Americas Technology

IT Spending Survey: 2024 spending expectations inflect positively, Gen-AI sees strong future budget intentions

Our survey of CIO spending intentions for 2024 shows an inflection against a pressured 2023. Our IT Spending Index rebounded to 74.5 from 60.5 in March 2023, and our IT Capital Spending Index increased to 61.5 from 50.5 in March 2023. This 23% and 22% swing, respectively, represents a significant inflection in both indexes following two straight declines in the June 2022 and March 2023 surveys (as well as muted growth in the December 2021 survey, albeit against a tough comp). Over the past ~20 years, the averages for Overall IT Spending & IT Capital Spending have been 63.0 & 60.5, respectively.

Results point to more optimistic 1H24 spending trends

Compared to 1H23, 64% of respondents expect Overall IT Spending to increase, versus 18% anticipating spending to decrease. This compares to the 51% / 13% split from our prior (March 2023) survey. Regarding Capital IT Spending, 47% of respondents anticipate spending to increase, while 20% expect spending to decrease. This compares to the 37% / 19% split in March 2023.

Early in GenAI budgetary allocation, but could see promising traction ahead.

With GenAI's proliferation, and companies allocating more budget towards developing GenAI-based SKUs, we thought it prudent to ask CIOs about their inclination to allocate budget towards GenAI in the next 1 & 3 years.

In the next 1 year, 86% of CIOs indicate 0% (30%) to 1 - 5% (56%) of budgets will be allocated towards GenAI products. We believe this is likely a function of organizations working to get more clarity on the accuracy and efficiency gains that can result from GenAI before allocating notable budgetary commitments.

The 3-year outlook looks slightly more promising, with 88% of CIOs noting some intention to spend on GenAI. This is largely split between 1 - 5% (48%), 5 - 10% (25%), and 10 - 15% (15%), with 10% of CIOs indicating intentions to spend between 15 - 30% on GenAI applications in 3 years.

Subsector takeaways

Software: (1) Public cloud adoption momentum continues. While AWS still leads in

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total spending, Azure remains the leader in terms of workloads in our survey, especially with IaaS + PaaS. Additionally, we are seeing continued consolidation in this space as more respondents are indicating using Azure & AWS; (2) Microsoft currently remains the top strategic vendor, while Google dropped to 7th (from T-4th), Oracle dropped to 6th (from T-4th), Salesforce was in sole possession of 4th (from T-4th), and CrowdStrike saw itself enter the ranking (9th) for the first time; and (3) Office Copilot could see notable 3-year growth, with responses indicating the install base using Copilot could potentially grow >4x in 3 years.

Servers/PCs/Storage/Networking: (1) Server spending expectations ticked up; **(2)** Storage spending expectations have returned to pre-Covid levels; **(3)** PC spending expectations were up relative to our previous survey; and **(4)** Networking intentions were marginally weaker but are still healthy. All of this is generally consistent with the recovery in total IT and capital spending indications we see in the broader survey.

IT Services: (1) IT Services spending intentions remained stable to somewhat weaker relative to last year as businesses are experiencing more rationalized overall spending; **(2)** Companies seek to prioritize Digital spending while rationalizing traditional spending categories within a limited spending envelope; **(3)** Accenture, IBM, Deloitte, and specialized digital vendors remain well positioned for incremental Digital spending while others are less well positioned to benefit.

Security Software: (1) Industry fundamentals are modestly improving, based on the "net strength" score for our sample set of vendors improving to 14% from 12% in March 2023 (and vs. 22% in June 2022). **(2)** On spending priorities, Identity and XDR/SOC are tied at first (we view these as compelling 2024 product cycle opportunities), followed by Platform Consolidation. Endpoint and Cloud moved down as priorities. **(3)** On vendor wallet share, MSFT, CRWD, PANW and NET saw the largest gains, further illustrating the momentum of the large Security platforms

Summary: Data points to more constructive behavior on IT spending

Index results: Spending indices rebounded from March 2023

Our survey of overall CIO spending intentions inflected significantly relative to our March 2023 survey. Our Overall IT Spending Index increased to 74.5 from 60.5 and our IT Capital Spending Index increased to 61.5 from 50.5. For context, the average Overall IT Spending Index and IT Capital Spending Index figures starting in October 2013 (and excluding COVID-impacted results in June & December 2020) are 71.5 & 68.9, respectively. At their respective highs, our Overall IT Spending Index reading was 85.5 (December 2017) and the IT Capital Spending index was 86.5 (June 2017). The latest results represent the somewhat cautious optimism that companies have highlighted as they work to navigate a potentially "higher-for-longer" rates environment while still operating against digital transformation initiatives.

Exhibit 1: Survey Data Indicates an IT Spending Rebound in 2024

CIOs Anticipate IT Spending Rebound in 2024

	Jun-22	Mar-23	Jan-24
GS IT Spending Index	76.0	60.5	74.5
GS IT Cap Spending Index	69.0	50.5	61.5

Source: Goldman Sachs Global Investment Research

1H24 spending intentions show YoY strength amongst both Overall IT Spending & Capital IT Spending

Regarding Overall IT Spending, compared to 1H23, a greater share of 100 respondents, 64%, anticipate spending to increase in 1H24, while 18% anticipate spending to decrease. This compares to a 51% / 13% split in March 2023, and a 42% / 27% split in June 2022.

Similar behavior is seen amongst IT Capital Spending. 47% of respondents anticipate spending to increase in 1H24, while 20% anticipate spending to decrease. This compares to a 37% / 19% split in March 2023, and a 36% / 24% split in June 2022.

Subsector takeaways

Software: (1) Our survey results continue to point to a positive outlook for public cloud adoption. Current expectations call for 47% of workloads to be migrated over the next three years (versus an average of 45% over the last three surveys). Only 29% of workloads have migrated today, representing a step up from an average of 25% in the last three surveys. Accordingly, these adoption patterns help validate our thesis that enterprises continue to expect to migrate / transform their workloads to the public cloud; **(2)** Microsoft continues its hold atop market positioning and is anticipated to expand its presence amongst customers within IaaS + PaaS and Virtualization; **(3)** Google continues to maintain its position as the #3 public cloud vendor; **(4)** CIOs spending intentions for virtualization remain positive for the 3rd straight survey, while spending intentions for Operating System, Database, and Middleware remain negative (albeit did show improvement versus our last survey). Microsoft led the improvement within Virtualization while VMware continued ceding share. Results indicated Oracle's share within database/middleware spending remains pressured; **(5)** Microsoft consistently maintains the #1 spot as the top strategic vendor based on both current, and forward (3 years) expectations; **(6)** Oracle is likely to lose the highest vendor wallet share, particularly in the database market (-42%).

Servers and PCs: (1) Expectations for server spending up modestly ticked from our prior survey. 26% of respondents now expect server spending to increase over the next 12 months, which is an improvement from 24% in our March 2023 but weaker than 41% in our June 2022 survey; **(2)** PC spending expectations were up, with 41% respondents expecting to increase spend over the next 12 months relative to 33%/46%

in our previous two surveys.

Storage: (1) Expectations for storage spending over the next 12 months have returned to pre-COVID levels after declining meaningfully in the prior two surveys. 63% of respondents anticipate an increase in storage spending (vs. 32% in March 2023 and 46% in June 2022), whereas 11% of respondents expect it to decrease (vs. 38%/26% in our previous two surveys) over the next 12 months; **(2)** Vendors such as Pure Storage, Nutanix, and NetApp are expected to have the highest net wallet share gains.

Networking: (1) Network equipment spending intentions, while still healthy, have moderated slightly from our previous survey. 52% of respondents now anticipate an increase in spending over the next 12 months (vs. 53% in March 2023 and past 5-year average of 54%); **(2)** Cisco is the only net share gainer within networking budgets, while Juniper, Arista, F5, HPE and others were all expected to lose share.

IT Services: Overall, discretionary IT Services spending intentions are trending slightly weaker than our March 2023 survey. The number of respondents forecasting increases in IT Services spending fell to 53% from 63% in March 2023. The number of respondents forecasting IT Services spending to remain flat increased to 25% from 19% in March 2023. 9% of respondents plan to increase spending by over 10% and 44% of respondents plan to increase spending by 0%-10%, versus 11% and 52% respectively in March 2023. The number of respondents planning to decrease spending increased to 21% from 18%.

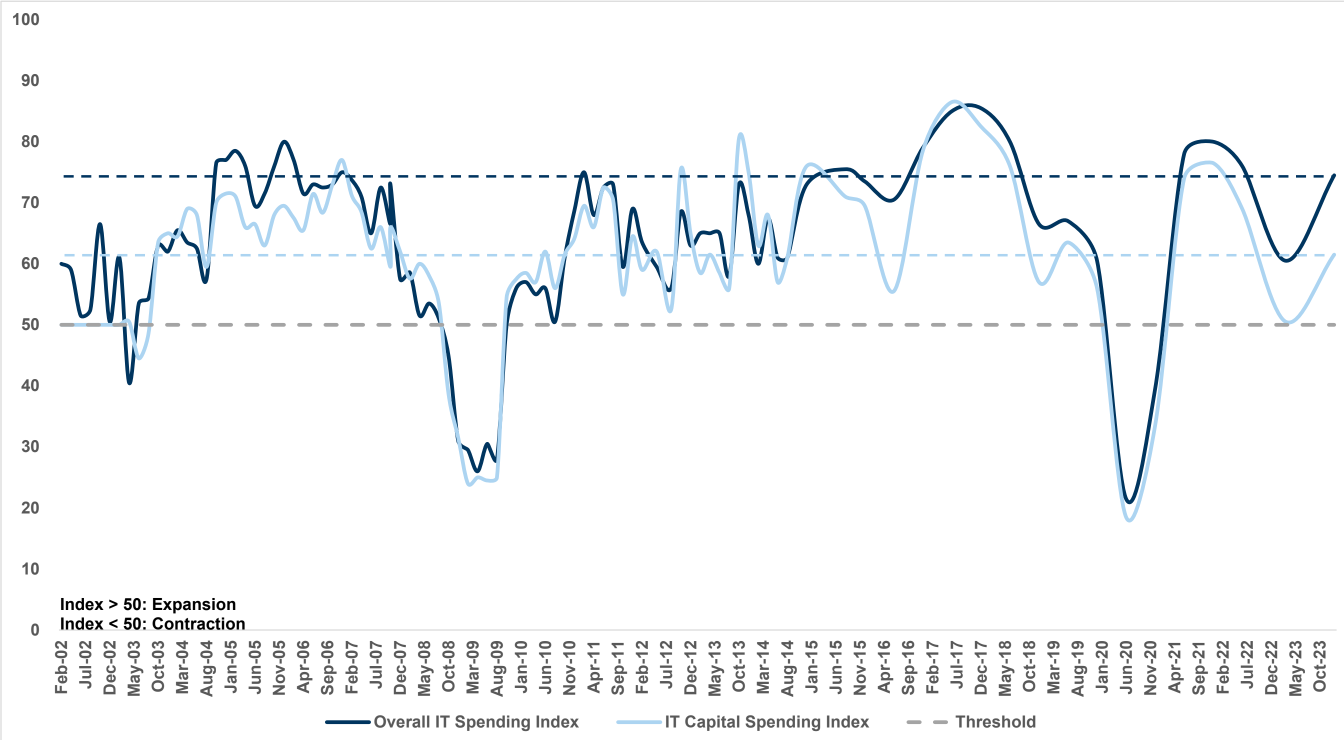
Security Software: (1) Security remains the top investment priority for CIOs. 47% of CIOs polled expect Security spending to accelerate in 1H23, vs. 46% in 2H22. **(2)** By category, Cloud surpassed Endpoint as a priority, while Identity moved down to priority #3 (from #2 in June). **(3)** Spending on physical network security appliances is expected to stay relatively flat over 3 years (better than expectations for negative in 2020 and 2021), likely reflecting timing of refresh cycles. Software subscription spending is expected to increase, implying an ongoing mix shift toward software form factors. **(4)** By vendor, highest net strength: MSFT, CRWD, NET, PANW, OKTA. Most improved: FTNT, NET, CSCO.

Detailed survey results: IT spending closing into contraction territory

Index Results: Overall IT and Capital IT Spending intentions rebound from March 2023

Our latest survey of CIO spending intentions for January 2024 notably inflected relative to our March 2023 survey. Our Overall IT Spending Index increased to 74.5 from 60.5 and our IT Capital Spending Index increased to 61.5 from 50.5. Both indices remain healthily above where they bottomed in June 2020. Our survey suggests that CIOs are adjusting to a potentially “higher-for-longer” rates environment, but appreciate the need to pursue digital transformation initiatives given the associated efficiencies.

Exhibit 2: Overall IT Spending rebounded to historically elevated levels; IT Capital Spending levels returned to historical average levels



Index based on your current thinking, how do you expect your overall 2024 IT spending growth to be relative to 2023? What do you expect your IT capital spending growth (spending on new equipment and software only; not including staffing, services, depreciation, occupancy, or other) to be in 2024?

Source: Goldman Sachs Global Investment Research

IT and capital spending index methodology

Our IT Spending indices (Exhibit 2) summarize our detailed survey data on forward spending expectations in terms of directional changes, thus providing a continuous data series across many years. The indices are determined by a methodology similar to that used by the ISM manufacturing indices, although our index is more forward-looking in that it gauges forward-year spending expectations, as opposed to the ISM indices which gauge current spending. Responses indicating "spending growth" in the coming year receive a weighting of 1.0, responses of "no change" receive a weighting of 0.5, and responses indicating "declining spending" receive a weighting of zero. Thus, an index value above 50 indicates expected spending growth, while a value below 50 indicates expected contraction.

A majority of respondents are expecting spending to be up in 2024

Our Overall IT Spending Index inflected positively to 74.5 from a depressed level of 60.5 in March 2023. While taking stock in this inflection, it does remain below strong December 2021 (80.0) and June 2022 (76.0) levels.

The number of respondents expecting to increase Overall IT Spending increased to 68% (from 49% prior), while the number expecting a decrease in Overall IT Spending was 19% (from 28% prior).

Respondents expecting to increase spending by 5%+ represented 27% of the sample, notably above the March 2023 figure of 16%. Conversely, respondents expecting to decrease spending by 5%+ turned in at 15%, slightly above the March 2023 figure of 14% (Exhibit 3).

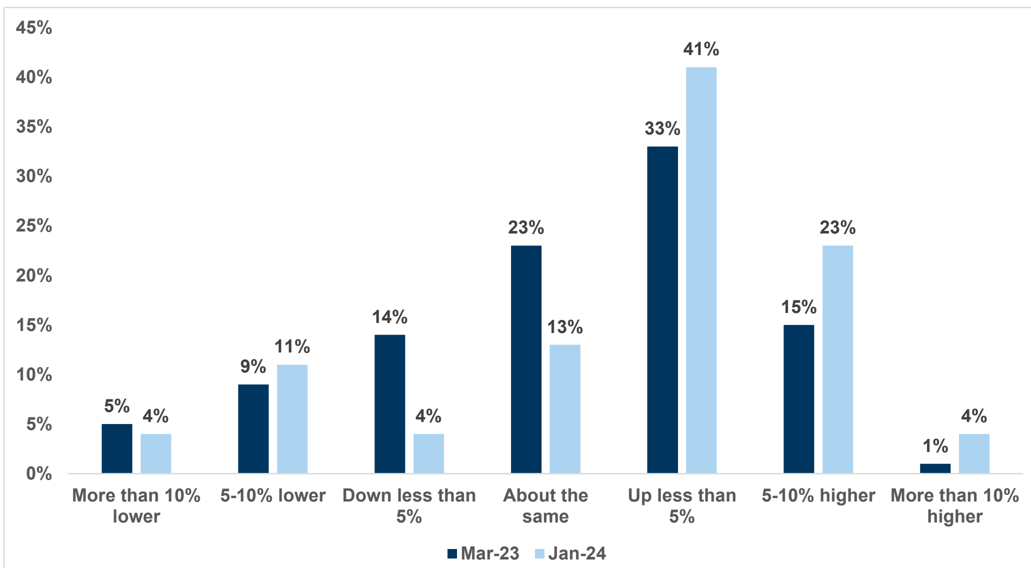
Our IT Capital Spending Index also inflected positively to 61.5 from a depressed level of 50.5 in March 2023. While taking stock in this inflection, it does remain below strong December 2021 (76.0) and June 2022 (69.0) levels.

The number of respondents expecting to increase IT Capital Spending increased to 50% (from 38% prior), while the number expecting a decrease in IT Capital Spending was 27% (from 37% prior).

Respondents expecting to increase spending by 5%+ represented 28% of the sample, notably above the March 2023 figure of 13%. Conversely, respondents expecting to decrease spending by 5%+ turned in at 20%, above the March 2023 figure of 13% (Exhibit 4).

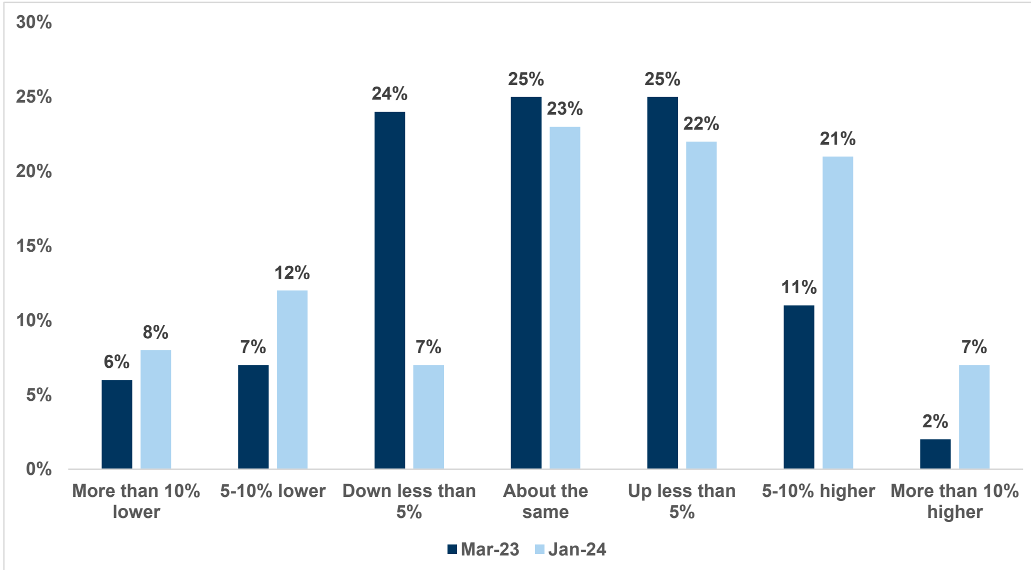
Exhibit 3: The Overall IT Spending outlook showed higher proclivity for increased spending compared to the March 2023 survey.

Underlying responses driving the IT Spending Index



Source: Goldman Sachs Global Investment Research

Exhibit 4: IT Capital Spending intentions skew more positively relative to March 2023
Underlying responses driving the IT Capital Spending Index



Source: Goldman Sachs Global Investment Research

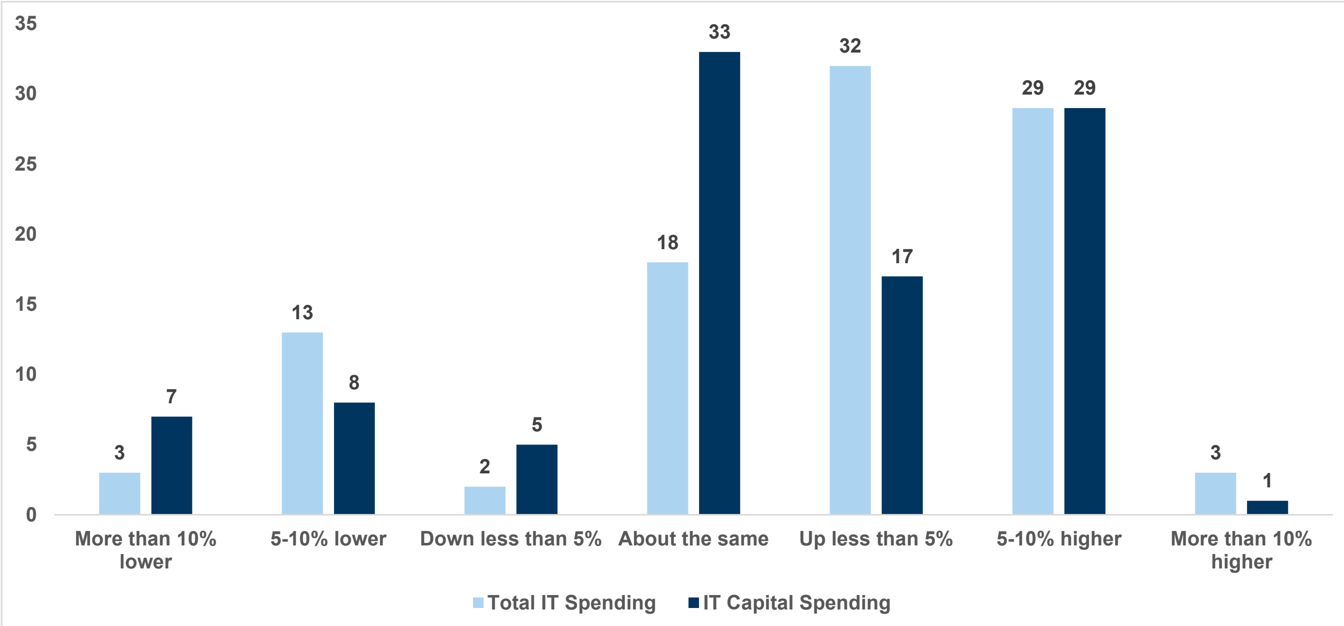
Respondents expect slightly better spending trends in 1H24 relative to 1H23

We asked CIOs on their expectations for Overall IT Spending and IT Capital Spending specifically in 1H24 versus 1H23.

Regarding Overall IT Spending, 64 respondents expect an increase in spending in 1H24 (versus 51 prior), 18 respondents expect spending to decrease (versus 13 prior), and 18 respondents expect spending to be the flat (versus 36 prior).

Regarding IT Capital Spending, 47 respondents expect an increase in spending in 1H24 (versus 37 prior), 20 respondents expect spending to decrease (versus 19 prior), and 33 respondents expect spending to be flat (versus 44 prior).

Exhibit 5: 1H24 spending shows promise following pressured budgetary environments in 2022 & 2023
Question: "What do you expect your IT Spending to be in 1H24 relative to 1H23?"



Source: Goldman Sachs Global Investment Research

Key spending priorities and strategic vendors

Microsoft, Amazon and Cisco continue to dominate the strategic vendor rankings

Respondents expect today's top three vendors to continue to maintain their pole position in 3 years. Microsoft remains the clear leader with 26% of the vote today, with Amazon (#2) and Cisco (#3) garnering 11% each, and Salesforce.com (#4, 6%) rounding out the rankings for the top strategic vendors. Notably, Salesforce saw a rise from being ranked 10th prior.

In three years, Microsoft (26% of the vote) is expected to maintain 1st place, with Amazon (#2) and Cisco (#3) maintaining their positions with 14% and 7% of the vote, respectively. Google (7%) is expected to move up to 4th place (from 8th currently), with Oracle (5%) and VMware (5%) expected to share 5th place.

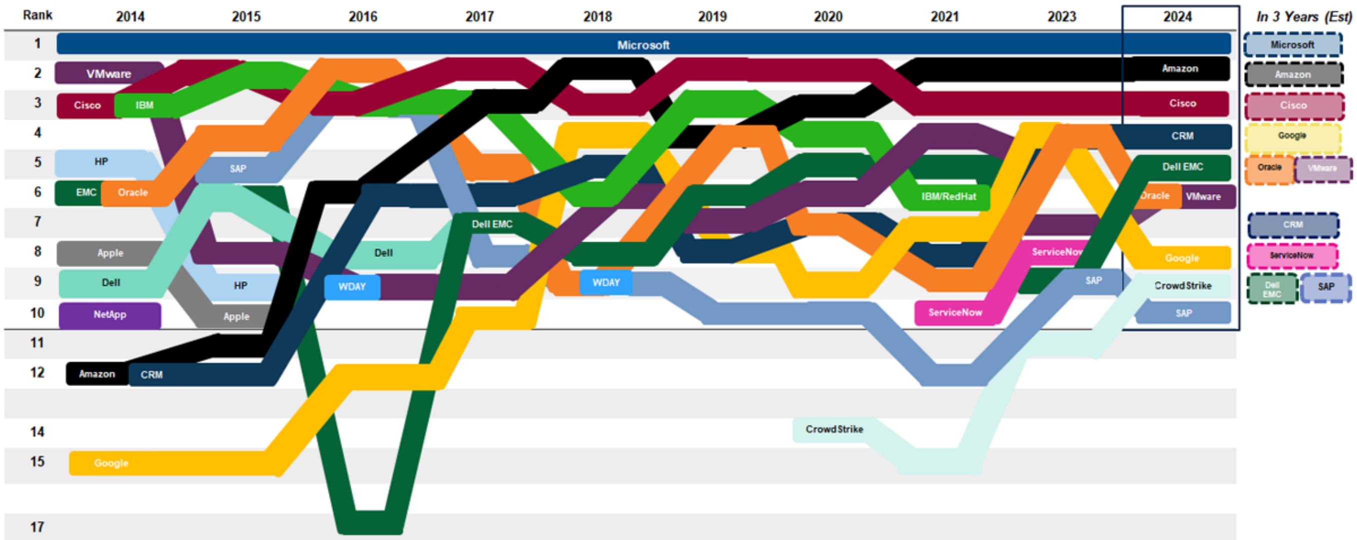


Exhibit 6: Who do you view as your top strategic IT vendors?
Expectations vs. Reality: December 2020 survey vs. January 2024 results

	Expectation (Dec. 2020 3Y forecast)	Reality (Jan. 2024 actual ranking)
1	Microsoft	Microsoft
2	Amazon	Amazon
3	Cisco	Cisco
4	Google	Salesforce/Tableau
5	VMware	Dell EMC
6	Zoom Video	Oracle, VMware
7	Salesforce	
8	Dell EMC, IBM/Red Hat	Google
9		Crowdstrike
10	Okta	SAP

Source: Goldman Sachs Global Investment Research

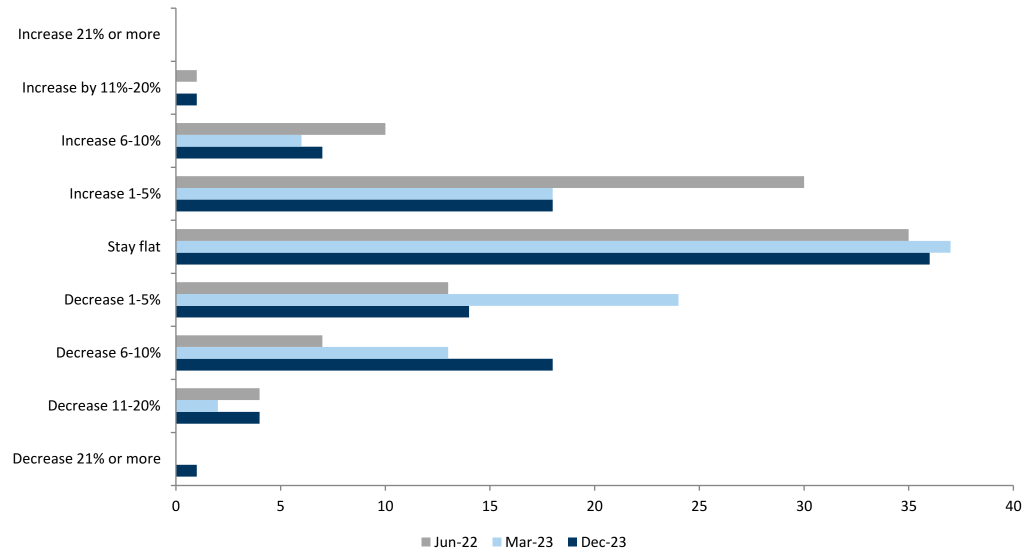
Subsector focus: Servers and PCs

Server spending expectations modestly higher

Expectations for server spending increased from our prior survey in March 2023 but declined from our June 2022 survey. In our December 2023 survey, 26% of respondents expect server spending to increase over the next 12 months, an improvement from 24% in March 2023 but worse than 41% in June 2022. 36% of respondents expect spending to remain flat, compared to 37% and 35% in our previous two surveys. 38% of respondents expect spending to decrease, compared to 39% and

24% in our previous two surveys, respectively. We expect growth in the server market to be primarily driven by demand for AI-infrastructure.

Exhibit 7: In terms of your server spending, what do you anticipate as the most likely scenario over the next 12 months?

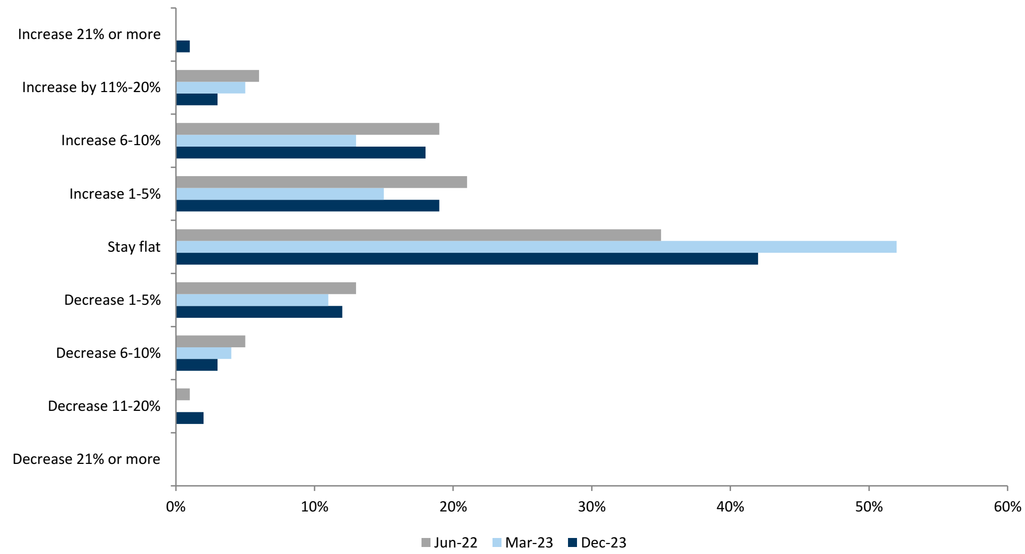


Source: Goldman Sachs Global Investment Research

PC spending expectations improve

In our latest survey, 41% of respondents expect an increase over the next 12 months, better than the 33% in our March 2023 and slightly worse than 46% in our June 2022 survey. This number is ahead of 2018-19 survey responses ranging in the mid-30%s. 42% of respondents now expect units to remain flat, compared to 52% in the March 2023 survey and 35% in the June 2022 survey. 17% of respondents expect PC units to decrease over the next 12 months compared to 15% and 19% in our March 2023 and June 2022 surveys.

Exhibit 8: In terms of your PC units purchase, what do you anticipate as the most likely scenario over the next 12 months?



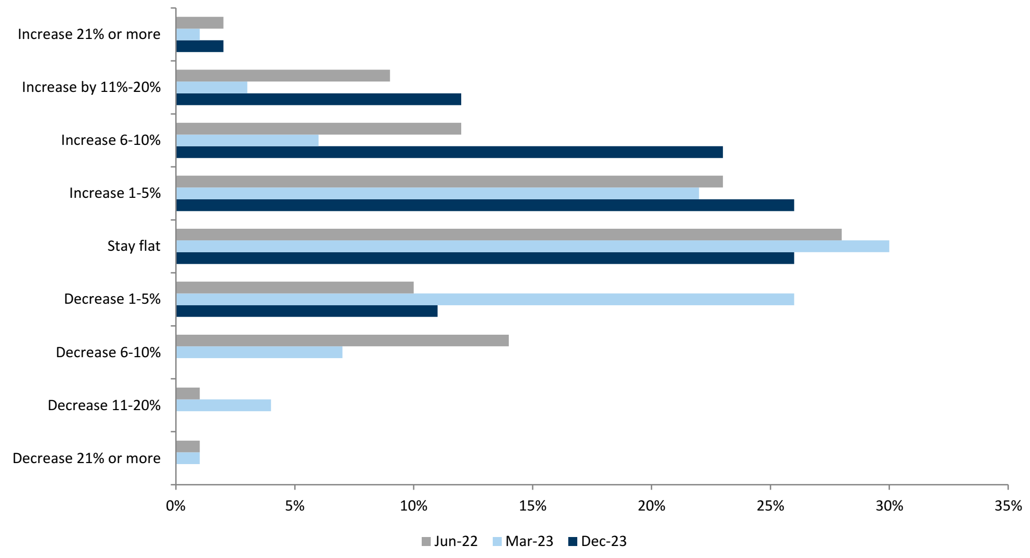
Source: Goldman Sachs Global Investment Research

Subsector focus: Storage

Storage spending expectations increase meaningfully

Expectations for storage spending over the next 12 months were up from our prior survey in December 2023. 63% of respondents anticipate an increase in storage spending, compared to 32% and 46% recorded in our March 2023 and June 2022 surveys, respectively, more in-line with pre-pandemic ranges of 50-60% (2018/19). 26% of respondents expect spending to remain flat, compared to 30% in our prior survey and 28% in the June 2022 survey. Finally, 11% of respondents now expect storage spending to decline over the next 12 months, lower than the 30%/26% in our prior two surveys.

Exhibit 9: In terms of your storage spending, what do you anticipate as the most likely scenario over the next 12 months?



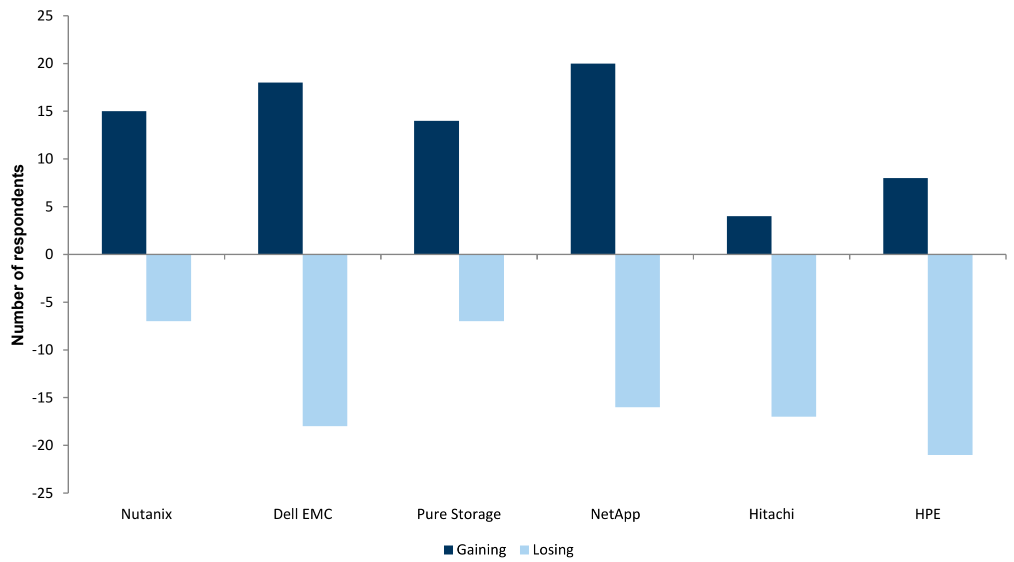
Source: Goldman Sachs Global Investment Research

Pure Storage, Nutanix, and Dell see more modest wallet share declines

In each survey we ask CIOs to indicate their expectation for the direction of storage wallet share by vendor. Our respondents expect Pure Storage, Nutanix, and NetApp to net gain share. HPE and Hitachi are expected to see net negative wallet share impacts, while Dell EMC is unchanged.

Exhibit 10: 4Q23 Survey

Are the following vendors gaining or losing share of wallet in your storage budget this year (for diversified vendors, please only consider the storage portion)?



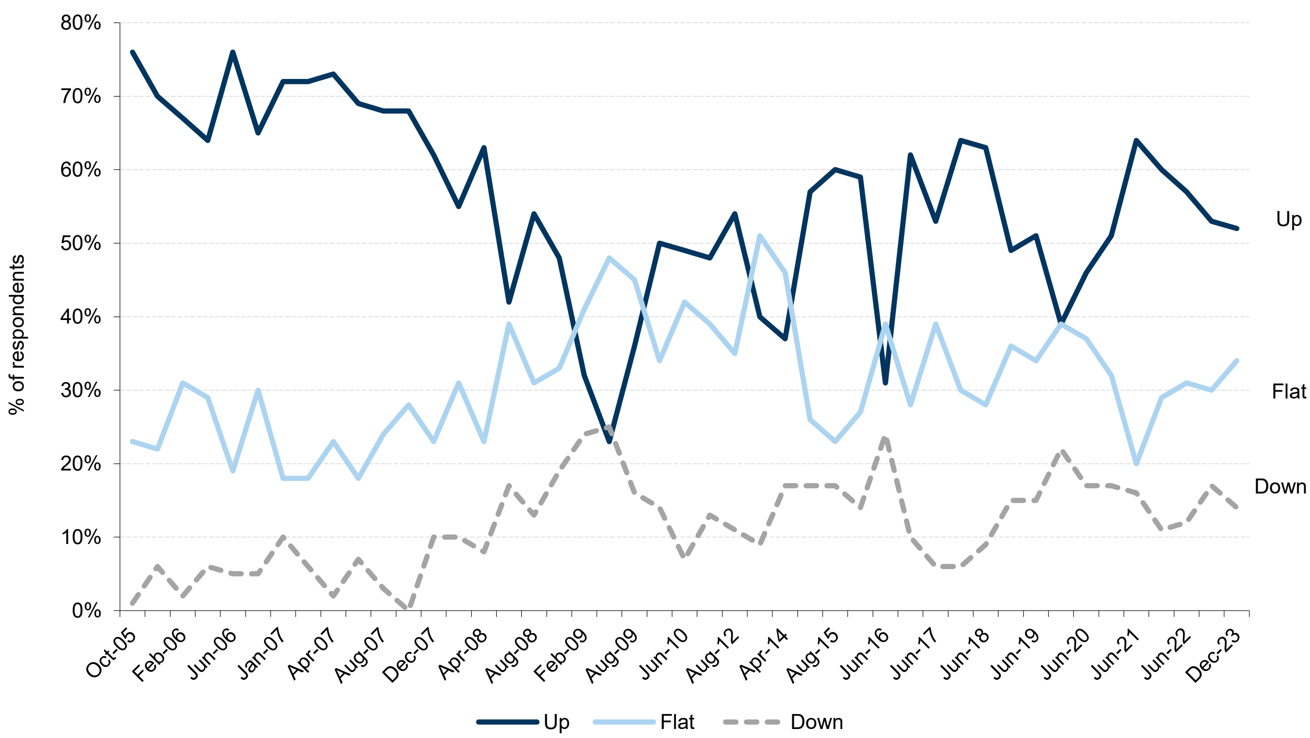
Source: Goldman Sachs Global Investment Research

Subsector focus: Networking

Network equipment spending outlook slightly weaker than March 2023

Since 2003 we have asked our CIO respondents about their spending intentions for Networking Equipment over the next 12 months. In our December 2023 survey, 52% of respondents indicated that they expect to increase networking spend over the next year, slightly lower than 53% in our March 2023 survey and 57% in our June 2022 survey. This is in-line with the 5-year average of 53%, but shows weakness in expected spending over the past 2 years after the peak we saw in June 2021 when 64% of respondents were expected to increase their spending. 14% of our survey respondents now expect to reduce their spending over the next 12 months, compared to 17% and 12%, respectively, in our previous two surveys. 34% of survey respondents expect spending to remain flat, compared to 30% and 31%, respectively, in our previous two surveys.

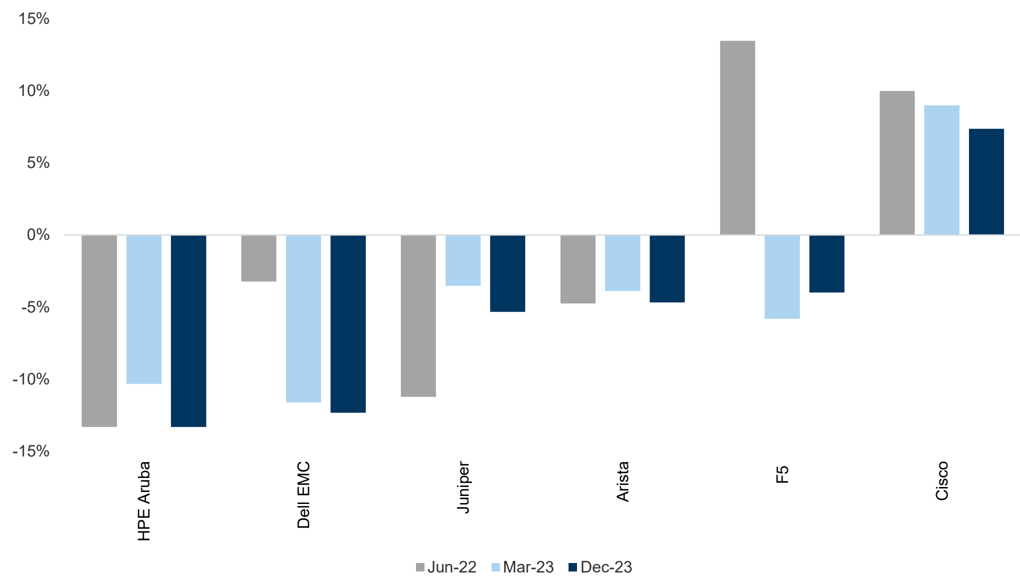
Exhibit 11: In terms of your overall network equipment spending, what do you anticipate as the most likely scenario over the next twelve months? Please select one.



Source: Goldman Sachs Global Investment Research

Cisco sees net positive wallet shares

Exhibit 12: Are the following vendors gaining or losing share of wallet in your networking budget this year (for diversified vendors, please only consider the networking portion)?
Net share gain/ (loss)



We define net share gain/loss as the number of net respondents who see a vendor gaining share, divided by the number of respondents that use the vendor's networking products.

Source: Goldman Sachs Global Investment Research

Share gainers

Cisco was the only net positive share gainer in our latest survey, with a 7% net share gain in December 2023 compared to 9% and 10% net share gains recorded in March 2023 and June 2022 surveys. Of the 100 respondents surveyed, 25 indicated that Cisco was gaining share of wallet, 18 indicated Cisco was losing share, 52 said that spending levels were unchanged, and the remaining 5 did not use Cisco products.

Share losers

Arista recorded a 5% net share loss compared to 4% loss in March 2023. In this survey, of the 64 respondents who use Arista's products, 4 indicated that Arista was gaining share of wallet, while 7 indicated that it was losing share of wallet, and the remaining 53 indicated that spending levels remained unchanged.

Juniper recorded 5% net share loss, compared to 4% loss in March 2023 and 11% loss in June 2022. Of the 75 respondents that use Juniper products, 8 indicated that they are gaining share compared to the 12 that indicated share losses.

F5 recorded a 4% net share loss, compared to -6% loss and 13% gain in March 2023 and June 2022 respectively. Of the 75 respondents who use F5's products, 7 indicated that F5 was gaining share of wallet, 10 indicated F5 was losing and the remaining 58 indicated that spending levels were unchanged.

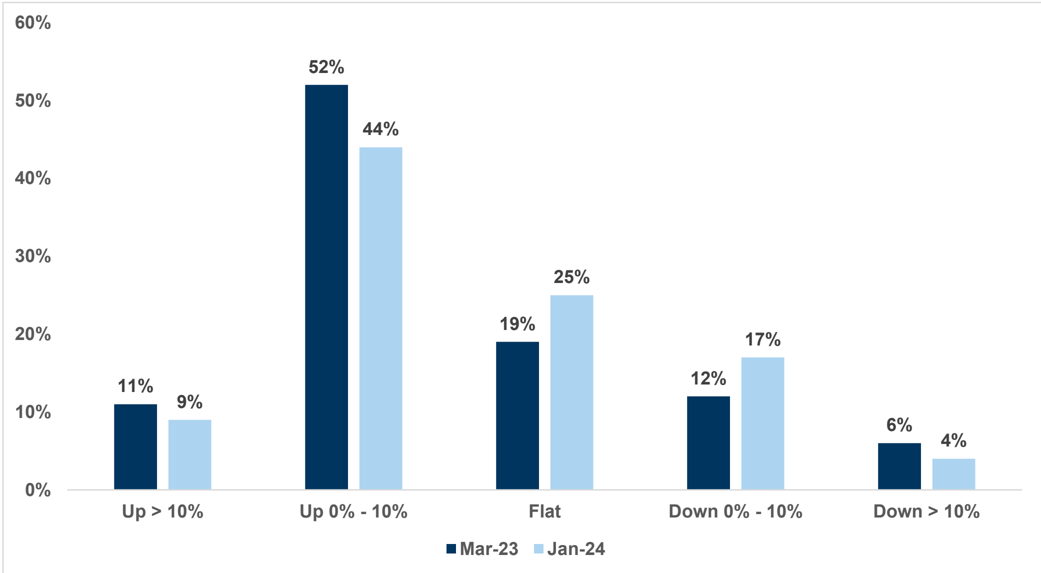
HPE and Dell EMC were highlighted as the other share losers, with 13% and 12% net share loss, respectively. 21 respondents see HPE losing share, while 11 expect it to gain share. For Dell EMC, 24 respondents expect it to lose share, while 14 respondents expect it to gain share.

Subsector focus: IT Services

Discretionary IT Services spending intentions show some degradation versus March 2023 survey.

Discretionary IT Services spending intentions slightly deteriorated versus our March 2023 data points. We asked CIOs how they expect their discretionary budgets for IT Services to trend in 1H24 (Exhibit 13). The number of respondents forecasting IT Services spending to rise dropped to 53% (from 63% prior). The number of respondents forecasting IT Services spending to remain flat increased to 25% (from 19%). Lastly, the number of respondents expecting IT Services spending to be down increased to 21% (from 18%).

Exhibit 13: In 1H24 (compared with 1H23), how do you expect your discretionary budget for IT consulting and outsourcing to trend?
March 2023 vs January 2024

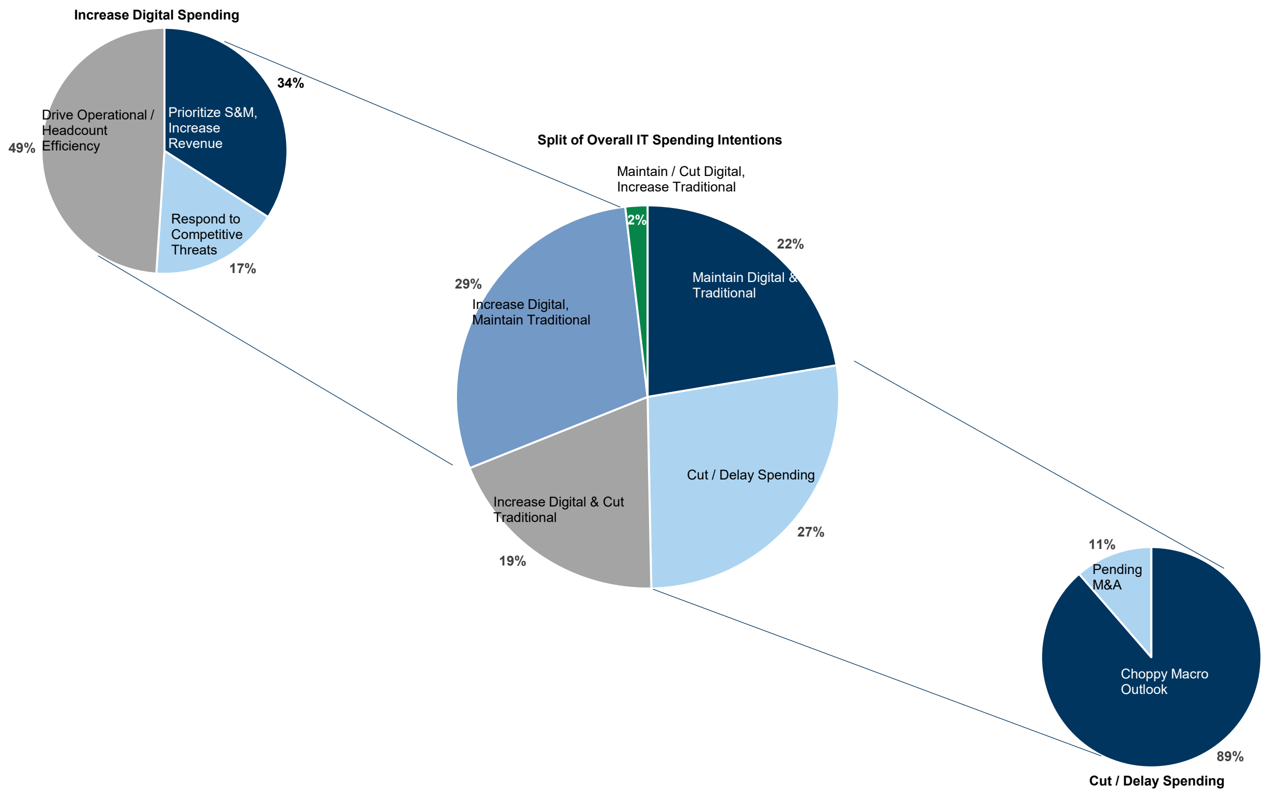


Source: Goldman Sachs Global Investment Research

Outlook for spending on Digital Services remains constructive

We asked respondents about planned changes in spending priorities for IT Consulting and Outsourcing vendors in 1H24. Approximately 22% of respondents expect to keep overall external spending on services at around the same level and mix, with 19% expecting to fund increases in digital spending with cuts in traditional programs and 2% expecting to increase traditional while maintaining or cutting digital. Of the 48% of respondents who plan to increase their Digital spending, 34% are prioritizing sales and marketing-related applications, 17% are increasing spending to respond to specific competitive threats, and 49% are seeking to gain cost efficiencies. Of the 27% of respondents who plan to cut overall spending on IT Services, the vast majority (89%, down from 96% in March 2023) cited a choppy macro outlook, while 11% cited pending merger activity.

Exhibit 14: In 1H 2024, what changes do you expect in terms of your spending priorities with IT Consulting & Outsourcing vendors? (choose all that apply)
January 2024

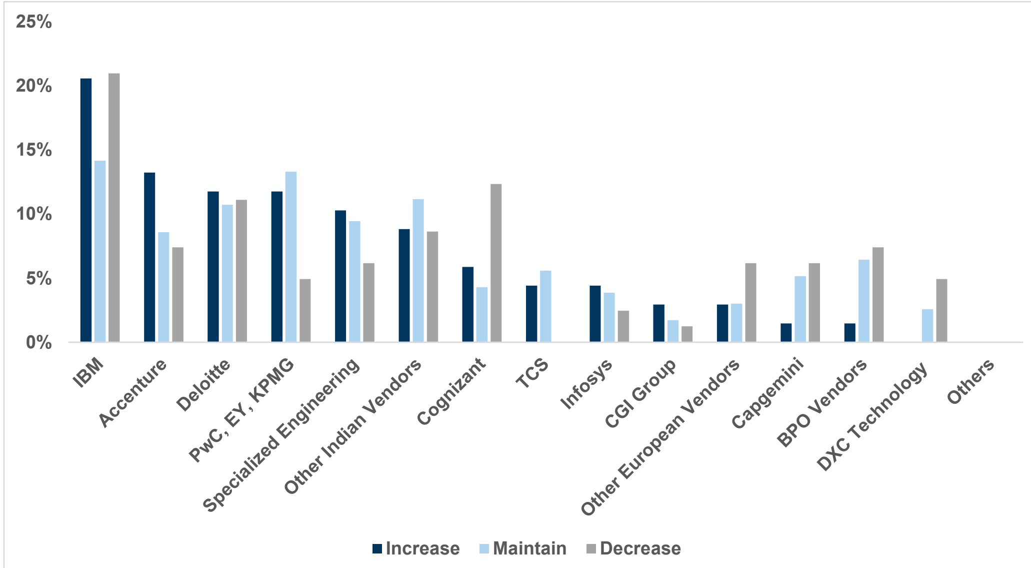


Source: Goldman Sachs Global Investment Research

Vendor rankings: more spending across vendors as clients look ahead

We asked respondents how they plan to change their spending (increase, decrease or maintain) with various IT Services vendors over the next 12 months. We noted more respondents are maintaining spend across vendors vs decreasing spend.

Exhibit 15: How are you planning to change spending over the next twelve months with your various IT services vendors? Select all that apply.
January 2024

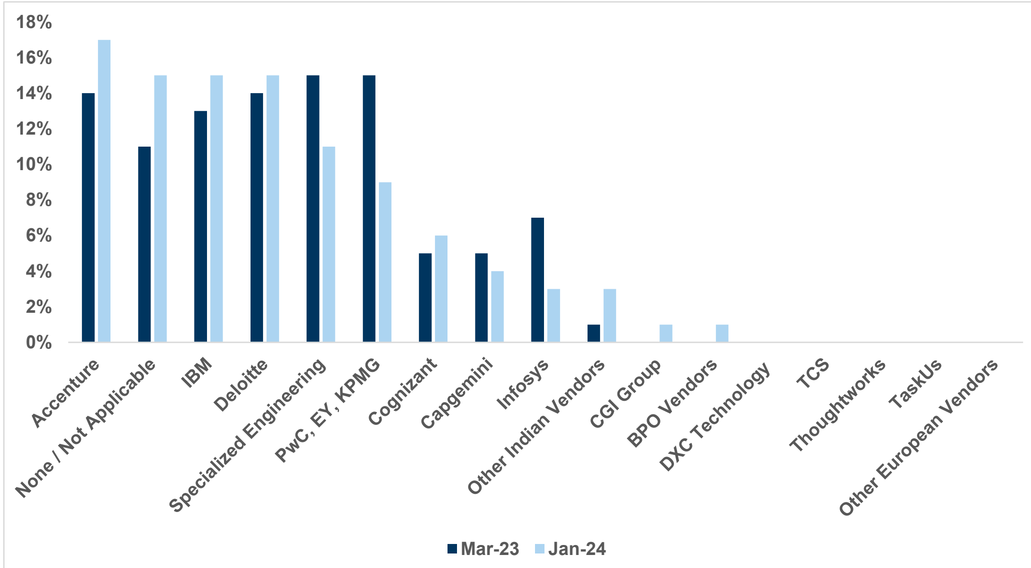


Source: Goldman Sachs Global Investment Research

Digital Services: Accenture, IBM, Deloitte, and specialized firms remain well positioned for Digital spending

In addition to our overall IT Services vendor rankings, we asked respondents which IT services vendor is best positioned for the shift to Digital service offerings, including SaaS, cloud, social, mobile, and analytics (Exhibit 16).

Exhibit 16: Which IT services vendor is best positioned for the shift to Digital Technologies (SaaS, cloud, social, mobile, analytics)?
March 2023 versus January 2024



*Specialized engineering/digital vendors- EPAM, Globant; **BPO vendors- Genpact, Conduent (formerly Xerox), EXL, WNS; ***Other Indian vendors- Wipro, HCL, Tech Mahindra; ****Other European vendors- Atos, Indra Sistemas, Tieto

Source: Goldman Sachs Global Investment Research

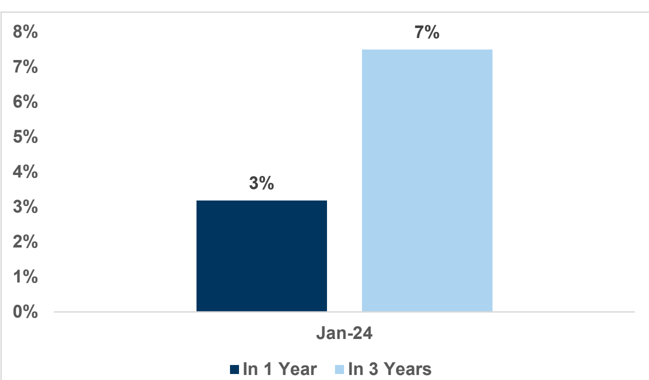
Subsector focus: Software

Strength across cloud continues. Public cloud adoption intentions, both today & in three years, remain strong, as the overall trend points to an increase in the number of workloads moving to the cloud, underscored by companies resuming digital transformation (DX) initiatives and prioritizing cloud adoption. Our most recent results indicated that 29% of workloads are in the cloud today with 47% of workloads expected to be in the cloud in three years. While a slight decrease versus our prior survey (31% / 51%), these numbers exceeded the averages from the last four surveys (24% / 43%). Demand signals for Microsoft Azure remain strong as it continues to be viewed preferentially as an increasingly strategic cloud provider within enterprises for both IaaS & PaaS. We reiterate our confidence in a strong demand environment for SaaS applications and remain bullish in our longer-term view of public cloud services as we expect enterprises to continue investing toward longer-term DX initiatives and application modernization efforts despite an elevated rates environment and a persistently challenging macro backdrop. We continue to expect DX-related spending to outpace overall IT spend for the foreseeable future. Furthermore, we highlight that database spending intentions were less negative versus our prior survey, with a 24% / 30% split on intentions to increase versus intentions to decrease spend. This compared to prior results of 20% / 36%. We also note that database spending intentions favored Microsoft (33% expected increased spending) versus continued weakness for Oracle (41% expected decreased spending). Additionally, despite Generative AI's (Gen-AI) popularity, many CIOs showed hesitancy in allocating material budget towards this over the next year, albeit with higher spending intentions noted on a three-year timeline.

While currently garnering de minimus budget allocation, Gen-AI could gain material budget traction within three years. In introducing Gen-AI specific questions for the first time, we aimed to understand how CIOs plan to allocate IT budgets towards Gen-AI over the NTM and 3 years. The answers to these questions will also serve as the benchmark we will track demand against in future iterations. Given Gen-AI's relative nascency, it was unsurprising that our calculations implied only 3% of budgets will be allocated towards Gen-AI in C23, with 86% of CIOs intending to allocate between 0% (30%) and 1 - 5% (56%) of budgets towards Gen-AI. However, within 3 years, CIOs are expecting this figure to >2x to 7% of budgets (Exhibit 17), with 48% allocating 1 - 5%, 25% allocating 5 - 10%, and 15% allocating 10 - 15%. While acknowledging this is only the first of many future data points, we highlight that our initial responses around public cloud adoption (4% / 9%) somewhat mirror the initial Gen-AI response rate (3% / 7%), potentially providing a loose framework in thinking about how this behavior could progress moving forward.

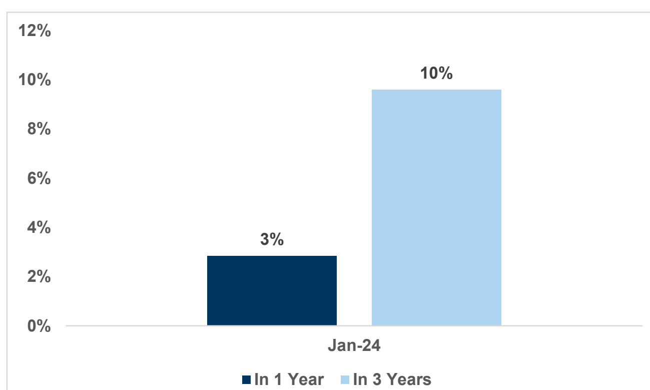
Furthermore, we asked CIOs about what percent of cloud workloads they expected to be Gen-AI within 1 and 3 years, and what percent of their install base could utilize an Office Copilot in the next 1 and 3 years. On a 1-year basis, both categories came in at 3% - matching the percent of IT budgets allocated to Gen-AI today. With continued prudence around budgets, coupled with initial questions around security and data privacy, this lower level of near-term adoption makes sense. Looking ahead 3 years, however, these respective categories are expected to garner 10% and 13% of budgets. We believe this increased adoption cadence is likely a function of 1) easing budgetary constraints as the Fed eventually cuts interest rates and the cost of capital becomes more palatable; 2) reduced concerns around data security & privacy as users gain more knowledge around Gen-AI / LLMs, coupled with a potential uptick in the number of company-specific LLMs, thereby giving customers comfort that their data isn't being used to train larger, broader models; and 3) customers gaining increased clarity around the potential efficiency gains driven by Gen-AI as more data and studies become available.

Exhibit 17: Expected Gen-AI budget allocations to >2x in 3 years
Question: "What percent of IT budgets could be allocated to Gen-AI in the next 1 year? 3 years?"



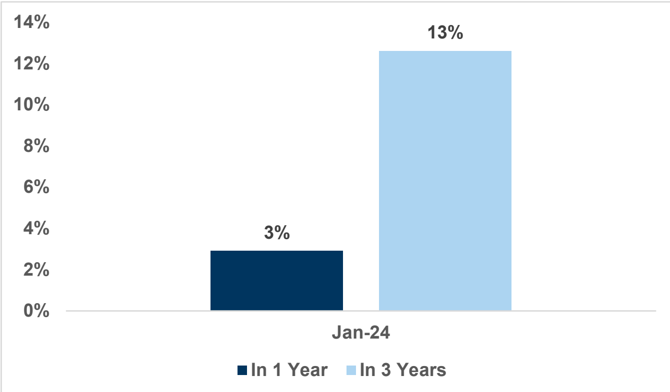
Source: Goldman Sachs Global Investment Research

Exhibit 18: Gen-AI cloud workloads could grow >3x in 3 years
Question: "What percent of cloud workloads do you expect to be Gen-AI in 1 year? 3 years?"



Source: Goldman Sachs Global Investment Research

Exhibit 19: Copilot usage could grow >4x in 3 years, likely underscored by companies seeking continued efficiencies
Question: "If you plan on using Office Copilot what percent of the install base could be on Office Copilot in the next 1 year? 3 years?"

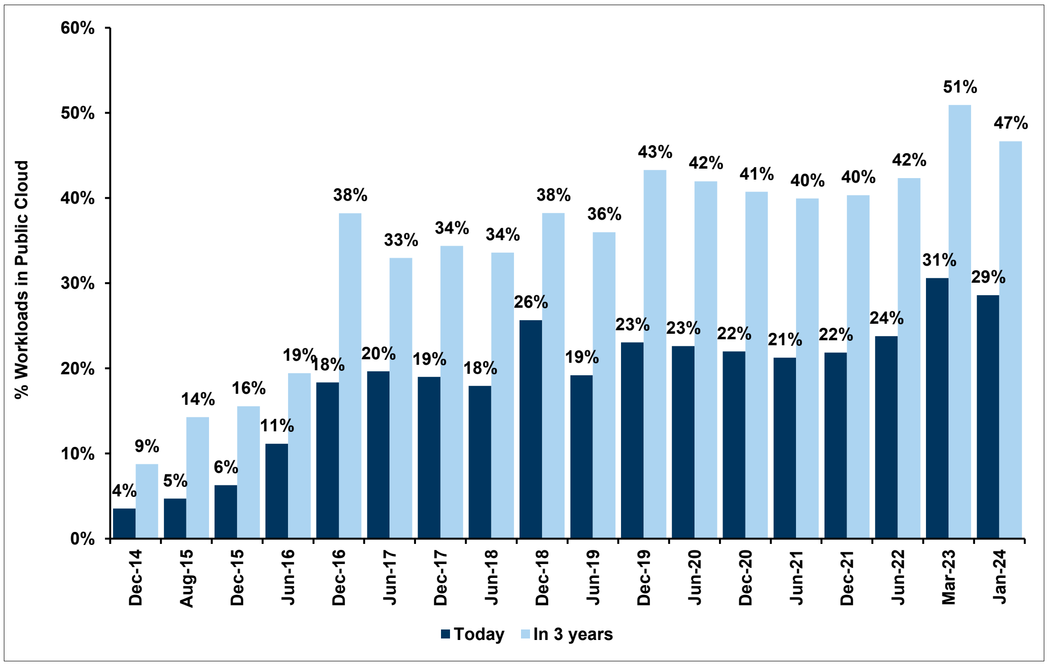


Source: Goldman Sachs Global Investment Research

The survey shows that while only 29% of workloads are run in public clouds today, CIOs expect this to move to 47% within three years. In a slight reversion versus our prior survey (while still maintaining the overall upward trajectory), current public cloud adoption levels dipped to 29% (versus 31% prior), with 47% expecting public cloud adoption in 3-years (versus 51% prior). Excluding our most recent survey, these values signal a step-up from the range seen in the last 4 surveys of 21% - 31% (current adoption) and 40% - 51% (3-year adoption), as seen in Exhibit 20. Furthermore, we note that since the respondents vary every survey, we believe the G2K cloud migration has increased to ~30% of current workloads (versus the average of 24% seen in the prior 4 surveys).

At 47%, 3-year expectations for workloads moving to cloud are close to all time highs (51%) and represent a notable increase from the average (43%) seen in the prior 4 surveys. We believe this helps validate our thesis that public cloud adoption is a durable long term tailwind for the sector. The percent of workloads in cloud today, while close to all-time highs, (29%), fell short of expectations from 3 years ago (41%). While the data suggests that workload migration has consistently lagged expectations by 13pp (average) since December 2019, we believe this could be a byproduct of: 1) initial migration hurdles, including ensuring a well-thought-out strategy exists and appropriate personnel are aligned, and 2) tighter IT budgets, especially throughout 2022 and 2023 against a higher interest rate environment. Given the trends we are seeing, coupled with company commentary that cloud optimization trends have stabilized, we believe cloud spending could resume versus the more pressured spend environment seen throughout 2022 / 2023. We see a long runway for continued cloud migrations in the foreseeable future as certain applications remain constrained by on-premise deployments (e.g., ERP), and the challenges in maintaining legacy, on-prem architectures become more apparent. Furthermore, we believe the adoption of more Gen-AI based workloads could act as a tailwind to both migration and overall cloud workload growth, as posited in our MSFT NDR note. Namely, we point to cloud optimization savings being redeployed at a more expeditious rate than previously seen coupled with Gen-AI workloads steadily growing as helping underpin this view.

Exhibit 20: Percentage of workloads in the cloud - both current and expected - continues trending upward
Question: "What percent of your applications have you moved to public cloud platforms today and what do you expect in 3 years from now (e.g. Amazon AWS, Microsoft Azure, Google Cloud Platform, etc.)?

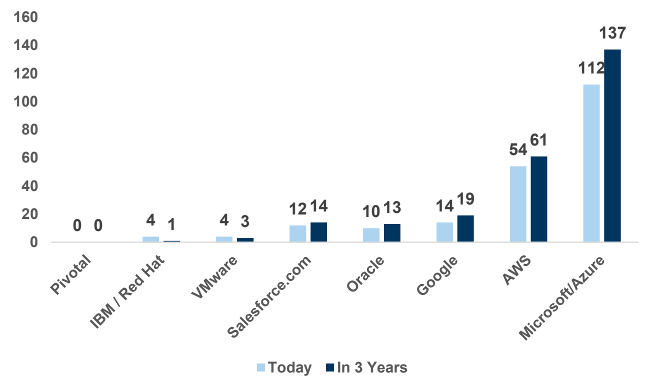


Source: Goldman Sachs Global Investment Research

In PaaS and IaaS, Azure momentum remains strong as adoption expectations increase. In each survey, we also ask CIOs about their vendor choices for public cloud, specifically for IaaS (infrastructure-as-a-service) and PaaS (platform-as-a-service) deployments. As Microsoft and Amazon continue growing in popularity and market share, we have seen consolidation favor these vendors - evident via an increased percentage of total responses skewing towards these vendors. In our most recent survey, 79% of respondents indicated utilizing Microsoft (53%) and Amazon (26%) their for IaaS & PaaS needs. This compares to 65% of respondents choosing Microsoft (43%) and Amazon (22%) in our prior survey.

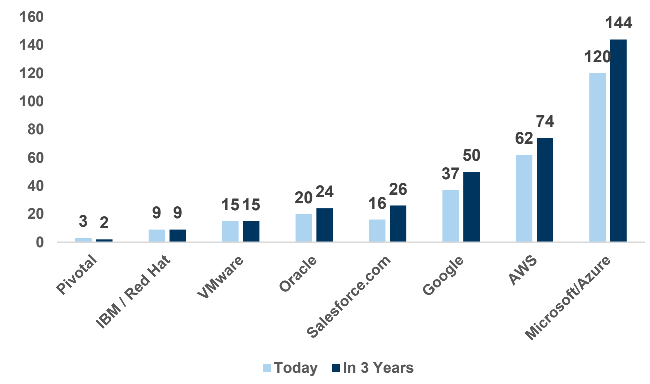
Microsoft also continues to be the public cloud vendor that CIOs expect to use three years from now, holding onto the large gap between its next largest competitor (AWS). Google saw a marked decrease in the number of respondents indicating that they currently leverage GCP (14 versus 37 prior), while the number of respondents who plan to leverage GCP in three years was 19 versus 50 prior.

Exhibit 21: Azure's strength over other vendors continues, response gap remains notable
Question: "Which public cloud vendor(s) are you using today and which will you use three years from now?" | IaaS + PaaS (January 2024)



Source: Goldman Sachs Global Investment Research

Exhibit 22: Which public cloud vendor(s) are you using today and which will you use three years from now?
IaaS + PaaS (March 2023)

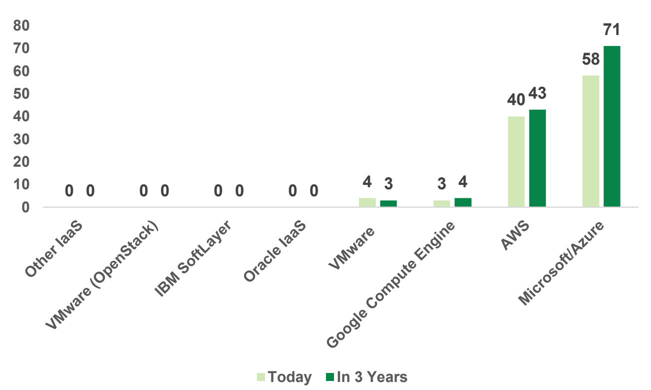


Source: Goldman Sachs Global Investment Research

Regarding IaaS, Microsoft Azure remains the most popular choice for IaaS deployments with 58 respondents, ahead of Amazon AWS with 40. While this data varies from survey to survey, responses in this iteration of the survey continue to suggest that Microsoft Azure will continue having more workloads than AWS over the next three years (Exhibit 23), with 71 CIOs indicating that they plan to leverage Microsoft Azure versus 43 planning to leverage Amazon AWS. We note, however, that workload usage does not directly translate to revenue.

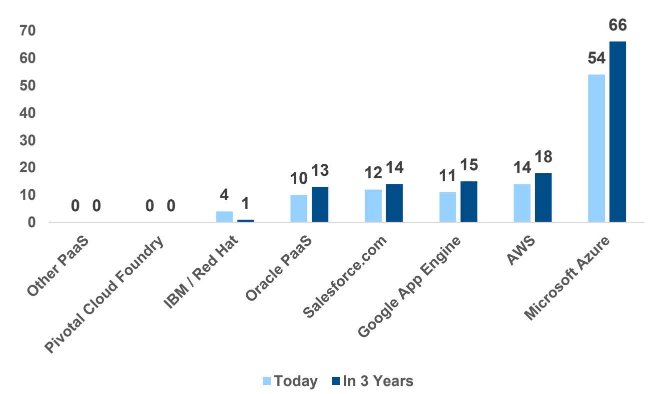
Microsoft's PaaS offering continues to extend its lead over competitors, with 54 survey respondents indicating that they currently leverage Microsoft Azure PaaS and 66 indicating that they plan on using the offering in 3 years. This compares to 14 respondents indicating they are using AWS PaaS offerings with 18 expecting to use the offering in 3 years (Exhibit 24).

Exhibit 23: Azure continues displaying strong share gains, potentially supported by reacceleration seen in F2Q24
Question: "Which public cloud vendor(s) are you using today and which will you will use three years from now?" | (IaaS Adoption, January 2024)



Source: Goldman Sachs Global Investment Research

Exhibit 24: PaaS Adoption - Which public cloud vendor(s) are you using today and which will you use three years from now? (January 2024)
MSFT Azure continues to show strong share gains, potenetially manifested via Azure reacceleration seen in Dec Q

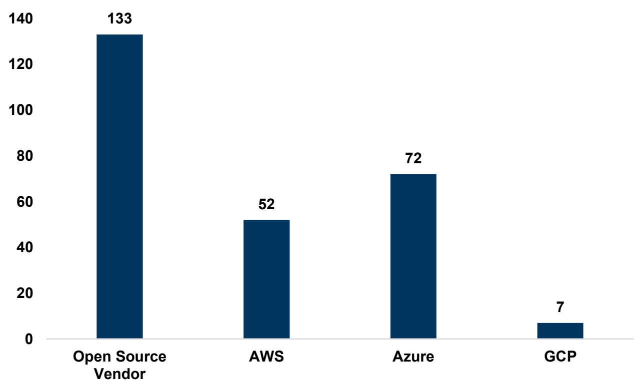


Source: Goldman Sachs Global Investment Research

Azure remains the top choice amongst public cloud providers in fending off competition from open source vendors. Our most recent survey indicated 133 respondents use one of the selected open source vendors listed in Exhibit 26 relative to 131 using similar services from public cloud providers (Exhibit 25). This compares to a 146/116 mix in our prior survey. Azure was cited the most often, with 72 instances of CIOs using competing services from MSFT, followed by AWS at 52 and GCP at 7. Gitlab and Hadoop were the most popular open source tools among respondents, with 34 respondents using Gitlab and 22 using Hadoop. Furthermore, 17 and 18 CIOs indicated they use a competing service from public cloud vendors. Amongst CIOs indicating they use similar services from public cloud vendors, Hadoop (18), Kafka (17), Spark (17), and Jenkins (15) ranked amongst the top 4.

Exhibit 25: Split between open source vendors and major CSPs remains relatively even

Question: “Which of the following commercial open source vendors do you currently utilize? If not, do you currently utilize a similar service offered by a public cloud vendor?”

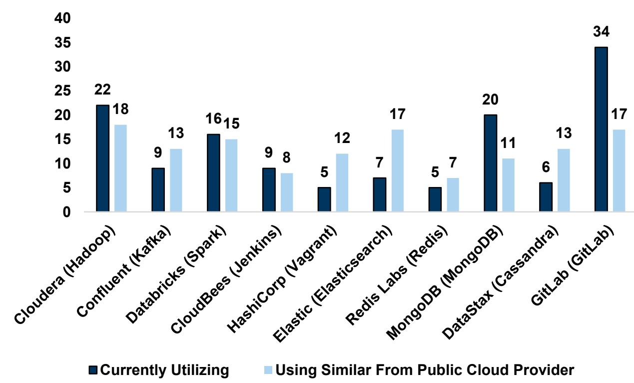


Total number of respondents indicating they use one or more open source offerings or competing offerings from public cloud providers

Source: Goldman Sachs Global Investment Research

Exhibit 26: Gitlab, Cloudera top responses on commercial open source vendor usage

Question: “Which of the following commercial open source vendors do you currently utilize? If not, do you currently utilize a similar service offered by a public cloud vendor?”

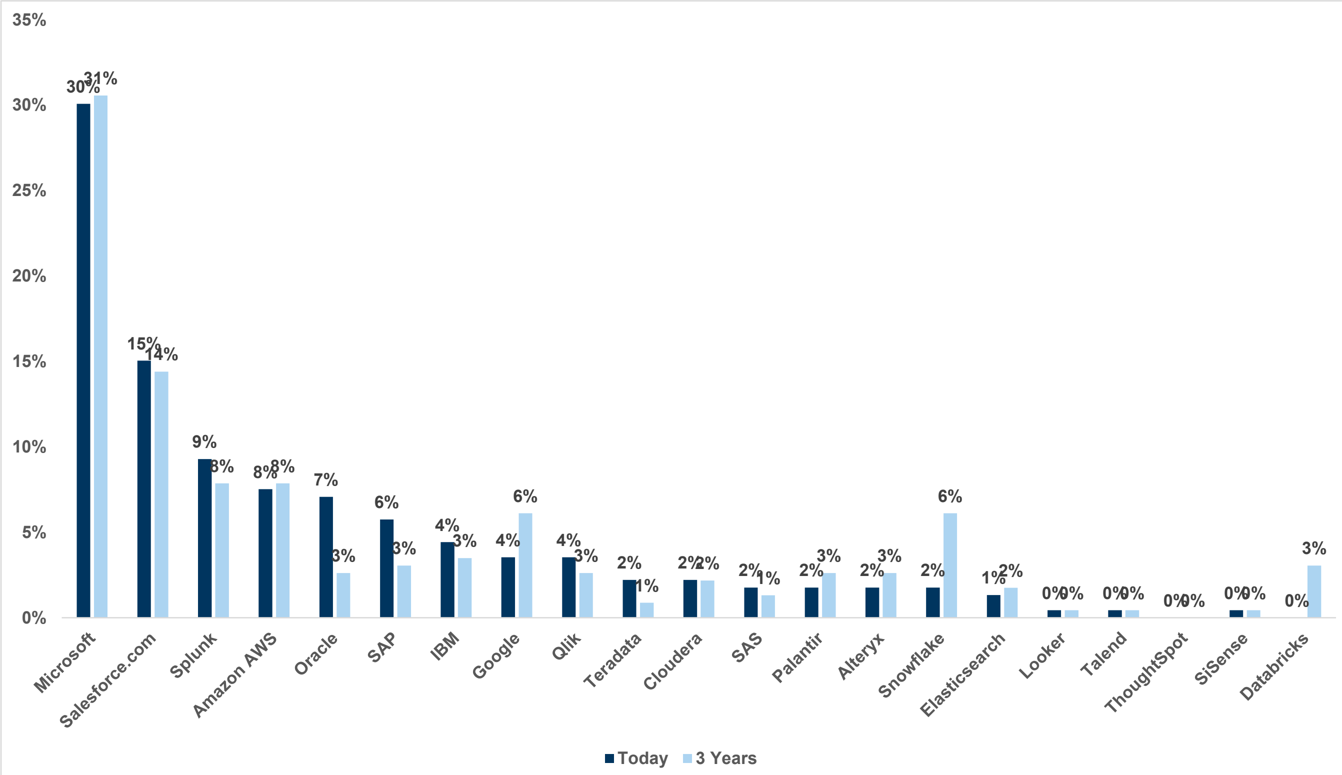


Number of respondents indicating they use open source offerings or competing offerings from public cloud providers

Source: Goldman Sachs Global Investment Research

BI / Analytics: Microsoft, Salesforce maintain lion’s share, Snowflake, Databricks show promising 3-year momentum. The analytics & AI space remains extremely relevant as companies focus on continued DX initiatives. While this type of software continues to be utilized by enterprises for complex use cases and low-code/no-code solutions, the need for greater leverage of a company’s data is democratizing the use of such platforms beyond the traditional IT department. We asked CIOs which BI and analytics vendors they spend the most on today, and how they expect that to change over the next three years. The top three vendors (in terms of responses) are unchanged from our last survey, with Microsoft sitting at 30%, Salesforce/Tableau at 15% and Splunk at 9%. Looking ahead to January 2027E, the outlook remains positive for Microsoft (+100 bps), while Salesforce/Tableau & Splunk (-100bps each), Oracle (-400bps) and SAP (-300bps) are expected to cede share to competitors. Furthermore, in evaluating the 3-year view, we highlight that of the ~1,200bps in market share redistribution, Databricks (+300bps), Google (+200bps), and Snowflake (+400bps) are expected to capture an outsized portion of this opportunity. Lastly, we note our belief believe that these results represent a good proxy for the data warehousing market.

Exhibit 27: Microsoft, Salesforce retain top rankings, Databricks, Google, Snowflake show promising 3-year share gains
Question: "With which of the following vendors do you spend/expect to spend the most on analytics platforms and business intelligence today/in three years (choose 3)?"

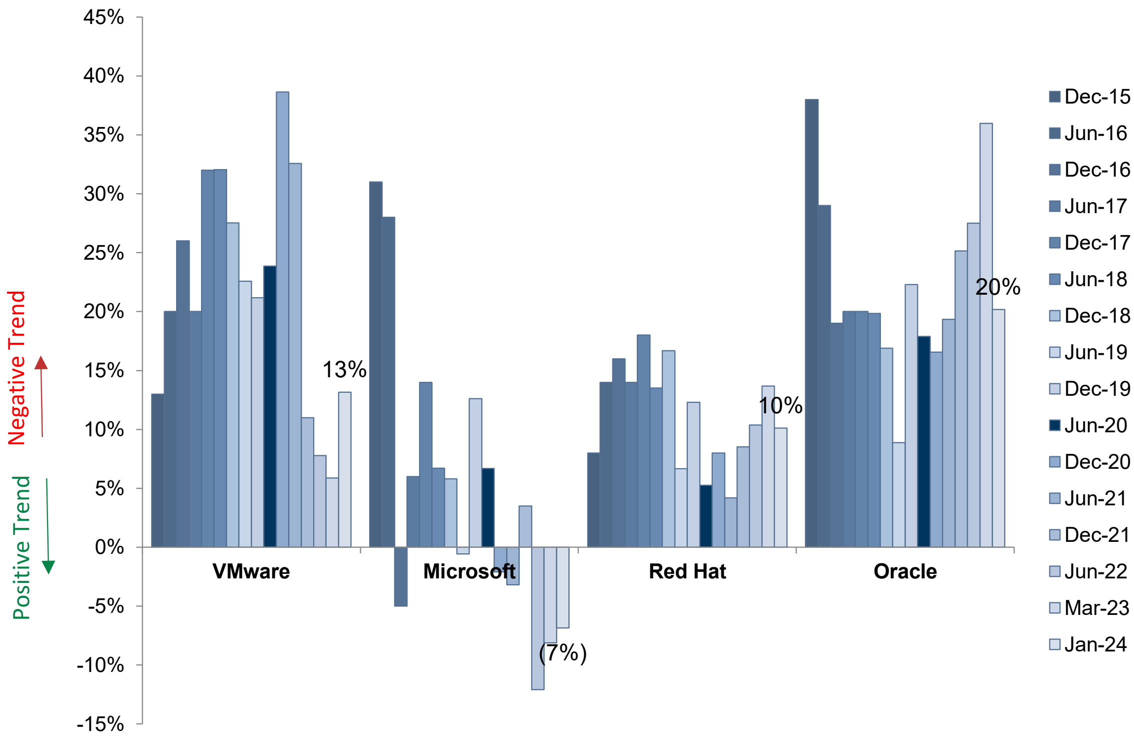


Source: Goldman Sachs Global Investment Research

CIOs continue to expect spending to decline significantly on operating system, database, and middleware; virtualization remains bright spot. Among the various components of the infrastructure software stack, we witnessed the biggest decline in expected spend for operating systems, however declines were largely present across the board. (Exhibit 28 and Exhibit 29).

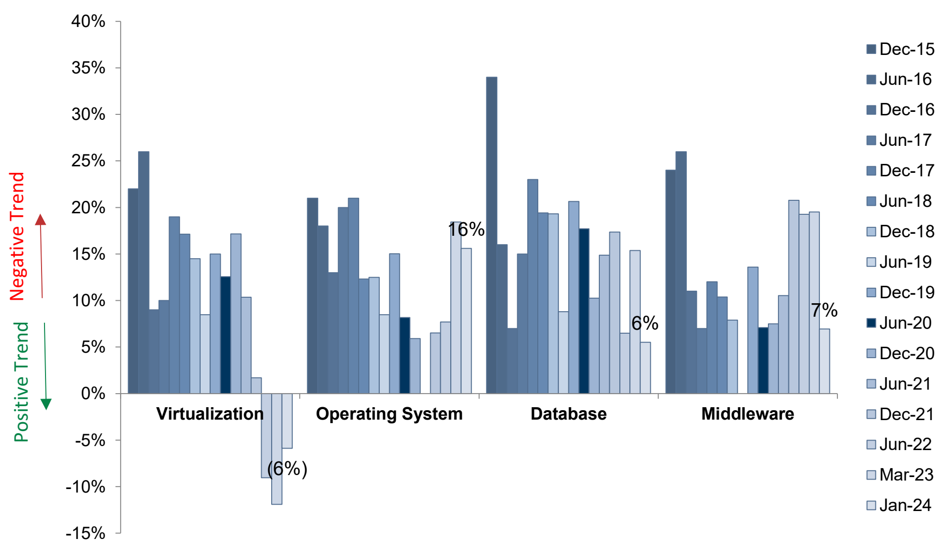
CIOs indicate Microsoft continues gaining wallet share, declines seen for VMware, Red Hat and Oracle. To gauge how expectations are changing over time, we track the differentials between the percent of respondents spending less minus those spending more. In general, survey respondents expect to increase their Microsoft spend with a differential of 7% (versus an 8% increase in March 2023 survey) and expect to decrease their VMware, Red Hat and Oracle spend, with net differentials of 13%, 10%, 20% respectively (versus decreases of 6%, 14% and 36% prior).

Exhibit 28: Historical Net Differentials - By Vendor
Differential = (% 'decrease' responses - % 'increase' responses)



Source: Goldman Sachs Global Investment Research

Exhibit 29: Historical Net Differentials - By Category
Differential = (% 'decrease' responses - % 'increase' responses)



Source: Goldman Sachs Global Investment Research

Drilling down into the specific technology areas, we highlight the following results:

Virtualization – The outlook on spending for virtualization inflected versus the prior survey in the net differential between spending decreases and increases. Based on our results, 29% of CIOs expect to spend less on virtualization versus 36% who forecast an increase in spend (versus a 27%/39% split in the prior study), where the net increase of 6% compares to the net increase of 12% in the prior study.

From a vendor perspective, 26% of VMware customers expect to spend more on virtualization software (versus 29% prior), and the number of customers intending to decrease spending went from 35% to 40%. Furthermore, Microsoft saw a 200 bps change in the number of customers who expect to decrease virtualization spending (21% expect less versus 19% prior) and saw an 400 bps decrease in the number customers who expect to grow virtualization spend, (45% expect more versus 49% prior).

Operating Systems – The outlook on spending for operating systems showed a slight inflection compared to the prior survey in the net differential between spending decreases and increases. Based on our results, 19% of CIOs expect to spend incrementally more (19% prior), compared to 35% expecting it to decrease (38% prior). As a result, the net decline decreased to 16% in this iteration of the survey, from 18% in last survey.

By vendor, Microsoft saw the number of respondents who expect to see a decline in spending on Windows Server OS improve (39% versus 44% prior), while expectations for increased spend remained flat at 25%. Red Hat Enterprise Linux saw expectations for increased spend decrease to 9% (from 11% prior), while expectations for decreased spend decreased to 28% versus 30% prior.

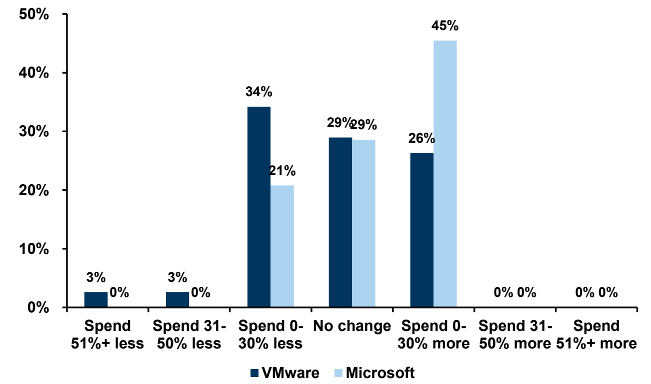
Database – Database spending intentions were less negative compared to our prior survey. Namely, the percent of respondents expecting a decrease lowered to 30% (from 36%) while the percent of respondents expecting an increase was 24% (from 20%).

CIOs view on Oracle remained negative, albeit to a smaller magnitude versus our last survey. Oracle database spending is expected to decline 41% (versus 53% prior), with an increase of 14% expected (versus 10% in our last survey). The outlook for Microsoft SQL Server spend was net positive with 33% of respondents indicating an increase in spend (versus 31% prior) and 20% indicating a decrease in spend (18% prior).

Middleware – We also witnessed continued deterioration in middleware spending expectations, albeit more muted versus the prior 3 surveys, where the net decline of 19% compared to 27% in the prior survey. CIOs expecting to increase spend turned in at 12% (versus 7% prior).

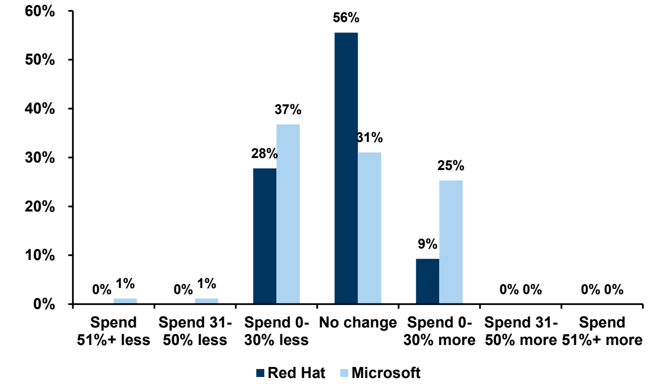
For Oracle, respondents who expect a decrease in spending turned in at 25% (versus 36% prior) while the number of respondents who expect an increase in spending turned in at 13% (versus 7% prior). Decreased spending intentions with Red Hat turned in at 11% from 16% prior, and increased spending intentions turned in at 11% versus 7% prior.

Exhibit 30: Microsoft is slated to garner notable spend relative to VMware for virtualization
Question: "As you migrate more workloads to the public cloud, how does this impact your net spend with the following vendors over the next two years?"



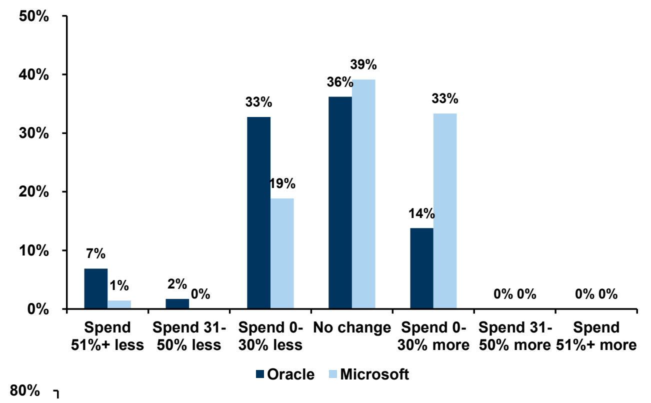
Source: Goldman Sachs Global Investment Research

Exhibit 31: RedHat spending intentions are largely flat, while Microsoft increased spending intentions show more strength
Question: "As you migrate more workloads to the public cloud, how does this impact your net spend with the following vendors over the next two years?"



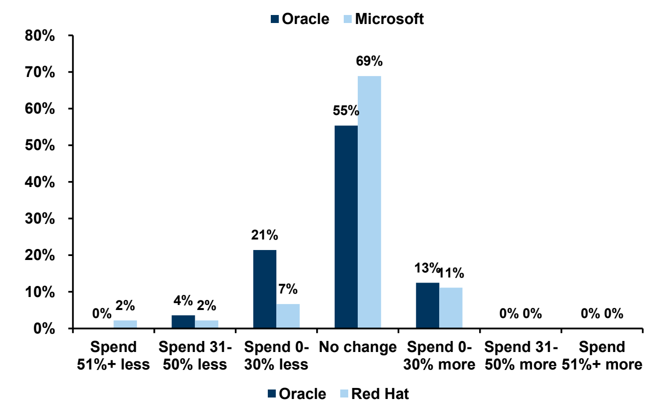
Source: Goldman Sachs Global Investment Research

Exhibit 32: Microsoft is poised to continue growing their share of databases, Oracle sees continued decline
Question: "As you migrate more workloads to the public cloud, how does this impact your net spend with the following vendors over the next two years?"



Source: Goldman Sachs Global Investment Research

Exhibit 33: Middleware spending intentions remain largely stable
Question: "As you migrate more workloads to the public cloud, how does this impact your net spend with the following vendors over the next two years?"



Source: Goldman Sachs Global Investment Research

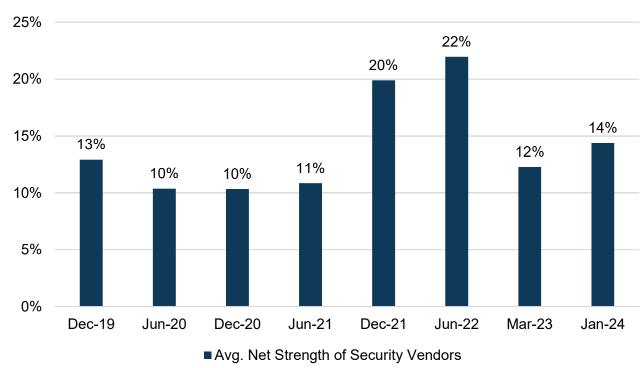
Subsector focus: Security

The outlook for Security solutions is modestly improving into 2024. As a proxy for the health of the industry, we calculate a measure of net strength for each security vendor (number of respondents citing whether a vendor is gaining wallet share, normalized for penetration within the respondent sample set), and take an average over time. Simplistically, when more vendors are gaining wallet share, we believe industry fundamentals are improving. We also look at the number of CIOs citing Security as a priority for investment in 2024 (Exhibit 35). Net strength for our sample set improved from 12% in March 2023 to 14% in Jan 2024, but compares to 22% in June 2022 (Exhibit 34). We see upside bias to this outlook given:

- A more optimistic industry view on spending patterns for 2024 after several headwinds in 2023 (e.g., pressure on contract duration and more discretionary projects) - including the potential for acceleration in select product categories such as firewall appliances post a cyclical trough. Recall that we use a growth-cyclical framework to evaluate the industry: our 2024 and 2025 industry aggregation suggests that 2023 was a trough for pace of deceleration, and that 2024 will see more modest deceleration and that 2025 will likely see steady industry growth. The stocks have historically pre-traded second derivative inflections by 12 months - and in this cycle, we believe November and December 2023 stock outperformance in part reflects the second derivative inflection in 2024.

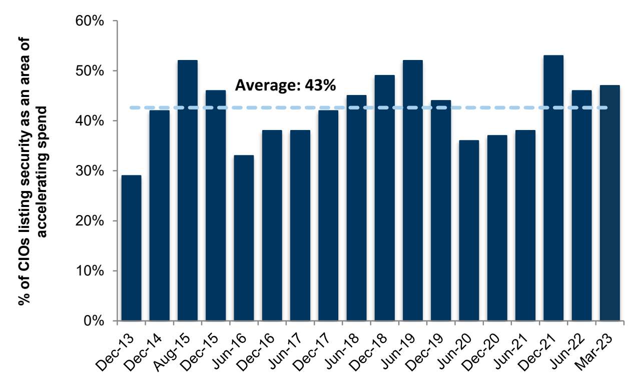
- The overall breach backdrop remaining elevated. Headlines include Scattered Spider in 2H23, and geopolitical cyber activity tied to the Israeli-Palestinian conflict and upcoming US election season.
- An expanding attack surface tied to ongoing digital transformation investment, including specifically related to Generative-AI and strong-AI projects. 67% of respondents are considering allocating GenAI implementation budget toward security use cases.
- An evolving regulatory environment with the SEC requiring stricter security disclosures for public companies in the US and the NIS2 Directive in Europe widening cybersecurity legislation for member states.

Exhibit 34: Net strength for security vendors improved in the latest survey
Are the vendors gaining or losing share in your security budget this year?



Source: Goldman Sachs Global Investment Research

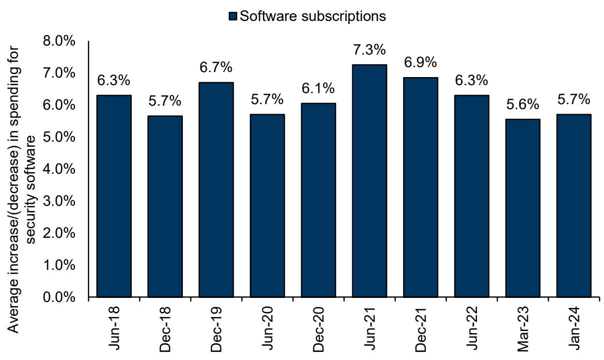
Exhibit 35: Security has screened as a top priority among CIOs in overall IT spending over the last several years
latest data as of March 2023



Source: Goldman Sachs Global Investment Research

Network security spend continues to shift towards software. Software spending continues to grow in importance over physical appliance spending, as organizations plan for more distributed computing workloads vs. traditional “castle and moat” architectures. We see SASE as a key enabler of the next generation of software networking security, and estimate 20-30% penetration within the existing firewall installed base. Our survey results imply that network security software spending is expected to increase 5.7% over the next 3 years, slightly above 5.6% in March 2023 but below 6.3% in June 2022, whereas physical spend is expected to be up 1% vs. flat in March 2023.

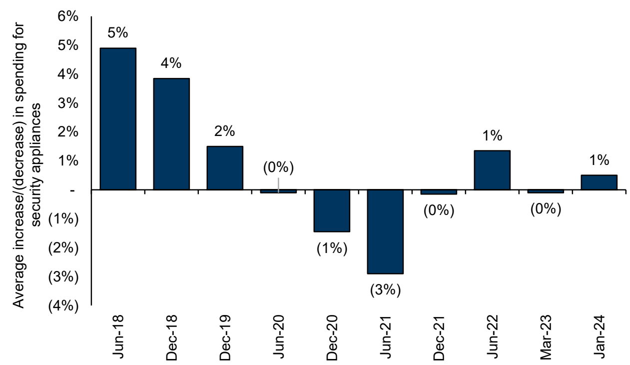
Exhibit 36: Net strength for Security Software improved modestly
Which of the following best represents your outlook for security software spending over the next 3 years?



June 2019 data is not available due to a change in the survey questions for the period

Source: Goldman Sachs Global Investment Research

Exhibit 37: Net strength for physical appliances inccreased to an expectation of +1% spend
Which of the following best represents your outlook for physical appliance spending (security) over the next 3 years?



Source: Goldman Sachs Global Investment Research

Priorities in focus: Identity, SIEM/XDR, Platform and Cloud. We asked CIO respondents about their priorities for incremental security spending over the next 12 months (summarized in Exhibit 38).

- **Identity moves to #1 from #3.** We believe the uptick in identity as a category is being driven by a number of high profile breaches last year that leveraged stolen credentials, particularly the Scattered Spider attacks. At the same time, we believe vendors like Okta and CrowdStrike are expanding the sophistication of their platforms to better incorporate threat intelligence and issues with manual processes - for example, Okta announced fine grained authorization and Identity Threat Protection (ITP), and CrowdStrike's ITDR product was a focus at its September customer conference. While we expect Microsoft to continue to offer a compelling platform solution, we believe the ongoing sophistication of identity-focused attacks creates room for Okta and select other vendors to maintain technology differentiation as best in breed offerings.
- **SIEM/XDR also moves to #1 from #5, ties with Identity as the top priority.** We believe this reflects the upgrade cycle to next-gen endpoint detection and response being further along (we estimate >60%), and incremental priorities shifting to build upon EDR to create a stronger SIEM platform, either via SIEM displacement or overlay technologies such as SOAR.
- **Platform sees the most notable increase vs. June 2022 (13% of CIOs vs. 7% prior) and now screens at #3, up from #4.** While best in breed vs. platform has been debated in the industry for over a decade, we believe the budgetary environment has been under more pressure over the past 18 months than at any time over the past 10+ years. This has in part been catalyzed by the rates environment (recall that the last time rates were above 3% was in 2007). We believe the normalization down in software fundamentals is pressuring the private company ecosystem in particular. Recall that the RSA security industry conference typically hosts upwards of 700+ vendors, and that only a couple dozen of these are publicly

traded. Our industry conversations suggest that many businesses that were funded in the 2020-2021 software upturn had only 12 months of runway in November 2021, and while many were able to extend this to 24 months of runway, the environment now to support growth initiatives is challenging. Many of these companies are point products or features that can be absorbed into larger platforms.

- **Cloud moves down, ties with Endpoint at #3 from #1 prior.** While cloud is one of the biggest area of greenfield opportunity in security, we are more bearish on the opportunity for our coverage to capture meaningful growth in cloud security tools: we view cloud as inherently deflationary to security costs, the market is fragmented, and we believe part of the cloud security TAM will be captured by IaaS providers embedding security in their infrastructure offerings.

Exhibit 38: Identity and SIEM/XDR are currently the biggest priority for CIOs within the security budget
% of CIO respondents on NTM incremental security spending priorities

Priority	% of CIOs Jan-24	Change vs. Mar-23	Change vs. Jun-22
Identity	15%	1%	(5%)
SIEM/XDR	15%	1%	2%
Platform	13%	(1%)	7%
Endpoint	12%	(2%)	(9%)
Cloud	12%	(4%)	1%
Firewall	12%	2%	4%
Vulnerability and risk management	11%	2%	(1%)

Note that the Identity category is a combination of three sub categories: Identity Access Management (IAM), Identity Governance and Administration (IGA) and Privileged Access Management (PAM), representing 11%, 4% and 0% respepively of the 15% for Identity.

Source: Goldman Sachs Global Investment Research

Exhibit 39: Cloud, Endpoint and Identity have been top security focus area for CIOs over the past few years
Where priorities are tied in any given survey, we use the prior survey rankings as a tie breaker

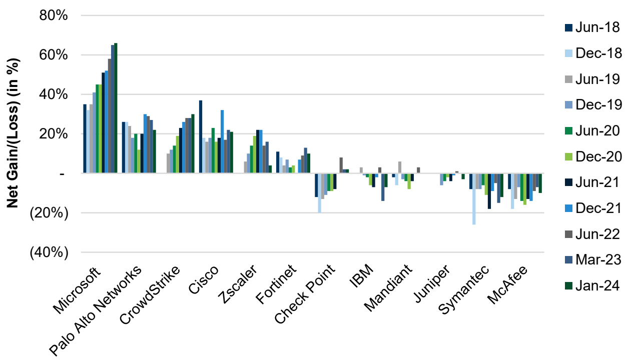
Jun-21	Dec-21	Jun-22	Mar-23	Jan-24
Endpoint	Endpoint	Endpoint	Cloud	Identity
Identity	Identity	Identity	Endpoint	SIEM/XDR
Firewall	Cloud	SIEM/XDR	Identity	Platform
Cloud	SIEM/XDR	Vul and risk mgmt	Platform	Endpoint
SIEM/XDR	MSS	Cloud	SIEM/XDR	Cloud

Source: Goldman Sachs Global Investment Research

Vendor specific wallet share: We have ~5 years of company-specific wallet share data. For vendors that have been consistent in this sample set since June 2018, we present a time series in Exhibit 40 and Exhibit 41.

Exhibit 40: Net gains for Microsoft, Palo Alto and CrowdStrike were among the most favorable within our coverage

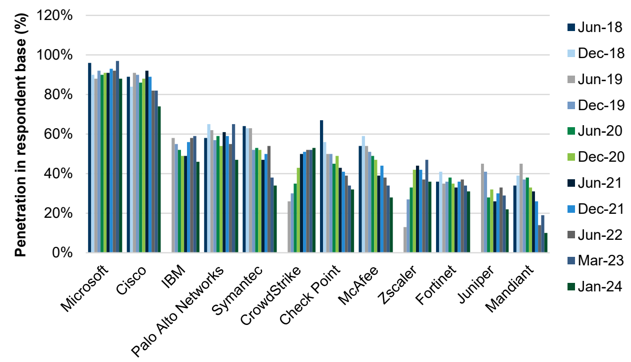
Net gain/(loss) is defined as % of CIOs expecting wallet share to increase for a vendor minus % of CIOs expecting wallet share to decrease for a vendor



Source: Goldman Sachs Global Investment Research

Exhibit 41: Penetration rates remained relatively consistent for larger vendors

Penetration of vendors in respondent base (%)



Source: Goldman Sachs Global Investment Research

Based on net strength (defined as # of CIOs expecting wallet share to increase for a vendor minus # of CIOs expecting wallet share to decrease, divided by the number of organizations partnering with the vendor, for names with at least 25% penetration in our sample set):

- **Highest net strength:** Microsoft, CrowdStrike, Palo Alto Networks and Cloudflare
- **Lowest net strength:** McAfee, Symantec, Secureworks, Forescout
- **Positive trend**: SentinelOne, Rapid7, Ping Identity; we also note positive momentum for CrowdStrike, Palo Alto and Microsoft
- **Negative trend:** Zscaler, Mandiant and McAfee; we also note more modest declines in Fortinet and Okta

Exhibit 42: Vendor-specific wallet shares: Microsoft, CrowdStrike, Cloudflare, Palo Alto and Okta screen as wallet share gainers
Are the following vendors gaining or losing share in your security budget this year? For diversified vendors, please only consider the security portion.

Vendor	Gaining	Same	Losing	Penetration	Net Strength (%) (overall)	Net Strength (%) (normalizing for penetration)	Mar-23
Microsoft	77%	20%	2%	88%	66%	75%	67%
CrowdStrike	58%	40%	2%	53%	30%	57%	54%
Palo Alto Networks	51%	45%	4%	47%	22%	47%	42%
Cloudflare	45%	55%	0%	31%	14%	45%	44%
Elastic	47%	47%	5%	19%	8%	42%	29%
Sailpoint	47%	47%	5%	19%	8%	42%	30%
CyberArk	44%	52%	4%	27%	11%	41%	32%
Rapid7	37%	63%	0%	30%	11%	37%	22%
Okta	41%	54%	5%	37%	13%	35%	40%
Fortinet	48%	35%	16%	31%	10%	32%	38%
Darktrace	34%	62%	3%	29%	9%	31%	29%
Cisco	39%	50%	11%	74%	21%	28%	27%
Proofpoint	31%	66%	3%	32%	9%	28%	23%
Ping Identity	23%	77%	0%	22%	5%	23%	8%
SentinelOne	30%	61%	9%	23%	5%	22%	0%
F5 Networks	26%	68%	6%	34%	7%	21%	9%
Varonis	33%	47%	20%	15%	2%	13%	13%
Zscaler	22%	67%	11%	36%	4%	11%	34%
Mandiant	10%	90%	0%	10%	1%	10%	26%
Check Point	25%	56%	19%	32%	2%	6%	6%
Carbon Black	39%	21%	39%	28%	0%	0%	-14%
Cybereason	0%	100%	0%	9%	0%	0%	8%
Splunk	22%	54%	24%	54%	-1%	(2%)	-2%
Qualys	36%	21%	43%	14%	-1%	(7%)	-6%
Tenable	11%	68%	21%	19%	-2%	(11%)	0%
Mimecast	23%	42%	35%	26%	-3%	(12%)	-21%
Juniper	5%	77%	18%	22%	-3%	(14%)	0%
IBM	20%	46%	35%	46%	-7%	(15%)	-24%
Forescout	0%	73%	27%	11%	-3%	(27%)	-36%
Secureworks	9%	55%	36%	11%	-3%	(27%)	-25%
Symantec	12%	41%	47%	34%	-12%	(35%)	-39%
McAfee	4%	57%	39%	28%	-10%	(36%)	-21%

Source: Goldman Sachs Global Investment Research

Respondent Overview

This is the 94th issue of our IT Spending Survey series, which was conducted in January 2024. Our survey panel comprises a controlled group of 100 IT executives from Global 2000 companies. The current survey results reflect the following:

Exhibit 43: Respondent Demographics

Revenue Breakdown ($USD)	
$0MM - $250MM	0%
$251MM - $500MM	4%
$501MM - $1B	36%
$1B - $10B	44%
>$10B	16%

Industry Breakdown	
Manufacturing	19%
Healthcare	14%
Financial Services	12%
Technology	12%
Retail	8%
Education	8%
Business Services	7%
Energy	4%
Communications	3%
Pharmaceuticals	3%
Transportation	2%
Utilities	2%
Wholesale / Distribution	2%
Engineering & Construction	2%
Government	1%
Defense	1%
Logistics	0%
Media	0%

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Kash Rangan, Michael Ng, CFA, Gabriela Borges, CFA, Eric Sheridan, Kevin Kumar, CFA, Gili Naftalovich, Ben Miller, Matthew Martino, Katherine Campagna, Dhruv Panwar, Max Gamperl, Jacob Staffel, Yash Goenka and Henry Dane, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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