as PCs age, with year-five costs reaching 364% of year-one levels, more than tripling as accelerating hardware failure rates (277% unplanned outages in year five compared with year one) drive more frequent outages and longer recovery times. Minimizing downtime costs is a business imperative: Beyond the direct financial impact of halted operations, outages disrupt employee workflows, erode customer service levels, and create reputational risk with real consequences.

Figure 4

Impact on cost of unplanned downtime

See the figure data in an accessible table format.

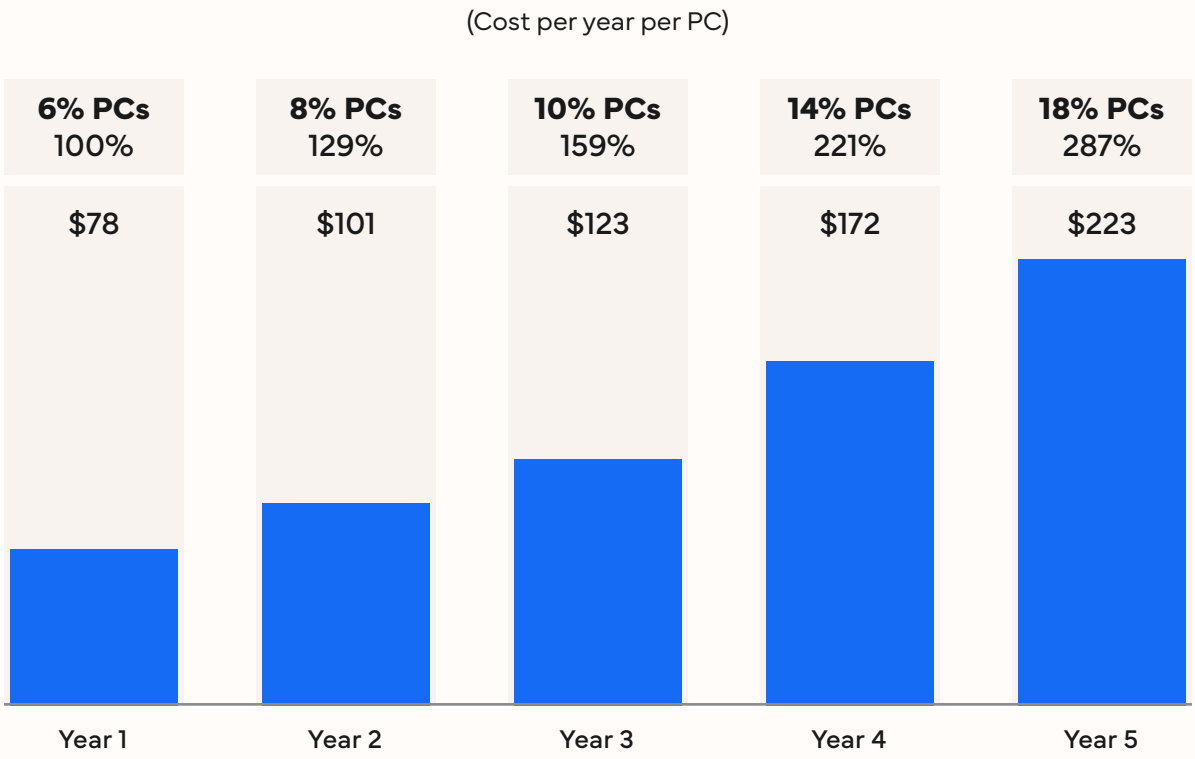


n = 735; Source: *IDC Quantitative Survey,* May 2026

Figure 5 (next page) illustrates that the share of PCs requiring unplanned replacement due to failure reaches 287% of the year-one rate by year five, with cumulative component wear accelerating failure rates. Unplanned PC replacements are disruptive and costly consequences of deferred refresh cycles, combining emergency procurement costs with the productivity losses and IT overhead of urgent device provisioning.

Figure 5

Impact on the cost of replacing PCs



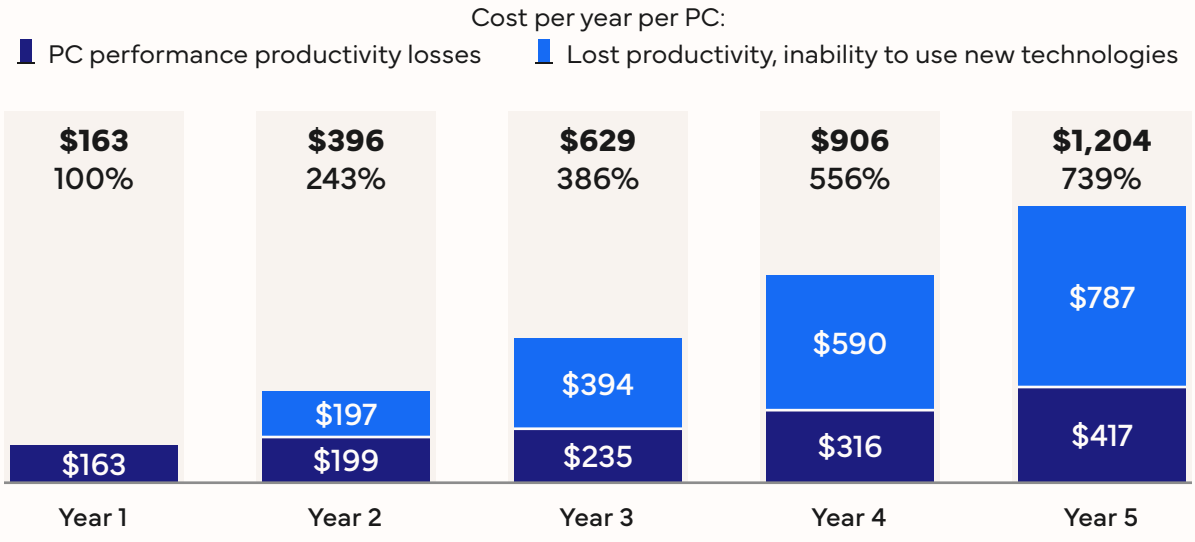
n = 735; Source: *IDC Quantitative Survey*, May 2026

Figure 6 (next page) captures the full scope of productivity losses that mount as aging PCs struggle to keep pace with evolving user and application demands, with year-five costs reaching 739% of year-one levels as a result of hardware limitations compounding performance degradation and preventing the adoption of AI and other modern productivity tools. These costs are consequential and reflect the degradation of device performance and the growing inability to access AI and modern software tools. As such, they are borne directly by the business rather than the IT budget, representing lost employee output and missed revenue opportunities that can significantly outweigh the savings from deferring a hardware refresh.

Figure 6

Impact on productivity losses due to performance

See the figure data in an accessible table format.



n = 735; Source: *IDC Quantitative Survey,* May 2026

The case for a three-year refresh cycle

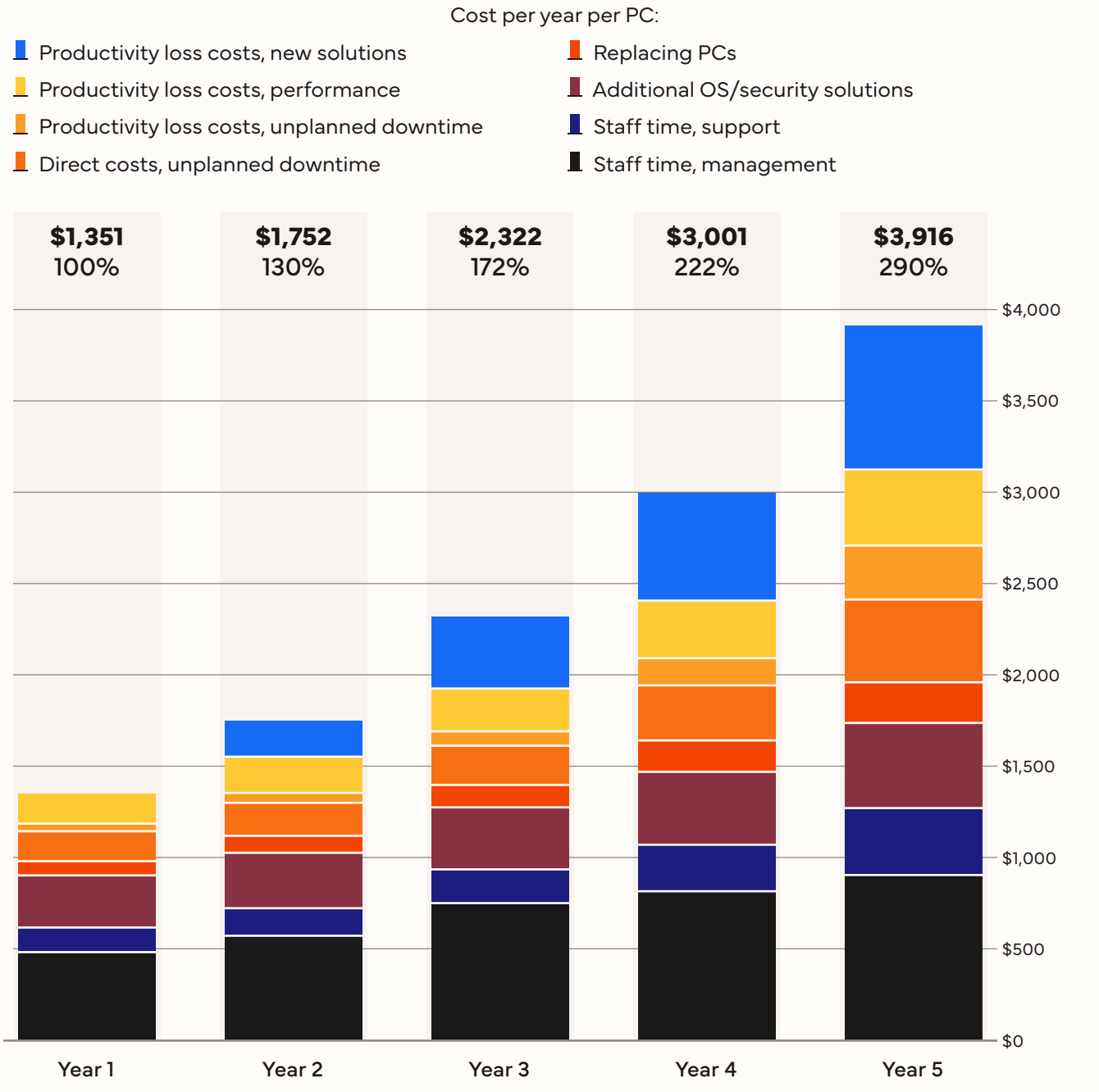
The cumulative evidence from IDC's research leads to a clear and counterintuitive conclusion: Despite requiring organizations to purchase a new PC in year four at an average cost of $1,822 per device, a three-year refresh cycle delivers a 14% lower total cost of ownership over five years compared to holding the same PC for the full five years. In absolute terms, that translates to nearly $2,000 in savings per device ($1,993 on a five-year per-PC basis), meaning that the escalating operational costs of an aging PC in years four and five more than offset the entire cost of replacing it after three years.

Figure 7 (next page) presents the full picture of per-PC annual operating costs across a five-year life cycle, excluding the initial hardware purchase. The escalation in costs across the areas measured is striking: IT staff management time, help desk support costs, OS and security solutions, unplanned downtime, PC replacements, and user productivity losses all rise meaningfully as devices age. In aggregate, total annual operating costs for a PC in year five reach 290% of what they were in year one, approaching nearly triple the cost of running the same device when it was new. This represents a compounding burden that accumulates quietly across large PC fleets.

Figure 7

Total costs per PC per year, excluding PC hardware costs

See the figure data in an accessible table format.



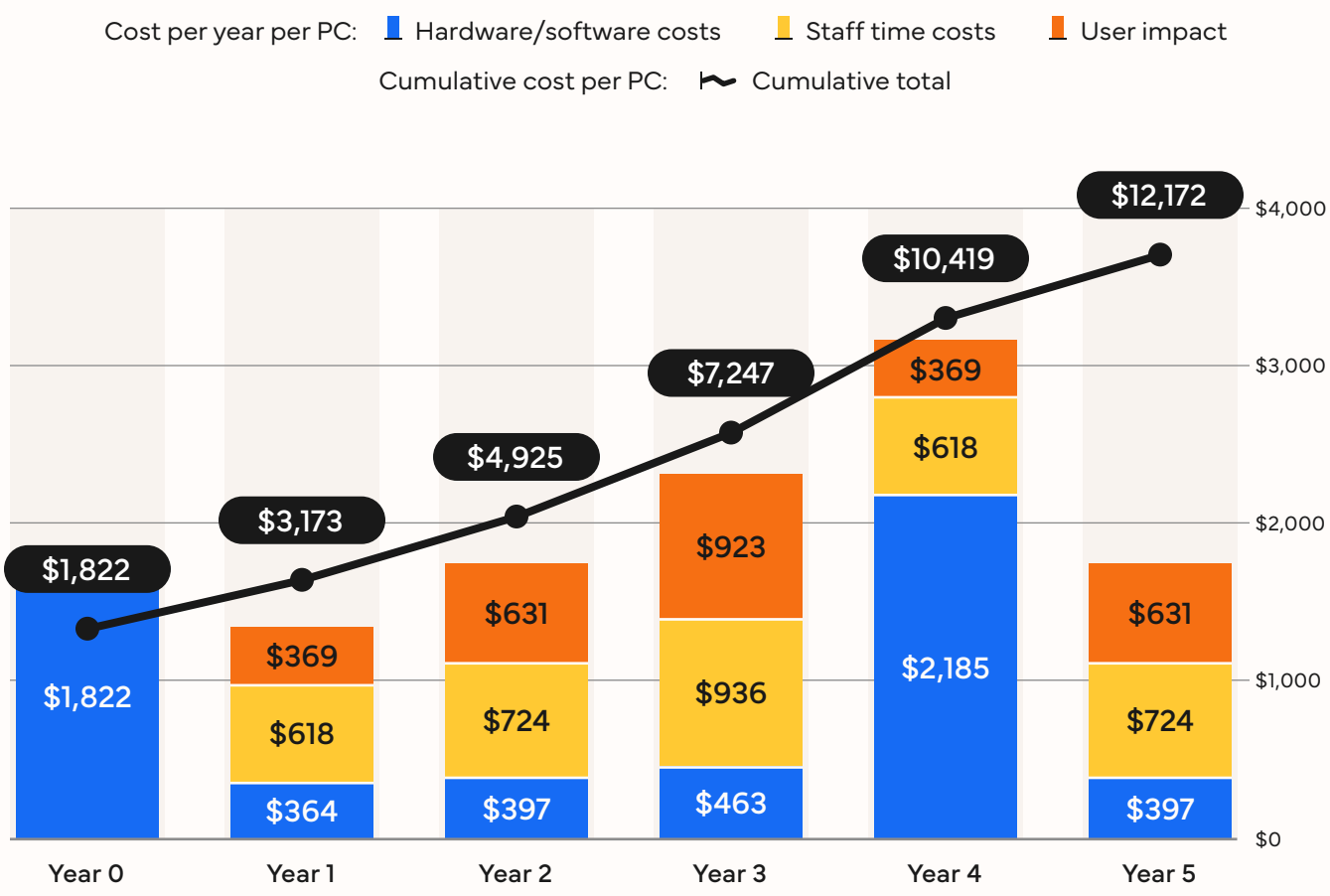
n = 735; Source: *IDC Quantitative Survey,* May 2026

Figure 8 (below) shows the five-year cumulative cost trajectory for organizations that refresh PCs after three years. The most visible feature of this chart is the step up in year four, which reflects the $1,822 average cost of purchasing and deploying a new PC: a real and significant outlay. However, because a refreshed PC resets to the lower cost profile of a newer device, the non-hardware operating costs in years four and five revert to levels consistent with years one and two of the prior device's life cycle, keeping annual costs controlled rather than allowing them to compound. The result is a five-year cumulative total of approximately $12,172 per PC.

Figure 8

Three-year refresh — Total cost per PC per year, cumulative total

See the figure data in an accessible table format.



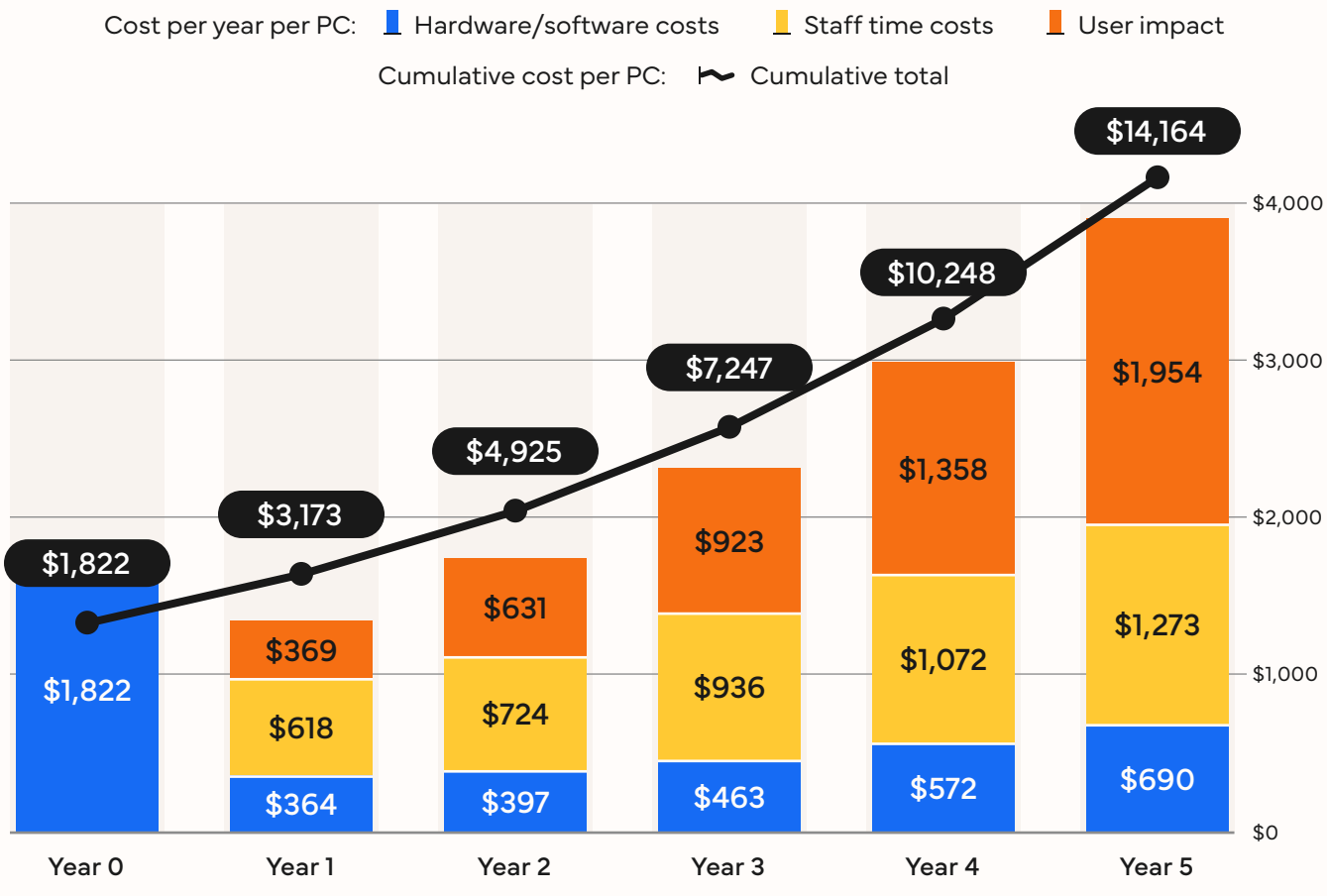
n = 735; Source: *IDC Quantitative Survey,* May 2026

Figure 9 (below) shows the five-year cumulative cost trajectory for organizations that hold PCs for the full five years, avoiding the hardware outlay of a year-four refresh. While cumulative costs through year three are identical to the refresh scenario, the absence of new hardware in year four proves to be a false economy: Without a refresh, operating costs continue their upward trajectory in years four and five, driven by escalating IT staff demands, software and security expenditures, downtime, and productivity losses on aging devices. The five-year cumulative total reaches approximately $14,164 per PC, which is 14% higher (and nearly $2,000 more) than the three-year refresh scenario. This finding demonstrates that the cost of inaction will typically outweigh the cost of the hardware investment for organizations considering a faster refresh cycle.

Figure 9

No refresh — Total cost per PC per year, cumulative total

See the figure data in an accessible table format.



n = 735; Source: *IDC Quantitative Survey,* May 2026

Table 2 (below) provides a granular look at why organizations incur lower costs by refreshing their PCs every three years rather than every five years. By refreshing after three years, **study participants can reduce PC, software, and security costs by 20% on average, IT staff time costs by 22% on average, and the cost of lost productivity and business by 44%.** These cost savings and efficiencies provide the foundation for the 14% overall savings over five years, even accounting for the additional investment costs required to deploy a new PC in year four.

Table 2

PC costs by category, years one to five

Category	Year 1	Year 2	Year 3	Year 4	Year 5	Total, 3-year refresh	Total, no refresh	Percent efficiency, 3-year refresh
Total hardware/ software costs	**$364**	**$397**	**$463**	**$572**	**$690**	**$1,984**	**$2,485**	**20%**
Cost of additional OS/security solutions	$286	$313	$340	$400	$467	$1,519	$1,796	15%
Cost of replacing PCs	$78	$101	$123	$172	$223	$465	$689	33%
Total staff time costs	**$618**	**$724**	**$936**	**$1,072**	**$1,273**	**$3,621**	**$4,624**	**22%**
Cost of staff time, management	$483	$573	$752	$817	$906	$2,864	$3,532	19%
Cost of staff time, support	$135	$151	$185	$255	$367	$757	$1,092	31%
Total user impact	**$369**	**$631**	**$923**	**$1,358**	**$1,954**	**$2,924**	**$5,234**	**44%**
Direct costs, unplanned downtime	$164	$181	$215	$302	$454	$905	$1,316	31%
Productivity loss costs, unplanned downtime	$42	$54	$79	$149	$296	$271	$620	56%
Productivity loss costs, performance	$163	$199	$235	$316	$417	$960	$1,330	28%
Productivity loss costs, new solutions	$0	$197	$394	$590	$787	$787	$1,968	60%
Total	**$1,351**	**$1,752**	**$2,322**	**$3,001**	**$3,916**	**$12,172**	**$14,164**	**14%**

n = 735; Source: *IDC Quantitative Survey,* May 2026

Additional evidence of employee use impact

Study results also suggest that interviewed organizations face a business drag beyond expressed productivity and business losses as their PCs age. These findings show that both IT organizations and end-user employees recognize the diminished capabilities of older PCs and realize that they are less likely to be up to the task of providing the requisite user experience.

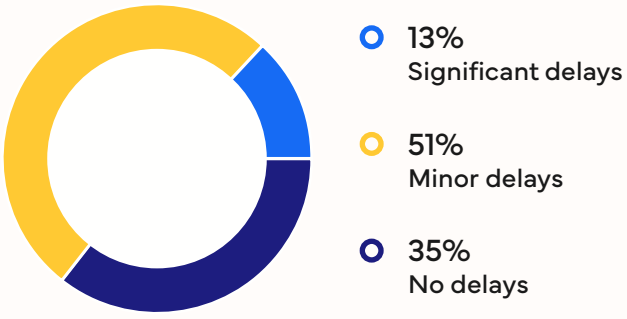
Figure 10 (below, left) shows that almost two-thirds of study participants delay the deployment of new software to at least some extent due to the age of PCs. With employee productivity and capabilities often closely related to the use of new software and technologies, this can create further friction for employees in day-to-day work.

Figure 11 (below, right) demonstrates that employees are aware of the impact that PC age has on PC performance. As shown, almost 80% of study participants reported that their employees provide negative feedback at least occasionally about the performance of older PCs.

Figure 10

Impact on software adoption

(Percentage of organizations)

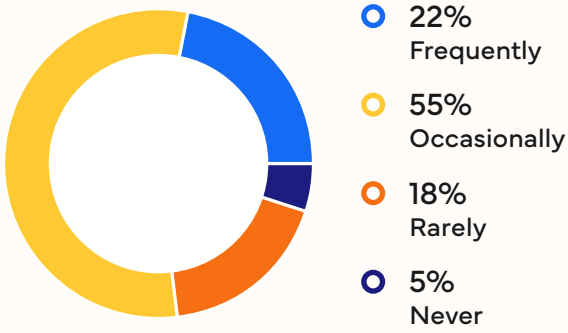


n = 735; Source: *IDC Quantitative Survey,* May 2026

Figure 11

Impact on employee performance complaints

(Percentage of organizations)



n = 735; Source: *IDC Quantitative Survey,* May 2026



Challenges and opportunities

The refresh cycle argument isn't complicated. The execution is. A few challenges consistently get in the way, and opportunities can get overlooked.

Challenges

- **Sustained pricing pressure on new hardware:** Memory costs will not normalize any time soon, and that has direct implications for refresh budgets. Organizations planning three-year cycles need to account for a procurement environment that is meaningfully more expensive than it was last year. That math needs to be built into the planning now.

- **Uncertainty around AI workloads on the PC:** The PC industry is still working out what AI means at the device level. Which workloads will run locally, which will stay in the cloud, and what hardware will be required to support them are questions without settled answers. IT decision-makers are being asked to make multi-year hardware commitments against a moving target. That's a legitimate concern but not an excuse to do nothing.

Opportunities

- **A chance to ask what employees need from a PC:** Refresh cycles create a conversation that doesn't happen often enough. Most organizations treat hardware decisions as a cost exercise and miss the bigger question: Are the devices they're buying matched to how employees work?
- **A reason to take a harder look at PC silicon options:** End users expect different things from their PCs than they did five years ago. Battery life, modern connectivity standards, and designs that hold up across a hybrid work environment have moved from "nice to have" to baseline expectations. A refresh cycle is a good time to evaluate the full range of silicon options rather than default to what's always been on the approved vendor list.



"Performance-wise and what they (Snapdragon) offer from a hardware perspective, they're very impressive … In 365 [running natively], it's been a very good experience. Even in the last five months, the number of native apps has really increased dramatically."

IT Director

"The NPUs in the Snapdragon-based machines are significantly [better…] … We're getting a lot of grad students asking 'can I run local AI on an ARM-based system?'"

IT Director, large university

Perspectives are drawn from qualitative focus group interviews that IDC conducted separately with IT professionals at organizations that have deployed or evaluated Qualcomm Snapdragon–powered PCs, conducted independently of the quantitative survey.

Conclusion

The evidence assembled in this study points to a conclusion that runs against the instinct many IT organizations are acting on. Holding PCs for a fourth and fifth year looks like a way to protect the budget, but the operational costs that accumulate over those two years more than erase the hardware spend it defers.

Across every category IDC measured, from software and security expenditures to IT staff time, unplanned downtime, and lost user productivity, costs rise steadily as devices age and rise fastest in years four and five.

Organizations that refresh on a three-year cycle reach a five-year total cost of ownership that is 14% lower than those that hold the same device for five years, a difference of $1,993 per PC. That advantage holds even after accounting for the full cost of buying and deploying a replacement at the start of year four.

A current fleet also makes IT easier to run. Newer devices generate fewer help desk tickets, demand less management time, and fail less often, which returns scarce staff hours to work that matters more than chasing failures on aging machines. In a period defined by tighter budgets, reduced IT headcount, and rising security demands, those operational gains compound alongside the direct savings.

For IT leaders, the implication is that a three-year refresh should be the default position, with the burden of proof falling on any decision to extend it. Mapping the fleet by device age, identifying the machines moving into years four and five, and funding their replacement before the operational costs accumulate is the most reliable way to keep total cost of ownership under control rather than letting it climb year over year.

Appendix A: Methodology

IDC's business value research is designed to quantify the financial and operational impact of technology decisions by combining primary survey data with a structured economic model. For this study, IDC conducted an online quantitative survey of 735 IT managers and IT decision-makers across organizations in eight countries (the United States, the United Kingdom, Germany, France, Spain, India, Italy, and Australia) with Windows PC installed bases of 50 or more devices. Survey fielding was completed in May 2026. Respondents were required to have direct knowledge of their organizations' PC management practices, IT support operations, and technology expenditures and were screened to ensure relevance and data quality. The survey instrument collected respondents' actual reported experience across all major cost dimensions of PC ownership, segmented by device age in years one through five.

IDC's cost model encompasses eight distinct cost categories, each populated with data drawn directly from survey responses. These categories are: (1) IT staff time for PC management, capturing proactive management, configuration, and maintenance hours; (2) IT staff time for help desk support, capturing reactive incident response, troubleshooting, and resolution hours; (3) OS, firmware, and security solution costs, including licensing, patching tools, endpoint security, and manual security remediation expenditures; (4) unplanned PC replacement costs, reflecting the frequency and cost of devices that fail outside of planned refresh cycles; (5) direct costs of unplanned downtime, including lost revenue and direct operational costs associated with device failures and outages; (6) productivity losses attributable to unplanned downtime, reflecting the value of employee time lost during outage events; (7) productivity losses attributable to PC performance problems, reflecting the value of productivity degraded by slow devices, application lag, boot times, and system instability; and (8) productivity losses attributable to an inability to use new technologies and software, reflecting the opportunity cost of employees on aging hardware being unable to leverage AI tools, modern applications, and other productivity-enhancing solutions.

For each cost category, IDC calculated an annual per-PC cost value for each year of a device's life cycle by applying the relevant survey-reported metrics (hours, frequencies, percentages, and expenditure figures) to IDC's standard salary and productivity assumptions (see below). Costs are expressed on a per-device, per-year basis to allow for direct comparison across life-cycle years and across refresh scenarios. All figures represent averages across the full survey sample of 735 organizations unless otherwise noted.

To construct the five-year total cost of ownership comparison, IDC modeled two scenarios. In the three-year refresh scenario, an organization deploys a new PC and operates it for three years, then purchases and deploys a replacement device at the beginning of year four and operates it through year five. Annual operating costs in years four and five of this scenario reflect the cost profile of a year-one and year-two device respectively, with the refreshed PC reseting the aging clock. In the no-refresh scenario, the same initial device is operated continuously for five years, with annual operating costs escalating in accordance with the age-related cost trajectories measured in the survey.

Productivity losses are quantified by applying the survey-reported percentage of working time lost to the applicable burdened salary assumption, with a 15% margin applied to account for the revenue impact of lost employee productivity in addition to the direct labor cost. IT staff time costs are quantified by applying reported hours to the IT staff burdened salary assumption. All salary figures are fully loaded, incorporating base salary plus a 28% burden for benefits and overhead. Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings. For the purposes of this analysis, IDC has used its standard assumptions of an average fully loaded salary of $100,000 per year for IT staff members and an average fully loaded salary of $70,000 per year for non-IT staff members. IDC assumes that employees work 1,880 hours per year (47 weeks x 40 hours).

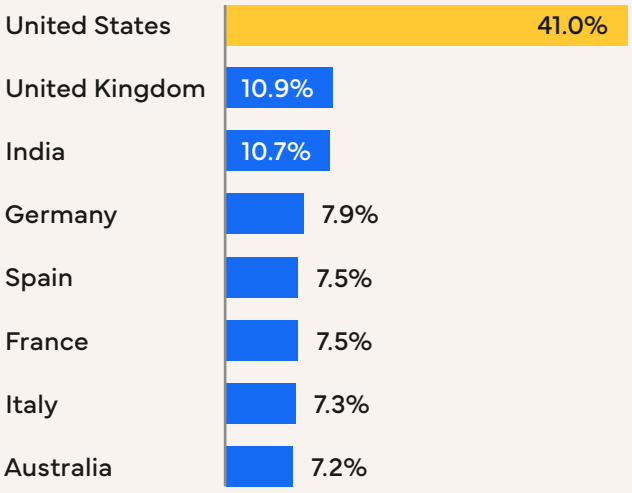
All dollar figures in this white paper are in USD.

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

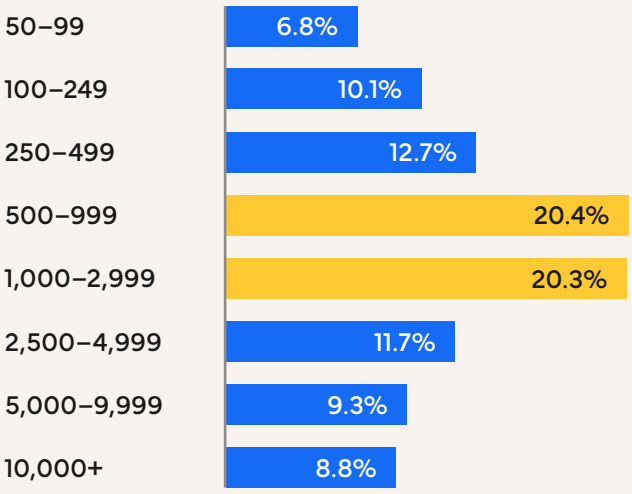
Appendix B: Survey overview

The following figures provide more detailed information about the firmographics of organizations that participated in IDC's survey.

Country



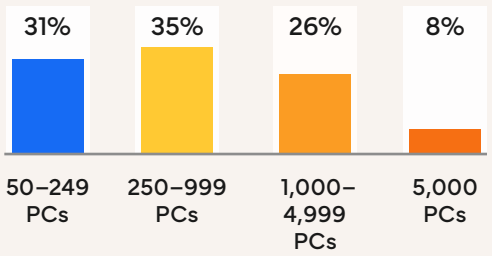
Size (by number of employees)



Industry

14.0%	Software and IT
12.7%	Business and personal services
11.0%	Healthcare
11.0%	Manufacturing
9.3%	Retail
7.5%	Telecommunications
4.5%	Education
4.4%	Travel and transportation
3.8%	Energy/utilities
3.7%	Wholesale and distribution
2.7%	Hospitality
2.6%	Government
0.8%	Media and entertainment
0.8%	Natural resources

PC installed bases



Appendix C: Accessible data tables

This appendix provides an accessible version of the data for any complex figures in this document. Click "Return to figure" to get back to the original figure.

Figure 1 accessible data

Total five-year costs, three-year refresh versus no refresh

$ per PC	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Three-year refresh	$1,822	$3,173	$4,925	$7,247	$10,419	$12,172
No refresh	$1,822	$3,173	$4,925	$7,247	$10,248	$14,164

n = 735; Source: *IDC Quantitative Survey,* May 2026

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Figure 2 accessible data

Impact on cost of OS and security solutions

Cost per year per PC	OS and firmware security solutions	Endpoint security solutions	Manual security patching costs	Total
Year 1	$103	$84	$99	$286 100%
Year 2	$113	$92	$108	$313 109%
Year 3	$124	$100	$116	$340 119%
Year 4	$145	$120	$135	$400 140%
Year 5	$170	$140	$157	$467 163%

n = 735; Source: *IDC Quantitative Survey,* May 2026

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Appendix C: Accessible data tables (continued)

Figure 3 accessible data

Impact on IT staff management and support time costs

Cost per year per PC	PC management	PC support	Total
Year 1	$483	$135	$618 (100%)
Year 2	$618	$159	$777 (126%)
Year 3	$752	$185	$937 (152%)
Year 4	$817	$255	$1,072 (173%)
Year 5	$906	$367	$1,273 (206%)

n = 735; Source: *IDC Quantitative Survey,* May 2026

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Figure 4 accessible data

Impact on cost of unplanned downtime

Cost per year per PC	Direct costs	Cost of lost productivity	Total
Year 1	$164	$42	$206 (100%)
Year 2	$189	$59	$248 (121%)
Year 3	$215	$79	$294 (143%)
Year 4	$302	$149	$452 (219%)
Year 5	$454	$296	$749 (364%)

n = 735; Source: *IDC Quantitative Survey,* May 2026

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Appendix C: Accessible data tables (continued)

Figure 6 accessible data

Impact on productivity losses due to performance

Cost per year per PC	Direct costs	Cost of lost productivity	Total
Year 1	$163	$0	**$163 (100%)**
Year 2	$199	$197	**$396 (243%)**
Year 3	$235	$394	**$629 (386%)**
Year 4	$316	$590	**$906 (556%)**
Year 5	$417	$787	**$1,204 (739%)**

n = 735; Source: *IDC Quantitative Survey,* May 2026

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Figure 7 accessible table

Total costs per PC per year, excluding PC hardware costs

Cost per year per PC	Year 1	Year 2	Year 3	Year 4	Year 5
Staff time, management	$483	$573	$752	$817	$906
Staff time, support	$135	$151	$185	$255	$367
Additional OS/security solutions	$286	$304	$340	$400	$467
Replacing PCs	$78	$93	$123	$172	$223
Direct costs, unplanned downtime	$164	$181	$215	$302	$454
Productivity loss costs, unplanned downtime	$42	$54	$79	$149	$296
Productivity loss costs, performance	$163	$199	$235	$316	$417
Productivity loss costs, new solutions	$0	$197	$394	$590	$787
Total	**$1,351 100%**	**$1,752 130%**	**$2,322 172%**	**$3,001 222%**	**$3,916 290%**

n = 735; Source: *IDC Quantitative Survey,* May 2026

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Appendix C: Accessible data tables (continued)

Figure 8 accessible data

Three-year refresh — Total cost per PC per year, cumulative total

Cost per year per PC	Hardware/ software costs	Staff time costs	User impact	Cumulative total
Year 0	$1,822	$0	$0	**$1,822**
Year 1	$364	$618	$369	**$3,173**
Year 2	$397	$724	$631	**$4,925**
Year 3	$463	$936	$923	**$7,247**
Year 4	$2,185	$618	$369	**$10,419**
Year 5	$397	$724	$631	**$12,172**

n = 735; Source: *IDC Quantitative Survey,* May 2026

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Figure 9 accessible data

No refresh — Total cost per PC per year, cumulative total

Cost per year per PC	Hardware/ software costs	Staff time costs	User impact	Cumulative total
Year 0	$1,822	$0	$0	**$1,822**
Year 1	$364	$618	$369	**$3,173**
Year 2	$397	$724	$631	**$4,925**
Year 3	$463	$936	$923	**$7,247**
Year 4	$572	$1,072	$1,358	**$10,248**
Year 5	$690	$1,273	$1,954	**$14,164**

n = 735; Source: *IDC Quantitative Survey,* May 2026

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About the IDC analysts



Tom Mainelli

Group Vice President,
Device and Consumer Research, IDC

Tom Mainelli heads the Device and Consumer Research Group, overseeing a wide array of hardware and technology categories that cater to both home and enterprise markets. His team's research spans PCs, tablets, smartphones, wearables, smart home devices, thin clients, displays, and virtual/augmented reality headsets. He also co-manages IDC's supply-side research team, which monitors display and ODM production across various categories. IDC's consumer research, anchored by the Consumer Market Model, employs regular surveys and proprietary models to forecast numerous consumer-focused activities and spending across hardware, software, and services. As group vice president, Mainelli collaborates closely with company representatives, industry contacts, and other IDC analysts to provide comprehensive insights and analysis on a diverse range of commercial and consumer topics.

More about Tom Mainelli →



Matthew Marden

Research Vice President,
Business Value Strategy Practice, IDC

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

More about Matthew Marden →

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