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The IT Trends Study
Taking the Pulse of IT **2025**

The 2025 Comprehensive Report

Issues, Investments, Concerns, & Practices
Of Organizations and their IT Executives

Results from the SIM IT Trends Study

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Price: \$995.00 (Free Download for SIM Members)

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This is the complete report of the Society for Information Management's 44th Anniversary IT Trends Study. Thank you to the 691 SIM members who completed the IT Trends Study questionnaire. This report is available to all SIM members at no charge at <https://trends.simnet.org>. A preview of this report will appear in the December 2024 issue of the MIS Quarterly Executive and an edited report will appear in the March 2025 issue, both of which are also available free of charge to all SIM members.

November 13, 2024

We have done our very best to make this report error free. But it is software, and you know how that goes sometimes. So, if you find errors or have questions, please let me know via vess.johnson@unt.edu.

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Executive Summary

These are the findings of the Society for Information Management's 44th Annual IT Issues and Trends Study identifying the most important issues in 2024, with responses from 691 IT executives, including 248 CIOs and 431 unique organizations. The average revenue of participating organizations was \$4.9 billion (median \$400 million). IT spending as a percentage of revenue was 4.9%, down significantly from 2023. However, 63.2% of organizations reported increasing IT headcount, down slightly from 2023. 97.0% reported increases in average IT salaries.

The top five IT management issues for organizations in 2024 were Cybersecurity, Alignment, AI and Machine Learning, Analytics, and Compliance the top five largest IT investments were Cybersecurity, Cloud, Application Development, AI and Machine Learning, and CRM.

The most common criteria for assessing CIO performance were Customer Satisfaction, Value of IT to the Business, Cost Control, Strategic Contribution of IT, and IT Availability. The average tenure of CIOs was 7.3 years (median 5 years) with 49.8% reporting to the CEO. CIOs continue to come from outside organizations at record levels (81.8%), and 25.1% came from prior non-IT positions.

Probably one of the most interesting shifts seen this year was related to AI and machine learning. AI continued its rise related to the most important management issues moving up from 6th to 3rd place. While this in itself is not a huge shift, what makes it interesting is its rise from 22nd position in 2022. Similarly, AI increased to 2nd with respect to top personal concerns for CIOs. In order to gain more understanding of AI's impact on organizations, this year's study did include a short special section on AI.

Market pressures appear to be in the forefront for 2024, with organizations feeling more concerned with markets and opportunities. Cost control within the organization continued as a significant concern. Cost controls related to IT moved up one spot into 6th along with cost controls related to the business (8th from 9th). In addition, Agility / Flexibility related to the business moved into the top 10 into 7th position from 16th in 2023.¹

DEDICATION: The IT Trends Research Team extends our heartfelt thanks to Chris Maurer for his dedication to the Annual IT Trends Study. For nearly a decade, Chris managed all team communications and played a pivotal role in advancing our analytics capabilities. Thank you, Chris, for your unwavering commitment, tireless efforts, and the friendship you've shared with us.

¹ This article is being published as a SIM-sponsored report.



Introduction

Starting in 1980, the Society for Information Management (SIM) has surveyed its membership to identify important information technology (IT) issues and to better understand the state of IT management. This yearly data has been compiled over the 40-plus year history of the study to identify trends and track changes in the management and use of business technology. The 2024 SIM IT Trends Study represents the 44th such attempt to better understand the challenges faced by organizations and the IT leaders that they employ. Over time, the SIM IT Trends Study has grown to explore new technologies, business challenges, and facets of IT management to become one of the most comprehensive investigations of its kind.

Founded in 1968, SIM is the oldest and largest not-for-profit professional organization in the U.S. for CIOs, senior IT executives, prominent academicians, advisors, and other IT leaders. SIM is both a national organization and a network of local chapters. SIM members, who comprise a broad cross-section of IT leaders, meet regularly to share, learn, and network. SIM succeeds because it provides value to its members, their organizations, and their communities. SIM co-founded both MIS Quarterly and MIS Quarterly Executive.

Shaped by SIM Research Fellows, the IT Trends Study's questionnaire is updated annually in order to improve its quality and to investigate emerging topics in the fast-paced world of IT. To the extent possible, alterations to the questionnaire are kept to a minimum to enable meaningful year-to-year comparisons and to facilitate the identification of trends. In April 2024, a personal link to the questionnaire was e-mailed to each of SIM's 4,983 members. The survey remained open for 9 weeks, during which weekly reminders were sent to those yet to respond. During this process, several e-newsletter articles were published, and members were encouraged to complete the survey to support their SIM chapter in a participation challenge. This year, 691 completed questionnaires were received, representing a response rate of 13.9% (compared to 14.8% in 2023).

As done since 2013, the responses were used to create two intersecting datasets: "The CIOs dataset" composed of the 248 respondents who identified themselves as the "CIO or highest-ranking IT executive" and "the Unique Organizations dataset" composed of the 431 organizations represented by their CIO or highest-ranking IT executive responding (typically a direct report to the CIO in a large organization).

The findings presented in this report are organized in six main sections: Top IT Management Issues; Investments in Technology; IT Practices of Organizations, including spending, workforce, infrastructure, cybersecurity, and digital transformation; IT Performance Measures; CIO Tenure, Reporting, Background, and Activities; and Summary and Conclusions.



1. Top IT Management Issues and Concerns

1.1 Organizations' Top IT Management Issues.

The IT leaders representing each of the 431 unique organizations were asked to select their five most important IT management issues or concerns from a list of 30 options. Table 1 contains the top ten most frequently cited IT management issues.

Table 1: Organizations' Most Important IT Management Issues

Organizational IT Issue	2024 (n=431)	2023 (n=436)	2022 (n=540)	2021 (n=454)	2020 (n=624)	2019 (n=618)	2018 (n=793)	2017 (n=769)	2016 (n=801)	2015 (n=785)	2014 (n=717)	2013 (n=483)
Security / Cybersecurity / Privacy	1 (41.5%)	2 (41.7%)	1 (51.1%)	1 (42.5%)	1 (36.1%)	1 (35.9%)	1 (38.3%)	1 (41.9%)	2 (36.0%)	2 (31.5%)	2 (17.6%)	7 (11.2%)
Alignment of IT and / with the Business	2 (36.9%)	1 (44.7%)	2 (33.9%)	2 (33.3%)	2 (35.1%)	2 (33.2%)	2 (32.8%)	2 (37.3%)	1 (41.7%)	1 (42.4%)	1 (26.2%)	1 (43.7%)
AI / Expert Systems / Machine Learning	3 (34.8%)	6 (20.4%)	22 (9.6%)	23 (7.5%)	16 (10.1%)	13 (12.8%)	16 (11.6%)					
Data Analytics / Data Management	4 (28.8%)	3 (27.1%)	3 (28.7%)	3 (24.7%)	3 (25.3%)	3 (25.7%)	3 (26.9%)	3 (23.4%)				
Compliance and Regulations (e.g., HIPAA, SarBox, SAS70, PCI, etc.)	5 (25.5%)	5 (21.8%)	4 (28.3%)	5 (23.6%)	4 (24.4%)	5 (20.6%)	6 (19.9%)	4 (20.7%)	12 (13.5%)	11 (16.2%)	12 (9.1%)	16 (6.0%)
Cost Reduction / Control - IT	6 (20.6%)	7 (19.0%)	17 (11.5%)	10 (15.6%)	6 (23.7%)	8 (18.6%)	9 (17.8%)	5 (20.0%)	7 (19.0%)	8 (17.3%)	17 (8.2%)	5 (16.8%)
Agility / Flexibility - Business	7 (18.3%)	16 (13.1%)	12 (15.2%)	9 (17.6%)	10 (18.1%)	7 (19.1%)	8 (18.2%)	9 (17.8%)	5 (19.9%)	9 (16.7%)	3 (16.7%)	2 (27.5%)
Cost Reduction / Control - Business	8 (17.9%)	9 (17.7%)	14 (13.7%)	13 (13.2%)	8 (19.4%)	10 (16.7%)	10 (14.5%)	6 (19.9%)	6 (19.7%)	10 (16.3%)	9 (12.3%)	4 (18.6%)
Digital Transformation	9 (17.4%)	4 (25.9%)	5 (22.2%)	4 (24.4%)	4 (24.4%)	4 (22.2%)	7 (19.5%)	8 (18.7%)				
Business Continuity	10 (16.7%)	8 (18.3%)	7 (17.8%)	7 (19.2%)	7 (22.8%)	16 (12.0%)	12 (14.0%)	18 (10.8%)	11 (13.7%)	15 (12.4%)	22 (5.0%)	



On the whole, results suggest highly stable management concerns among IT leaders. This is particularly true for Cybersecurity and IT Alignment, which, while swapping positions to occupy the 1st and 2nd positions respectively, remain the dominant concerns of IT leaders over the last decade. Data analytics slipped from 3rd position in 2023 to 4th position in 2024, ceding its prior position to AI. Compliance, Business Continuity, and Digital Transformation remain in the top ten, however the latter fell 5 places from its high-water mark of 4th to a new low-water mark of 9th. While it is clear that Digital Transformation continues to be a highly important area of focus for organizations, it is possible that some IT leaders have shifted focus from the topic as a whole to specific technologies such as AI, which may be critical for the enactment of digital transformation. Cloud Computing's decline from 10th in 2023 to 16th in 2024 marks the most significant decline in importance in this year's study. This marks the first time since 2018 that Cloud Computing has not occupied a top ten position and, while Cloud utilization continues to grow (See Section 3.4), may indicate that IT leaders are have acclimated to the budget and technical challenges associated with its use.

Several items increased in importance among the organizations surveyed. As already noted, AI continued its upward trajectory moving from 6th to 3rd one year after a dramatic increase from 22nd to 6th. This increase in importance, combined with clear indications of an increase in spending (See Section 2.1), suggests that organizations are embracing the rapid rate of AI innovation and are finding use cases which offer the potential to improve outcomes.² The most significant shift in organizational issues is the upward movement of Business Agility which rose from 16th in 2023 to 7th this year. While striking, this move returns Business Agility to a position more consistent with its historical pre-COVID 19 level. Business and IT Cost Reduction also both increased slightly in importance though, again, organizational importance over the last decade is consistent outside of post-COVID disruptions.

1.2. IT Leadership's Top IT Management Issues and Concerns.

Each IT leader selected up to five IT management issues from a list of 30 which they view as the most personally important or worrisome. Responses from the senior-most IT leader in each of the 431 responding unique organizations are presented in Table 2.

² Minevich, M. (2023). The Dawn Of AI Disruption: How 2024 Marks A New Era In Innovation. <https://www.forbes.com/sites/markminevich/2023/12/14/the-dawn-of-ai-disruption-how-2024-marks-a-new-era-in-innovation/>



Table 2: IT Leaders' Most Important or Worrisome IT Management Issues

Organizational IT Issue	2024 (n=431)	2023 (n=436)	2022 (n=540)	2021 (n=454)	2020 (n=624)	2019 (n=618)	2018 (n=793)	2017 (n=769)	2016 (n=801)	2015 (n=785)	2014 (n=717)	2013 (n=480)
Security / Cybersecurity / Privacy	1 (45.5%)	1 (44.5%)	1 (55.2%)	1 (46.9%)	1 (40.9%)	1 (46.3%)	1 (46.4%)	1 (47.7%)	1 (46.4%)	1 (36.8%)	1 (25.5%)	2 (19.8%)
AI / Expert Systems / Machine Learning	2 (31.8%)	4 (24.3%)	27 (6.5%)	32 (5.3%)	27 (7.7%)	31 (6.3%)	26 (7.3%)					
Alignment of IT and / with the Business	3 (28.5%)	3 (26.8%)	3 (25.2%)	2 (24.4%)	2 (23.4%)	2 (25.1%)	4 (19.8%)	4 (21.8%)	3 (24.0%)	2 (29.7%)	3 (19.9%)	1 (32.5%)
IT Talent / Skill Shortage / Retention	4 (22.7%)	2 (27.1%)	2 (38.1%)	3 (22.2%)	5 (18.4%)	3 (21.5%)	2 (25.6%)	3 (23.5%)	2 (28.3%)	3 (28.3%)	2 (20.9%)	3 (19.6%)
Credibility of IT / Perception of IT Leadership	5 (20.0%)	5 (20.9%)	6 (17.8%)	4 (21.6%)	4 (20.4%)	4 (20.4%)	3 (22.1%)	2 (24.4%)	4 (20.3%)	6 (16.4%)	18 (7.1%)	
Business Continuity	6 (18.1%)	7 (17.7%)	5 (19.3%)	5 (17.4%)	3 (21.8%)	8 (14.1%)	5 (17.4%)	8 (14.0%)	5 (17.4%)	7 (16.2%)	13 (7.8%)	
Compliance and Regulations (e.g., HIPAA, SarBox, SAS70, PCI, etc.)	7 (17.2%)	6 (19.3%)	4 (19.4%)	6 (16.5%)	7 (15.9%)	5 (15.7%)	6 (16.3%)	5 (16.9%)	11 (12.1%)	13 (12.2%)	14 (7.5%)	16 (7.5%)
Cost Reduction / Control - IT	8 (15.8%)	9 (15.6%)	25 (8.3%)	16 (10.4%)	9 (14.4%)	17 (10.2%)	15 (11.3%)	20 (10.1%)	13 (11.1%)	21 (9.0%)	30 (3.9%)	13 (8.3%)
Data Analytics / Data Management	9 (14.8%)	10 (15.4%)	7 (15.2%)	9 (14.1%)	12 (12.3%)	7 (14.2%)	8 (14.1%)	7 (14.2%)				
Improving IT Communications and Relationships with the Business	10 (14.2%)	8 (15.8%)	11 (13.7%)	11 (11.7%)	14 (11.7%)	6 (15.2%)	11 (12.4%)	9 (13.4%)	10 (12.6%)			

The list of the top ten IT management issues about which IT leaders worry remained stable in 2024, with no additions or departures among the most salient concerns. Cybersecurity, Alignment between the IT organization and the rest of the business, and Credibility of IT maintained their positions from last year, occupying the 1st, 3rd and 5th



positions respectively. AI continued its upward trend and moved from the 4th position in 2023 to the 2nd position in 2024, displacing IT Talent which fell to 4th. Business Continuity (6th) and Compliance (7th) swapped places from their prior year rankings. The top ten is rounded out by IT Cost Reduction, Data Analytics, and Communications and Relationships with the Business which occupy the 8th through 10th positions.

The trends exhibited in the list of most important or worrisome IT management issues suggests the concerns of IT leaders tend to be fairly consistent over time. However, there is evidence of fluctuation in the wake of external events and the emergence of disruptive technologies. IT Cost Reduction is a notable example of the former. In 2020, at the height of the COVID 19 pandemic, as many organizations were grappling with uncertainty about the future, IT Cost Reduction ranked 9th among personal worries. In the following two years, concerns about IT Cost Reduction fell sharply, likely due to an influx of organizational funding allocated to weather the pandemic and its aftermath. In 2023 and 2024, we again see that IT Cost Reduction concerns returned to the top ten list as many organizations grapple with inflationary cost increases. Likewise, the emergence of business-viable generative AI models clearly altered the landscape of management concerns for IT leaders. In particular, the release of ChatGPT in November of 2022,³ correlates with a significant increase in concern among IT leaders who no doubt recognized the opportunities and challenges such innovations might engender. Collectively, these trends highlight the complexity of the role IT leaders play within organizations. Such individuals must manage ongoing operational concerns while reacting to changes in both the business and technological environments.

Table 3 displays organizational IT management concerns in relation to the items IT leaders cite as personal concerns.

Table 3: Top Ten Organizational and Personal IT Management Issues

	Most Important to their Organizations		Most Important or Worrisome to IT Leaders	
Issue	2024 (n=431)	2023 (n=436)	2024 (n=431)	2023 (n=436)
Security / Cybersecurity / Privacy	1 (41.5%)	2 (41.7%)	1 (45.5%)	1 (44.5%)
Alignment of IT and / with the Business	2 (36.9%)	1 (44.7%)	3 (28.5%)	3 (26.8%)

³ Heaven, W. (2023). The Inside Story of how ChatGPT was Built from the People Who Made it. <https://www.technologyreview.com/2023/03/03/1069311/inside-story-oral-history-how-chatgpt-built-openai/>



	Most Important to their Organizations		Most Important or Worrisome to IT Leaders	
Issue	2024 (n=431)	2023 (n=436)	2024 (n=431)	2023 (n=436)
AI / Expert Systems / Machine Learning	3 (34.8%)	6 (20.4%)	2 (31.8%)	4 (24.3%)
Data Analytics / Data Management	4 (28.8%)	3 (27.1%)	9 (14.8%)	10 (15.4%)
Compliance and Regulations (e.g., HIPAA, SarBox, SAS70, PCI, etc.)	5 (25.5%)	5 (21.8%)	7 (17.2%)	6 (19.3%)
Cost Reduction / Control - IT	6 (20.6%)	7 (19.0%)	8 (15.8%)	9 (15.6%)
Agility / Flexibility - Business	7 (18.3%)	16 (13.1%)	18 (11.1%)	25 (8.0%)
Cost Reduction / Control - Business	8 (17.9%)	9 (17.7%)	28 (7.0%)	29 (6.4%)
Digital Transformation	9 (17.4%)	4 (25.9%)	20 (10.9%)	12 (12.6%)
Business Continuity	10 (16.7%)	8 (18.3%)	6 (18.1%)	7 (17.7%)
Improving IT Communications and Relationships with the Business	14 (12.8%)	21 (9.4%)	10 (14.2%)	8 (15.8%)
IT Talent / Skill Shortage / Retention	16 (11.1%)	11 (15.6%)	4 (22.7%)	2 (27.1%)
Credibility of IT / Perception of IT Leadership	21 (10.2%)	24 (6.9%)	5 (20.0%)	5 (20.9%)

Past investigations have demonstrated that the importance ascribed to a given IT management issue by organizations often differs from that held by IT leaders. While there is significant overlap in the perceptions of these two stakeholder groups, as expected, items of organizational concern tend to be more business focused and items of personal concern for IT leaders tend to be connected to the effective operation of the IT function. For example, Business Agility and Business Cost Reduction are of significant importance for organizations but rank relatively low on the list of concerns for IT leaders. Such leaders likely have significant experience developing, implementing, and supporting IT solutions for these objectives and thus worry less about their ability to bring these solutions to fruition. This may also be the cause of the interesting disparity seen with Digital Transformation. However, because digital transformation is concerned with the creation of new business models, it necessarily spans the boundaries of various departments. Thus, IT leaders may feel less personally concerned about Digital Transformation because ownership and accountability may lie outside of the IT organization.



IT leaders worry about issues which are directly related to their ability to function effectively within the organization. Specifically, Improving Communication and Relationships with the Business, IT Talent Retention, and ensuring the Credibility of IT all appear in the top ten concerns of IT leaders, but rank relatively low on the list of organizational concerns. Failure to achieve such goals would have immediate, tangible impact on the effectiveness of IT departments and, as expected, IT leaders express concerns about these threats to their departments.

2. Technology Investments and Worrisome Technologies

IT Leaders also identified up to five areas that represent their organization's largest current or near-term IT investments, those areas that should get more investment, and those of greatest personal concern ("i.e., they keep you up at night") from a list of 28 different investment areas.

2.1 Organizations' Largest IT Investments.

Table 4 displays the investment areas selected by IT leaders as their organization's largest current or near-term IT investments.

Table 4: Top Ten Largest IT Investments of Organizations

IT Investment Area	2024 (n=431)	2023 (n=436)	2022 (n=540)	2021 (n=454)	2020 (n=624)	2019 (n=618)	2018 (n=793)	2017 (n=769)	2016 (n=801)	2015 (n=785)	2014 (n=717)	2013 (n=482)
Analytics / Business Intelligence / Data Mining / Forecasting / Big Data	1 (42.2%)	1 (39.4%)	1 (40.0%)	3 (34.1%)	2 (35.6%)	1 (37.9%)	1 (37.7%)	1 (41.6%)	1 (39.5%)	1 (38.0%)	1 (30.1%)	1 (42.1%)
Security / Cybersecurity	2 (41.1%)	2 (39.0%)	2 (37.2%)	2 (38.8%)	3 (33.0%)	3 (33.3%)	2 (37.1%)	2 (36.2%)	3 (29.5%)	3 (28.9%)	7 (11.9%)	14 (7.5%)
Cloud Computing (e.g., SaaS, PaaS, IaaS, etc.)	3 (35.5%)	4 (34.2%)	3 (36.9%)	1 (43.0%)	1 (38.1%)	2 (36.1%)	3 (33.9%)	3 (31.1%)	4 (27.8%)	7 (22.9%)	5 (15.6%)	3 (18.7%)
Application Software Development / Maintenance	4 (30.6%)	3 (35.8%)	4 (29.3%)	4 (28.6%)	4 (27.6%)	4 (28.3%)	4 (30.6%)	4 (30.6%)	2 (34.1%)	4 (28.8%)	4 (18.4%)	6 (11.8%)
AI / Machine Learning / Expert Systems	5 (26.5%)	8 (13.1%)	15 (10.0%)	17 (9.3%)	15 (9.6%)	12 (10.8%)						
CRM (Customer Relationship Management)	6 (20.9%)	6 (20.2%)	6 (21.9%)	6 (21.8%)	5 (22.8%)	5 (24.1%)	6 (23.7%)	6 (24.1%)	5 (26.0%)	5 (24.5%)	6 (13.8%)	2 (19.5%)
ERP (Enterprise Resource Planning)	6 (20.9%)	5 (23.4%)	5 (23.9%)	5 (23.6%)	6 (22.3%)	6 (22.5%)	5 (26.6%)	5 (28.6%)	6 (25.0%)	2 (32.2%)	3 (18.7%)	4 (16.6%)



IT Investment Area	2024 (n=431)	2023 (n=436)	2022 (n=540)	2021 (n=454)	2020 (n=624)	2019 (n=618)	2018 (n=793)	2017 (n=769)	2016 (n=801)	2015 (n=785)	2014 (n=717)	2013 (n=482)
Legacy Applications - Replacing / Replatforming	8 (15.3%)	7 (18.6%)	7 (14.8%)	7 (17.2%)	7 (15.7%)	7 (18.8%)	9 (15.0%)	9 (15.5%)	11 (13.2%)			
Integration / Application Integration / Data Integration	9 (12.3%)	19 (8.9%)	11 (11.7%)	12 (10.1%)	13 (11.2%)	10 (11.5%)	11 (10.7%)	12 (11.1%)	9 (15.7%)	11 (11.3%)	17 (5.4%)	
Legacy Applications - Maintaining (updating / consolidation)	10 (10.9%)	12 (10.8%)	9 (12.2%)	12 (10.1%)	12 (11.7%)	9 (12.8%)	10 (11.7%)	10 (12.5%)	10 (13.6%)			

Organizational IT investments tend to be relatively stable in the absence of external factors or the emergence of new disruptive technologies. In 2024, we observe that Analytics and Cybersecurity were the most commonly cited top investments by organizations, maintaining their 1st and 2nd ranking from the prior year. Cloud Computing and Application Software Development swapped their prior year positions, landing in the 3rd and 4th positions respectively. Consistent with the increased organizational interest in such technologies (see Table 1), AI rose 3 places from its 2023 position to claim the 5th most frequently cited IT investment in 2024. The percentage of IT leaders that include CRM and ERP (tied for 6th), as well as Replacing Legacy Applications (8th) in their selection of top organizational IT investments also remained fairly consistent with prior years. Integration entered the top ten for the first time since 2019, increasing its rank from the prior year by 10 and securing the 9th position. Historically, Integration hovered just outside the top ten since 2015 and its prior year ranking at 19th marked an all-time low. Its new position may reflect a return to equilibrium or may be driven by integration concerns arising from new types of IT systems (e.g., AI). Maintenance of Legacy Applications also entered the top ten, securing the 10th position after a one-year absence from the list. Its recurring position near the bottom of the top ten confirms the enduring importance of maintaining long-running systems and the ongoing financial commitment such systems require.

Two items, Collaboration Tools and Data Center Infrastructure, were tied for the 9th position in 2023 and left the top ten list this year. Collaboration fell by 8 places in the rankings, assuming the 17th position. While this is a significant change in investments directed at Collaboration Tools, the new position is in line with pre-COVID investment patterns. Data Center Infrastructure moved to the 12th place ranking, continuing a slow gradual decline in investments related to such technologies. This is likely due to the continued high levels of investment in competing technologies such as Cloud Computing.



2.2. Technologies that Should Get More Investment and Most Personally Worrisome.

In order to capture differences in how IT investments are currently made and the desired investing priorities of IT leaders, respondents also selected up to five investment areas which they believed should receive additional investment, and five they find most personally worrisome. Table 5 presents the top ten choices in each of these categories.

Table 5: Organizational versus Personal Investment Priorities

	Largest IT Investments		Those that Should Get More Investment		Those Most Personally Worrisome	
Information Technology	2024 (n=431)	2023 (n=436)	2024 (n=431)	2023 (n=436)	2024 (n=431)	2023 (n=436)
Analytics / Business Intelligence / Data Mining / Forecasting / Big Data	1 (42.2%)	1 (39.4%)	3 (30.6%)	2 (35.1%)	5 (16.2%)	7 (13.1%)
Security / Cybersecurity	2 (41.1%)	2 (39.0%)	2 (32.5%)	3 (29.1%)	1 (44.8%)	1 (46.3%)
Cloud Computing (e.g., SaaS, PaaS, IaaS, etc.)	3 (35.5%)	4 (34.2%)	10 (13.0%)	7 (15.8%)	15 (9.0%)	11 (11.9%)
Application Software Development / Maintenance	4 (30.6%)	3 (35.8%)	8 (14.2%)	10 (14.4%)	10 (10.9%)	6 (14.7%)
AI / Machine Learning / Expert Systems	5 (26.5%)	8 (13.1%)	1 (45.0%)	1 (38.8%)	2 (32.3%)	2 (25.2%)
CRM (Customer Relationship Management)	6 (20.9%)	6 (20.2%)	16 (9.5%)	15 (10.3%)	22 (5.3%)	24 (4.4%)
ERP (Enterprise Resource Planning)	6 (20.9%)	5 (23.4%)	17 (9.3%)	20 (7.6%)	17 (7.2%)	19 (7.3%)
Legacy Applications - Replacing / Replatforming	8 (15.3%)	7 (18.6%)	7 (14.8%)	8 (15.6%)	7 (13.9%)	5 (16.5%)
Integration / Application Integration / Data Integration	9 (12.3%)	19 (8.9%)	19 (8.6%)	10 (14.4%)	21 (5.6%)	17 (8.5%)
Legacy Applications - Maintaining (updating / consolidation)	10 (10.9%)	12 (10.8%)	21 (7.0%)	20 (7.6%)	12 (10.4%)	8 (12.8%)
Data Integration / Data Quality	11 (10.7%)	14 (10.6%)	4 (20.0%)	6 (17.9%)	6 (15.1%)	12 (11.2%)
Master Data Management / Data Quality	16 (8.1%)	20 (8.7%)	9 (13.5%)	16 (9.6%)	14 (10.0%)	15 (8.9%)
Staff Development / Training / Retention / H1B	17 (7.7%)	18 (9.2%)	6 (17.2%)	4 (20.0%)	4 (21.6%)	4 (23.4%)



	Largest IT Investments		Those that Should Get More Investment		Those Most Personally Worrisome	
Information Technology	2024 (n=431)	2023 (n=436)	2024 (n=431)	2023 (n=436)	2024 (n=431)	2023 (n=436)
Enterprise / IT Architecture	23 (6.7%)	27 (4.6%)	13 (11.4%)	12 (12.6%)	9 (11.1%)	18 (8.3%)
Disaster Recovery / IT Continuity Planning	25 (6.3%)	11 (11.2%)	5 (17.4%)	5 (18.3%)	3 (23.7%)	3 (23.9%)
Innovation / Disruptive Technologies	26 (5.8%)	17 (9.4%)	12 (12.3%)	9 (14.7%)	7 (13.9%)	9 (12.2%)

Predictably, there is often more correspondence between investment areas IT leaders find personally worrisome and those they believe should get more investment than observed between such areas and the largest IT investments of the firm. Trends suggest that organizational investments in large, well understood, though often expensive, IT systems often do not trigger concerns for IT leaders tasked with implementing, operating, and maintaining such assets.⁴ This pattern is evident with information technology topics such as CRM, ERP, Integration, Maintenance of Legacy Applications, and, to a lesser extent, Cloud Computing, which rank high on the list of IT investment areas but lower on the list of technologies that should get more investment and those most worrisome to IT leaders.

Conversely, numerous IT topics are associated with low organizational investment but are viewed by IT leaders as either personally worrisome, associated with underinvestment, or both. The most egregious of such misalignments include Innovation and Disruptive Technologies, Disaster Recovery, and Staff Development. With respect to Innovation and Disruptive Technologies, it appears that organizations may not be allocating resources broadly to explore the landscape of potential disruptors. However, organizations are investing heavily in specific disruptive technologies in ways that align with the concerns of IT leaders (e.g., AI). As a hedge intended to provide a degree of downside protection in rare but potentially highly damaging circumstances, Disaster Recovery often falls into this group of technologies. Finally, Staff Development is an operational concern which is top of mind for IT leaders but less directly impactful on business operations, at least in the short term. Collectively, such misalignments call out organizational risks which are not necessarily addressed through spending on associated mitigation strategies.

There are numerous investment areas which rank highly on all three lists. These include Analytics, Cybersecurity, Application Software Development, Replacement of Legacy

⁴ Johnson, V., Maurer, C., Torres, R., Guerra, K., Mohit, H., Srivastava, S., & Chatterjee, S. (2024). The 2023 SIM IT Issues and Trends Study. *MIS Quarterly Executive*, 23(1), 83–124.



Applications, and AI, which is consistent with findings from last year. Among these items, AI is the most recent investment area to be ranked highly across all three lists. As observed in last year's IT Trends report, AI was introduced in 2019 and, since that time, IT leaders have consistently suggested it should receive more investment. However, their personal concern ranked relatively low until last year, moving up 16 places to the 2nd position among technologies most personally worrisome. This year, AI remains top of mind for IT leaders and organizational spending continues to rise among organizations. This consistency is further evidence that both organizations and IT leaders believe AI is here to stay and offers new capabilities to organizations for decreasing costs and/or increasing revenue.

Among the most interesting shifts related to concerns about organizational investments is that IT leaders are increasingly worried about Enterprise Architecture. It increased in rank from 18th in 2023 to 9th in 2024, the most significant increase among investment areas that IT leaders find most personally worrisome. Given the breadth of Enterprise Architecture, this change could be attributable to a major shift in business strategy, the regulatory environment, or rapid technological change. Given the growth in interest and associated investments in AI, the latter of these factors is the most likely cause for increased concern about Enterprise Architecture, as IT leaders consider how to integrate new technologies with business processes, existing data assets, enterprise applications and infrastructure to further organizational goals.

3. Participating Organizations and their IT Practices

3.1. Location, Industry, Revenue, and IT Spending of Participating Organizations.

An overwhelming majority of respondents (96.3%) in this year's sample are located in the United States. While the sample of 431 unique organizations represents 29 different economic sectors, six sectors account for more than 55% of all respondents: Healthcare/Medical (15.6%), Finance/Insurance (12.3%), Manufacturing (7.7%), Education (6.5%), IT Services/Consulting (6.0%), and Not-For-Profit (5.1 %). The percentage of publicly-traded companies in the sample dropped slightly from 30.9% last year to 27.8% in 2024. The average revenue for the sample in 2024 is \$4.9B with a median of \$400M, which is down slightly from 2023 (\$5.9B and \$500M).

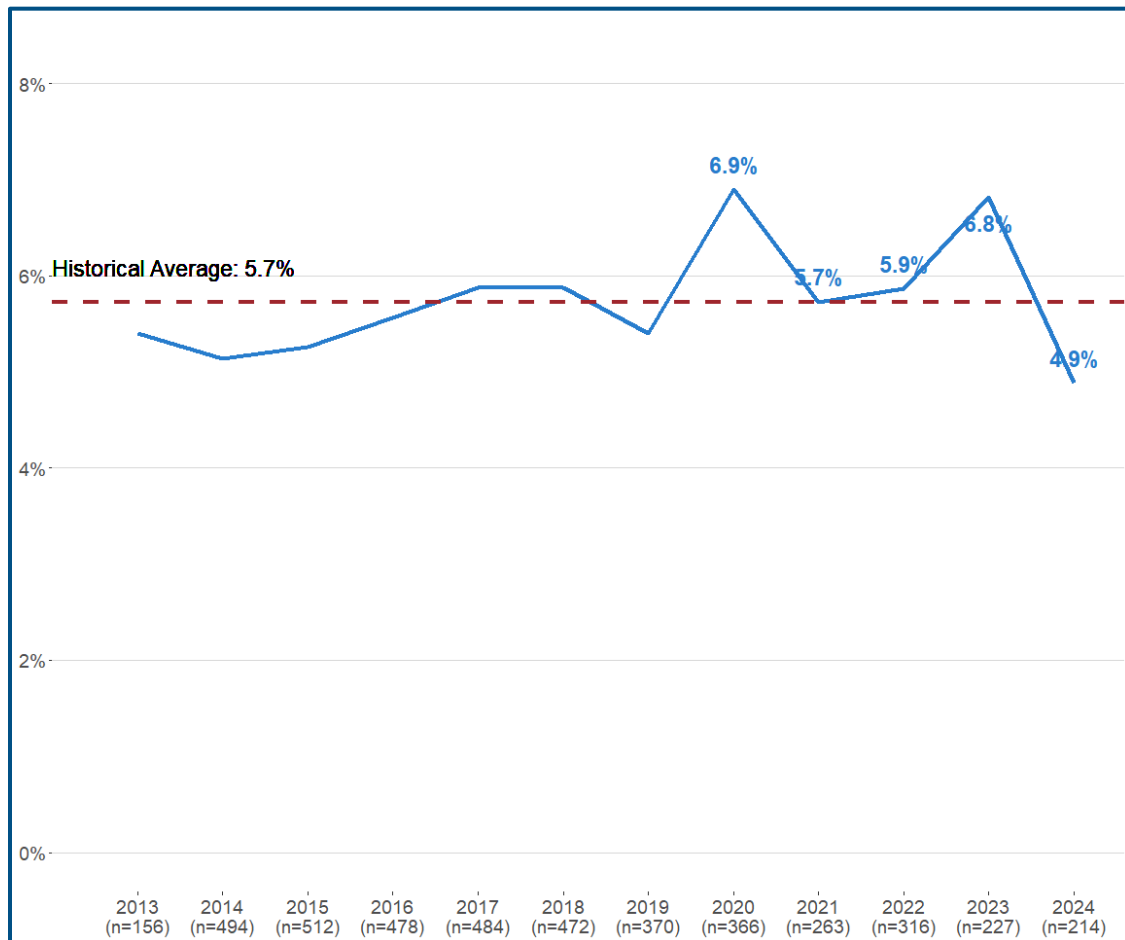
3.2. IT Budget and Spending Trends.

Average annual IT budgets were up slightly in 2024 for the 241 organizations reporting this figure, rising from \$95.2M to \$105M. The median IT budget \$10M, which is similar to the previous three years. To account for organization size, IT budget as a percentage of total revenue was also computed for the 214 organizations reporting both



values. In 2024, this percentage dropped precipitously to 4.9%, a 10-year low for the IT Trends Study (Figure 1). Given the relatively minor changes to annual revenues and IT budgets as a whole, this drop could signal that revenues may be growing at a slightly higher rate than IT budgets.

Figure 1: Average IT Spending as a Percentage of Revenue



Across sectors, there is much less variance in IT spending as a percentage of revenue compared to previous years. While last year, sectors ranged from 15.6% (Business/Professional Services/Consulting) to 1.2% (Transportation), this year's spread is only 2% to 10.5% (Table 6).



Table 6: IT Spending as Percentage of Revenue, by Business Sector

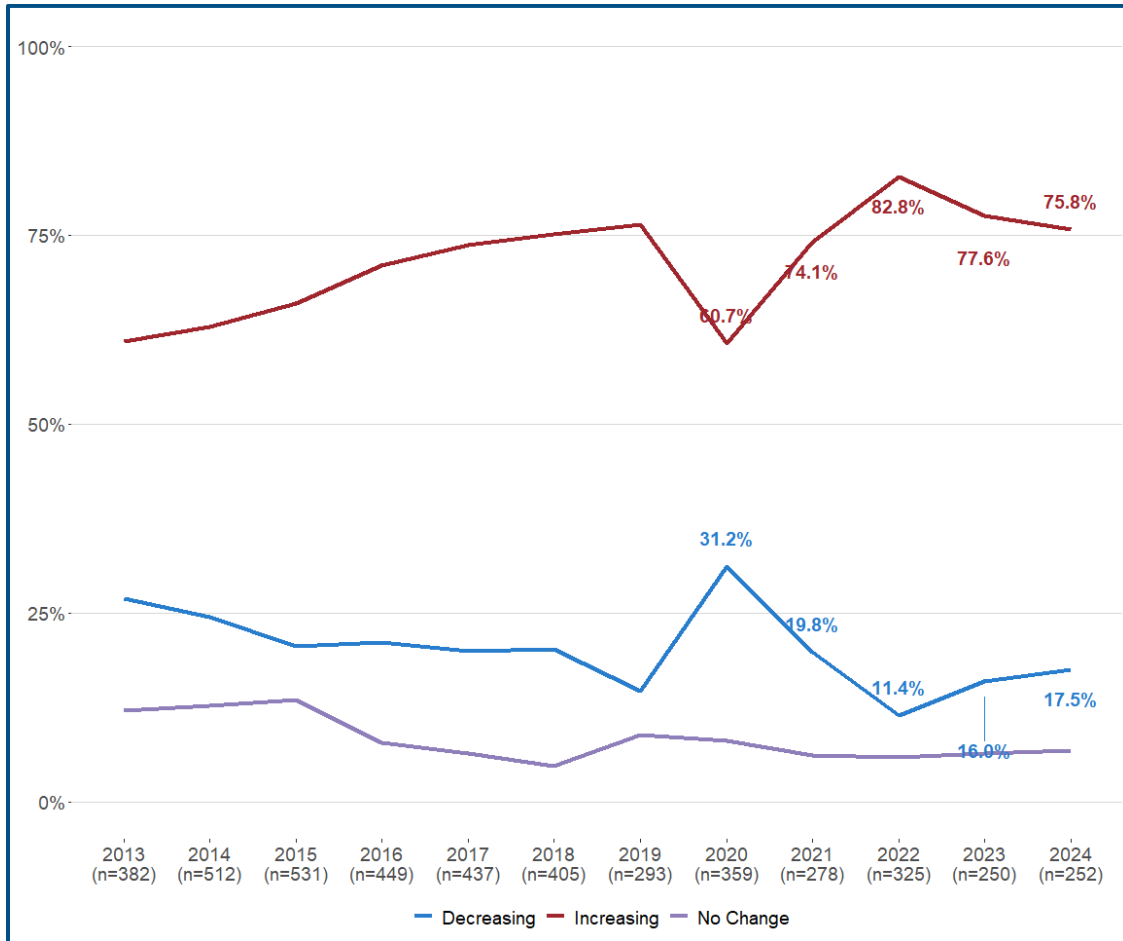
Sector ^a	Number of Organizations	Average % of Revenue Spent on IT
IT Services / Consulting	26	10.5%
IT Hardware / Software	12	8.6%
Not-for-Profit	27	6.7%
Other for profit (specify):	22	5.8%
Financial Services / Insurance / Banking	53	5.5%
Education	28	5.4%
Retail / Wholesale	12	5.0%
Healthcare / Medical / Medical Technology / BioMedical	67	4.1%
Government	29	4.0%
Business or Professional Services / Consulting	14	3.9%
Real Estate	12	2.5%
Consumer Goods / Services	10	2.4%
Transportation / Distribution / Logistics	15	2.3%
Manufacturing	33	2.0%

^a Only sectors with at least 10 reporting organizations are included here.

While IT budgets as a percentage of revenue decreased significantly this year, there was only a small increase in the percentage of respondents that claimed their IT budget was lower in 2024 than in 2023 (Figure 2). Many organizations (75.8%) still report an overall increase in their IT budget, but based on other statistics reported above, it appears as though these budget increases are modest in nature.



Figure 2: Changes in IT Budgets



Some minor changes in how IT budgets are allocated across several mutually-exclusive budget categories were observed in 2024. Notably, the percentage spent on cloud services decreased from 19.4% to 18.5% and that on software increased from 15.5% to 17.6% (Table 7).



Table 7: IT Budget Allocations

Budget Category	2024 (n=238)	2023 (n=216)	2022 (n=297)	2021 (n=225)	2020 (n=337)
Employees	33.6%	33.7%	33.8%	35%	33.9%
Cloud Services (SaaS, PaaS, IaaS, process, etc.)	18.5%	19.4%	18.7%	18.2%	16%
Software	17.6%	15.5%	17.2%	15.2%	17.2%
Consultants & Contractors ^a	14.1%	13.4%	12.4%	14.2%	13.9%
Hardware	9.5%	9.8%	10.8%	10.8%	11.5%
Facilities (including supplies and consumables)	3.4%	3.9%	3.7%	3.6%	3.7%
Other	3.3%	4.3%	3.4%	3%	3.8%

^a Prior to 2022, Consultants and Contractors were two separate categories. Reported numbers are the sum of both categories prior to 2022

Separate from the categories noted above, respondents were asked to estimate their IT spending by functional area. Table 8 shows that these percentages have changed very little over the past four years, except for a steady upward trend of analytics spending.

Table 8: IT Budget Allocations to Non-Mutually Exclusive Categories

Functional Budget Category	2024 (n= 221)	2023 (n= 221)	2022 (n=309)	2021 (n=246)	2020 (n=349)
Keeping the lights on (i.e., IT day-to-day operations including upgrading and replacement)	38.4%	38.1%	36.8%	38.6%	39.1%
Software development, maintenance, and/or integration	15.5%	14.2%	16.6%	14.8%	16.8%
Cybersecurity	12.3%	12.2%	12.6%	10%	8.6%
New IT-related capital investments	11.9%	13.5%	13%	13.5%	15.1%
IT Outsourcing (both domestic and offshore)	11.7%	12.3%	11.5%	10.2%	9.6%
Analytics / Business Intelligence / Big Data	10.3%	9.2%	8.1%	6.4%	6.9%
IT related R&D and Innovation	7.9%	8.5%	8.2%	5.5%	5.4%
Offshore IT	5.8%	6.3%	6.2%	5.5%	4.5%



Technical training, development, and/or education	3.4%	3.0%	3.1%	2.7%	2.8%
Managerial and leadership training, development, and/or education	2.7%	3.2%	3.0%	2.4%	2.7%

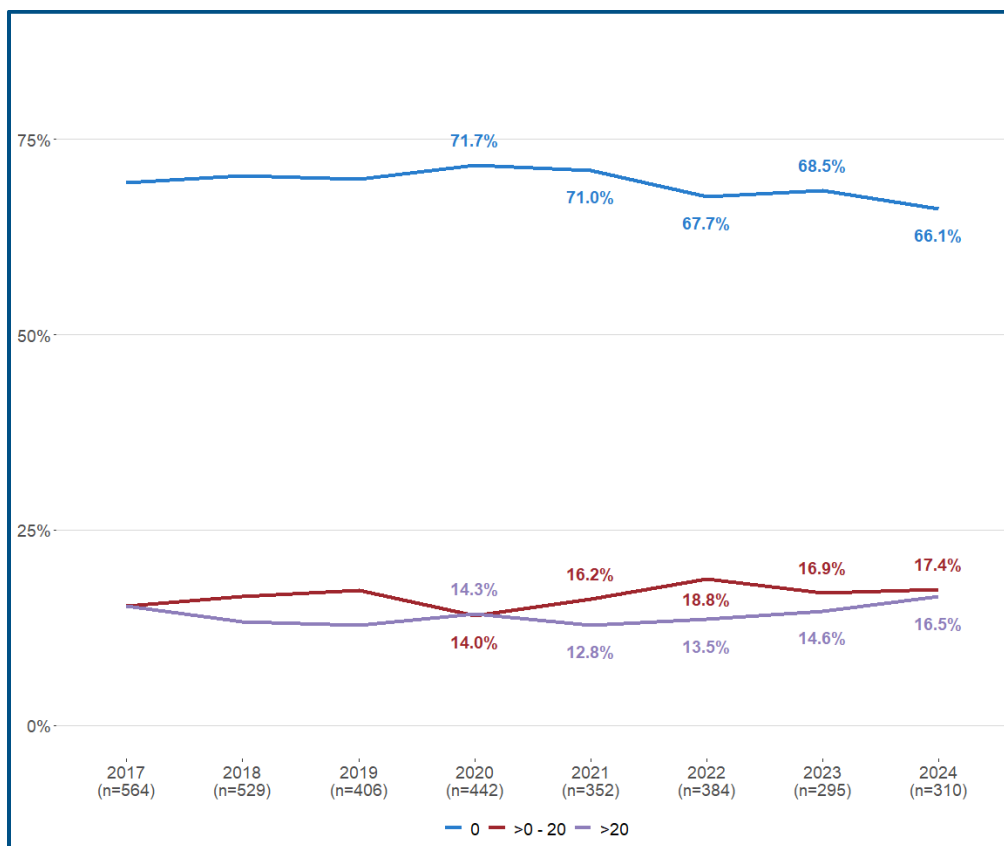
Totals do not sum to 100% because categories are overlapping and not mutually exclusive

3.3. IT Workforce and Salary Trends.

3.3.1. IT Employees and their Salaries. In 2024, the average number of “full-time IT employees (IT FTEs, not including contractors or consultants)” who “report to or under the top IT person” was 180 (n = 343) down from 267 in 2023. However, the median number of IT FTEs in remained steady at 30.

On average, 10% of IT FTEs in 2024 were “located outside their home country (i.e., offshore)” (n=310), consistent with 2023. However, 66.1% of organizations reported having no IT employees outside of their home country, down from 68.5% in 2023 (Figure 3).

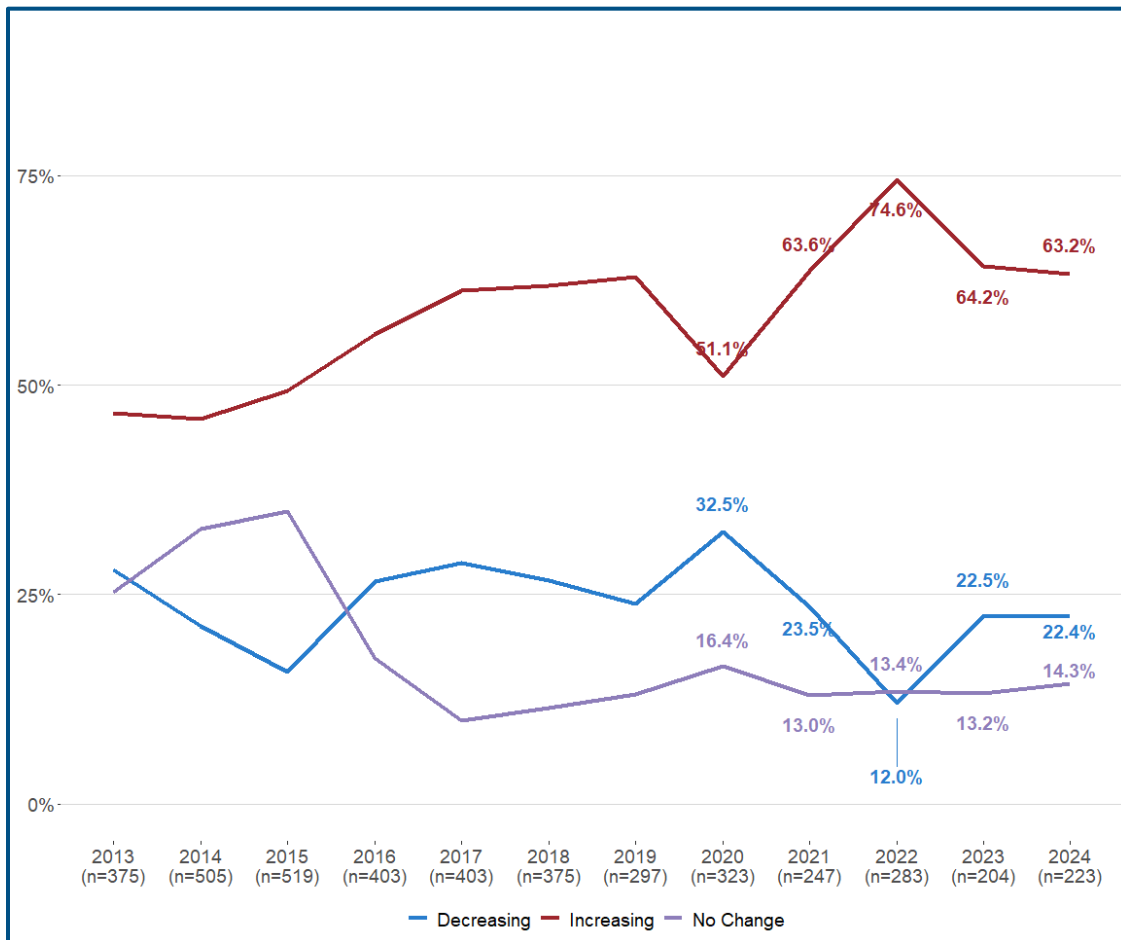
Figure 3: Percentage of IT FTEs Located Outside Employer's Home Country





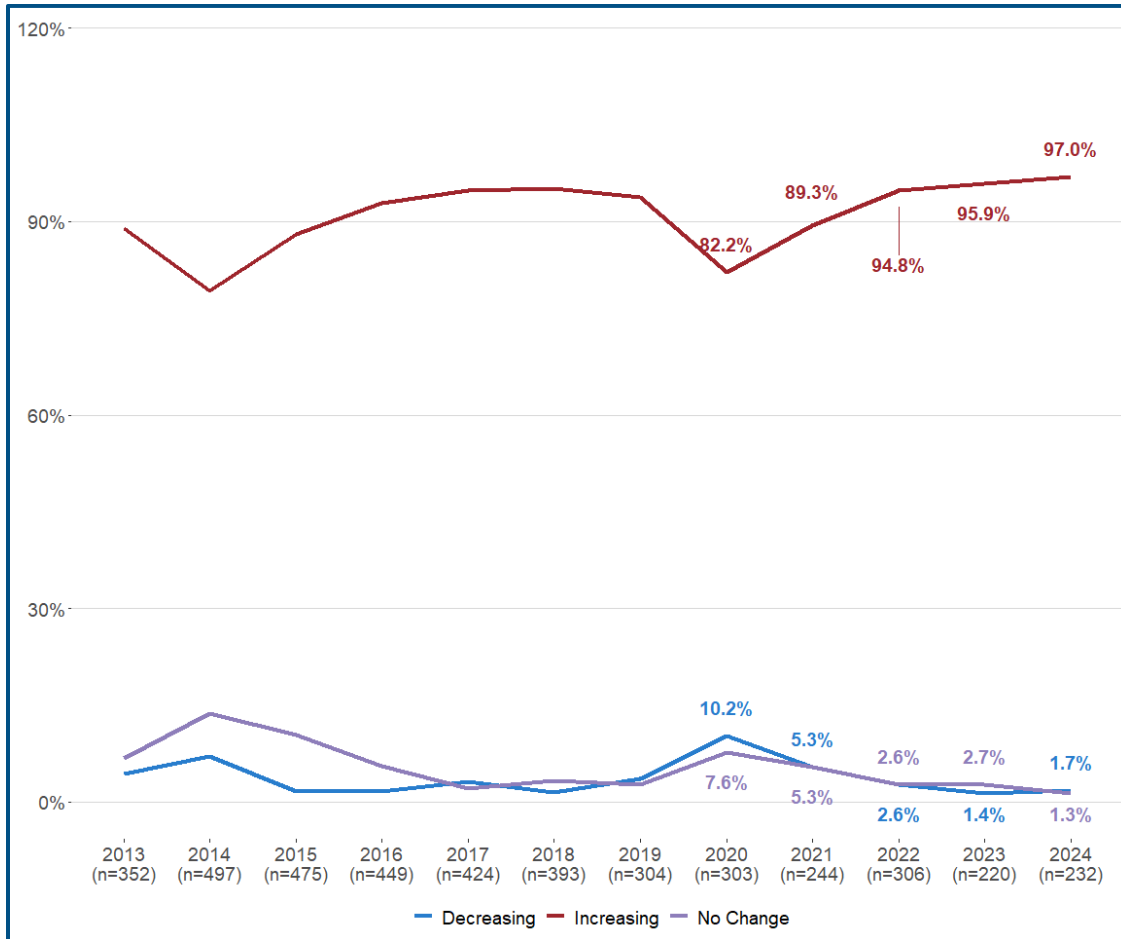
In 2024, 63.2% of 223 responding organizations reported an increase in the number of internal IT employees (Figure 4), this is similar to the 64.2% in 2023. The percentage reporting no change remained relatively flat at 14.3%. Organizations reporting decreasing headcount remained flat at 22.4%.

Figure 4: Changes in Internal IT FTEs



In 2024, 97% of organizations reported that average IT salaries increased (Figure 5). This is up from 95.9% in 2023 and represents the fourth year of an upward trend. The average increase in IT salaries declined slightly from 5.7% in 2023 to 5.2% in 2024.

Figure 5: Changes in Average IT Salary



3.3.2. IT Contractors and Consultants. The average number of IT contractors and consultants continued to decline 2024 to 81 (n=285), down from 92 in 2023. However, the median remained steady at 5 and the standard deviation was 718.0 indicating significant variability in the sample. 64.6% of respondents reported using less than 50 consultants and contractors, which is up from 62% reported in 2023. The percentage of those using no contractors or consultants remained relatively flat at 21.1%.

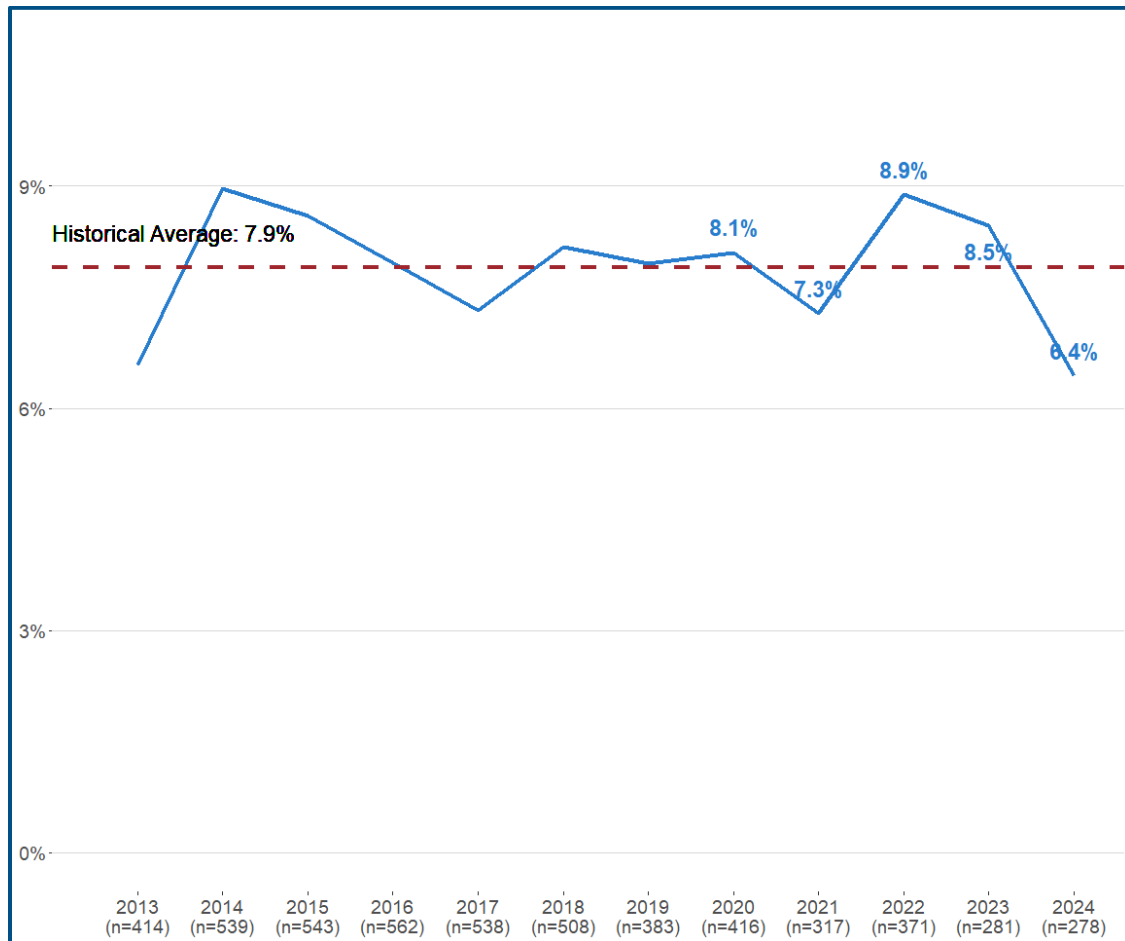
Of the 144 organizations that reported using IT contractors and consultants, 55.6% reported an increase in the number utilized. 19.4% reported no change, and 25.0% reported a decrease. This is consistent with that reported in 2023.

3.3.3. IT Workforce Turnover and Retirements. Turnover rate decreased dramatically from 8.5% in 2023 to 6.4%. (Figure 6). This is the lowest level reported in the past 11 years and far below the 7.9% historical average. This is consistent with the national



turnover rate that is currently at its lowest since 2021. This is often attributed to the current economic cycle where employee confidence is low, inflation, and overall economic growth.⁵

Figure 6: Turnover Rate for Full-Time IT Employees



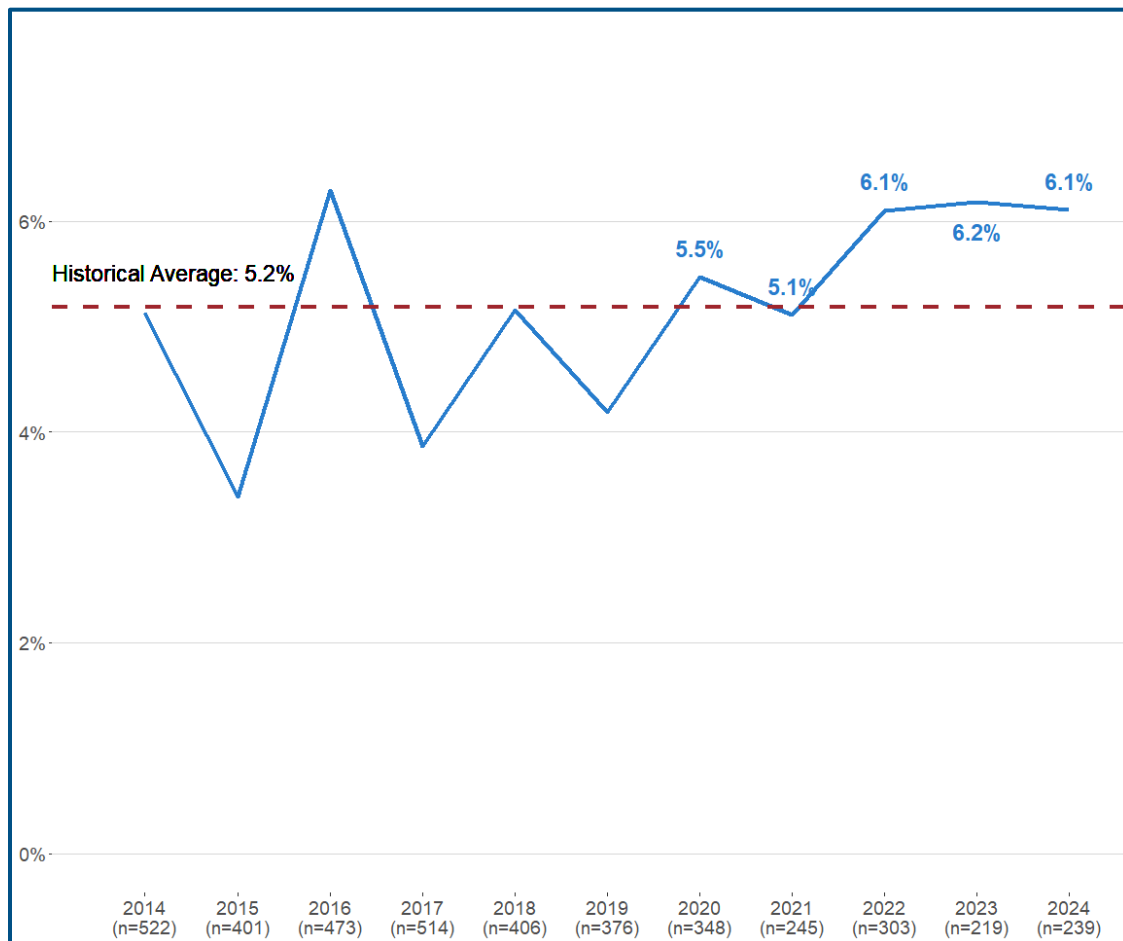
Respondents provided estimates of the portion of their IT staff turnover that was “involuntary (i.e., the result of downsizing, layoffs, terminations, etc.)” rather than “voluntary (i.e., quitting, retirements, etc.).” Voluntary departures, on average, accounted for 72.1%, a decrease from 73.2% in 2023. Involuntary departures increased to 27.9% from 26.7% in 2023 and 22.2% in 2022.

⁵ Collins, E. (2024). Employee Retention Statistics: Why Companies Need to Pay Attention in 2024. <https://www.selectsoftwarereviews.com/blog/employee-retention-statistics>



3.3.4. IT Workforce Training Expenditures. Overall investment in training remains above the 10-year average of 5.2%. IT leaders reported that the percentages of the IT budget allocated to managerial/leadership and technical training in 2024 were 2.7% and 3.4%, respectively. The combined 6.1% allocated to training in 2024 remained relatively flat shown in Figure 7. This is consistent with efforts to attract, develop, and retain talent.

Figure 7: Percentage of IT Budget Spent on Training

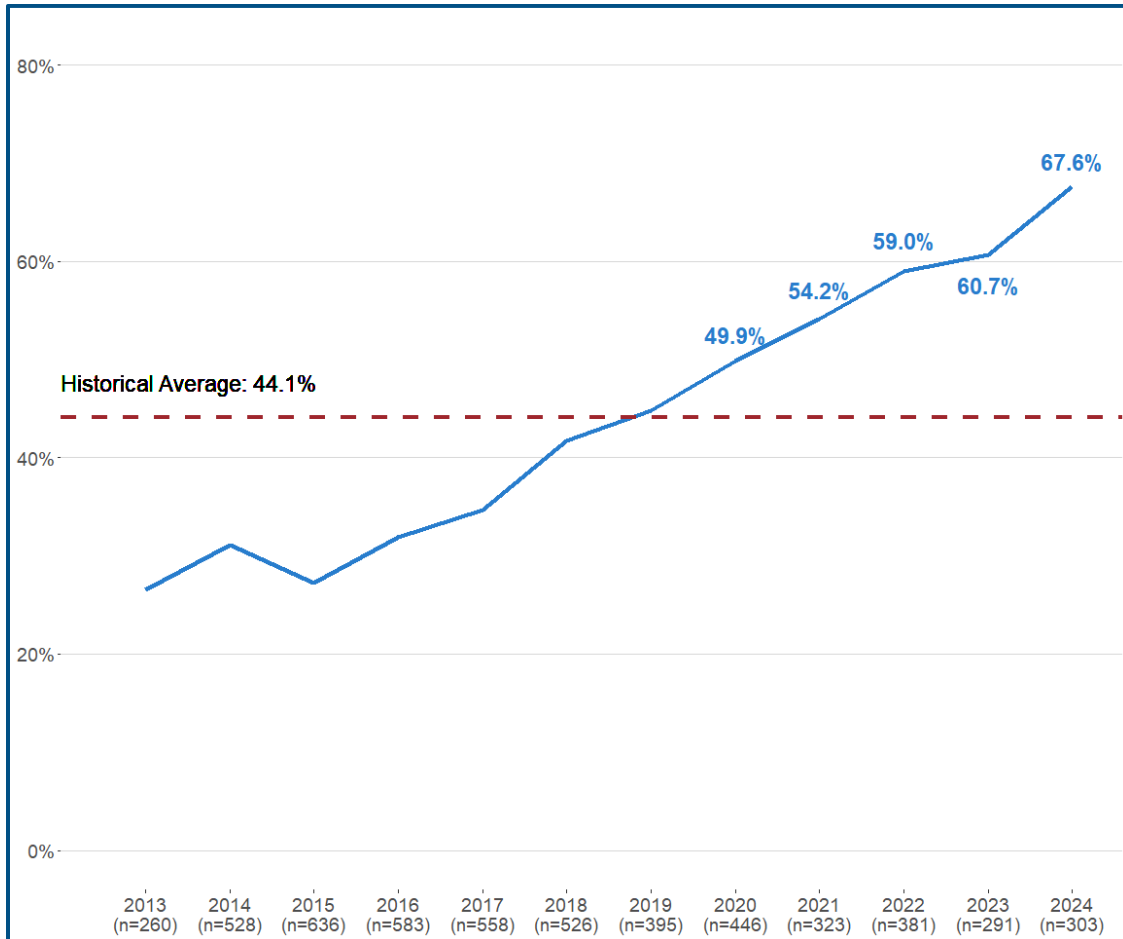


3.4. Use of Cloud and Shared Services.

Organizations on average, reported delivering 67.6% “of all IT services” via the cloud which continues the strong upward trend that began in 2015 (Figure 8). The median value continued to increase from 65% in 2022 and 70% in 2023 to 75% in 2024.



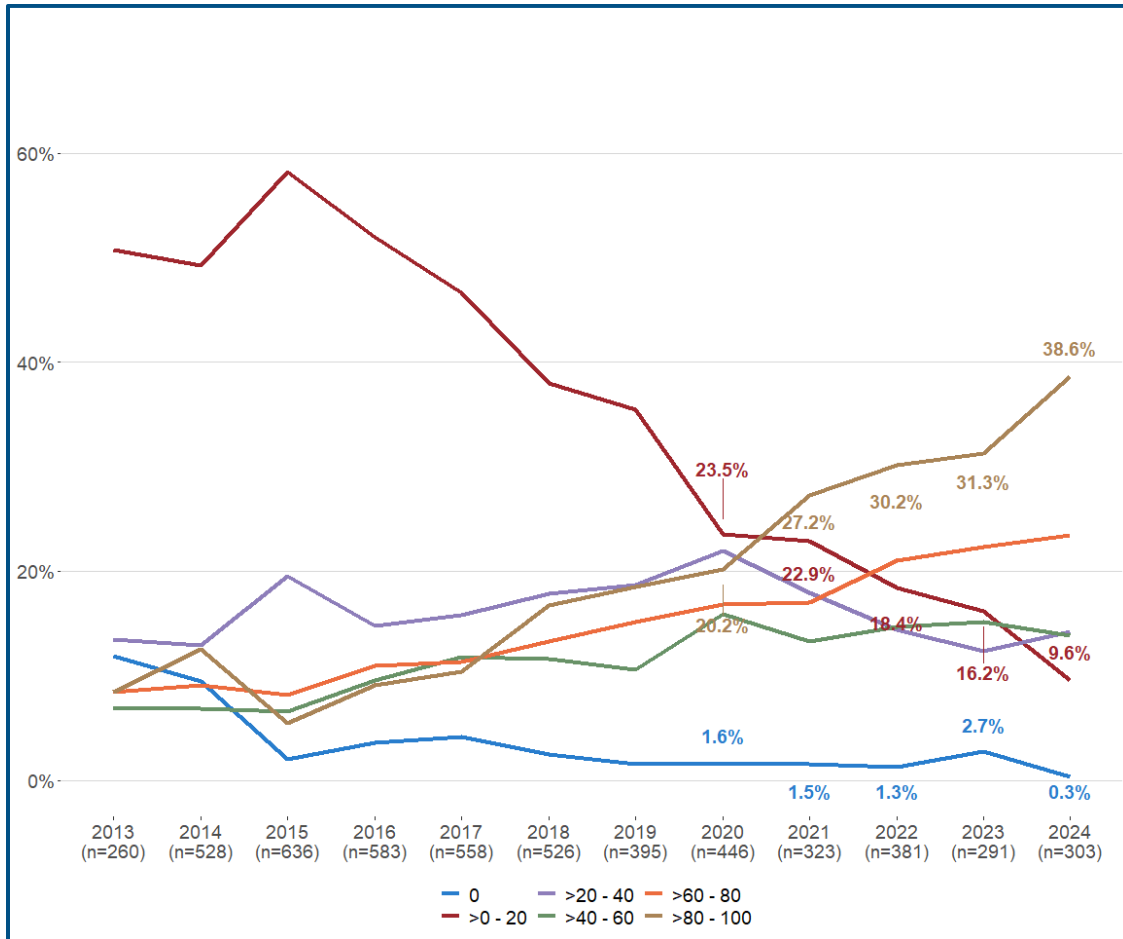
Figure 8: Average Amount of All IT Services Delivered by Organizations via the Cloud



3.4.1. Cloud-Based IT Services and Solutions. Figure 9 shows how organizations are moving to deliver more IT shared services via the cloud. 0.3% of organizations reported no cloud-based IT services, down from 2.7% 2023. However, 38.6% of organizations in 2024 reported delivering over 80% of their shared IT services via the cloud.

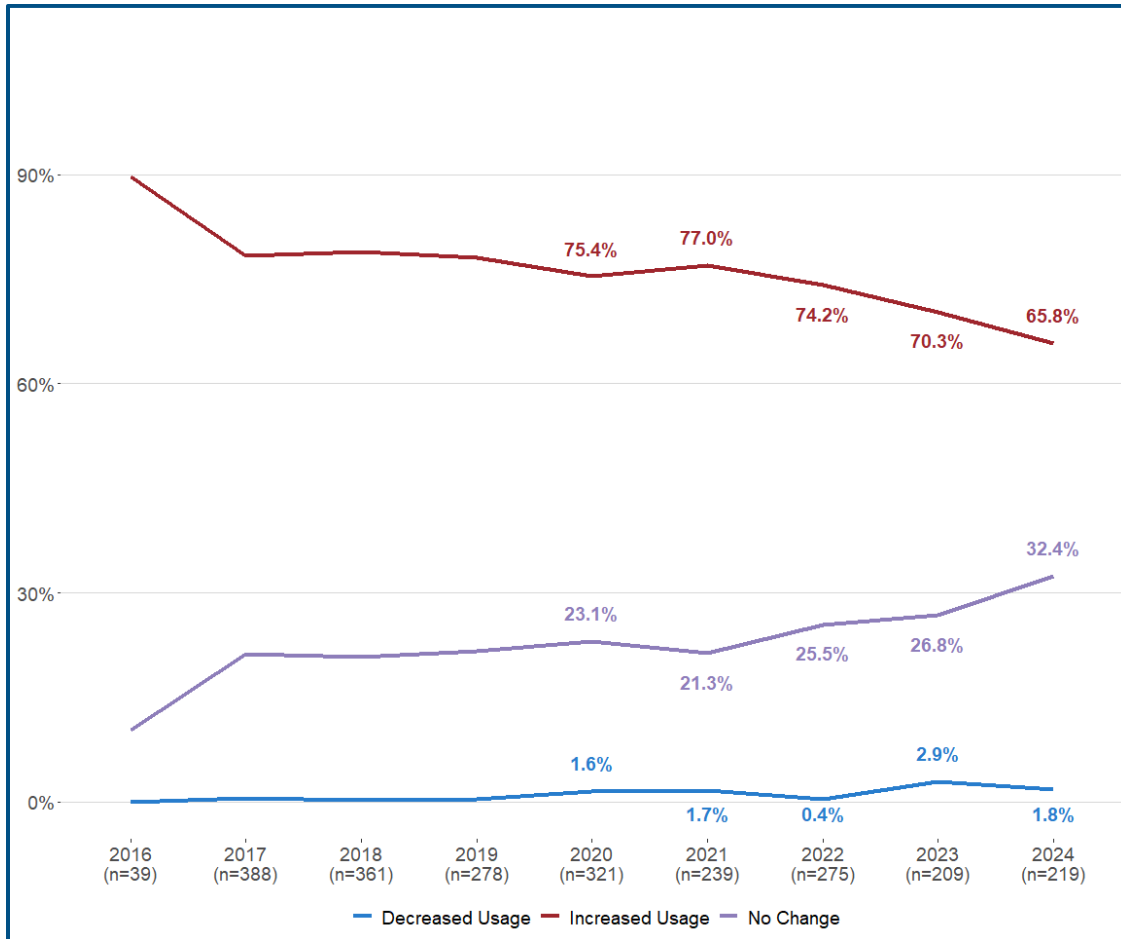


Figure 9: Percentage of IT Services Delivered via the Cloud



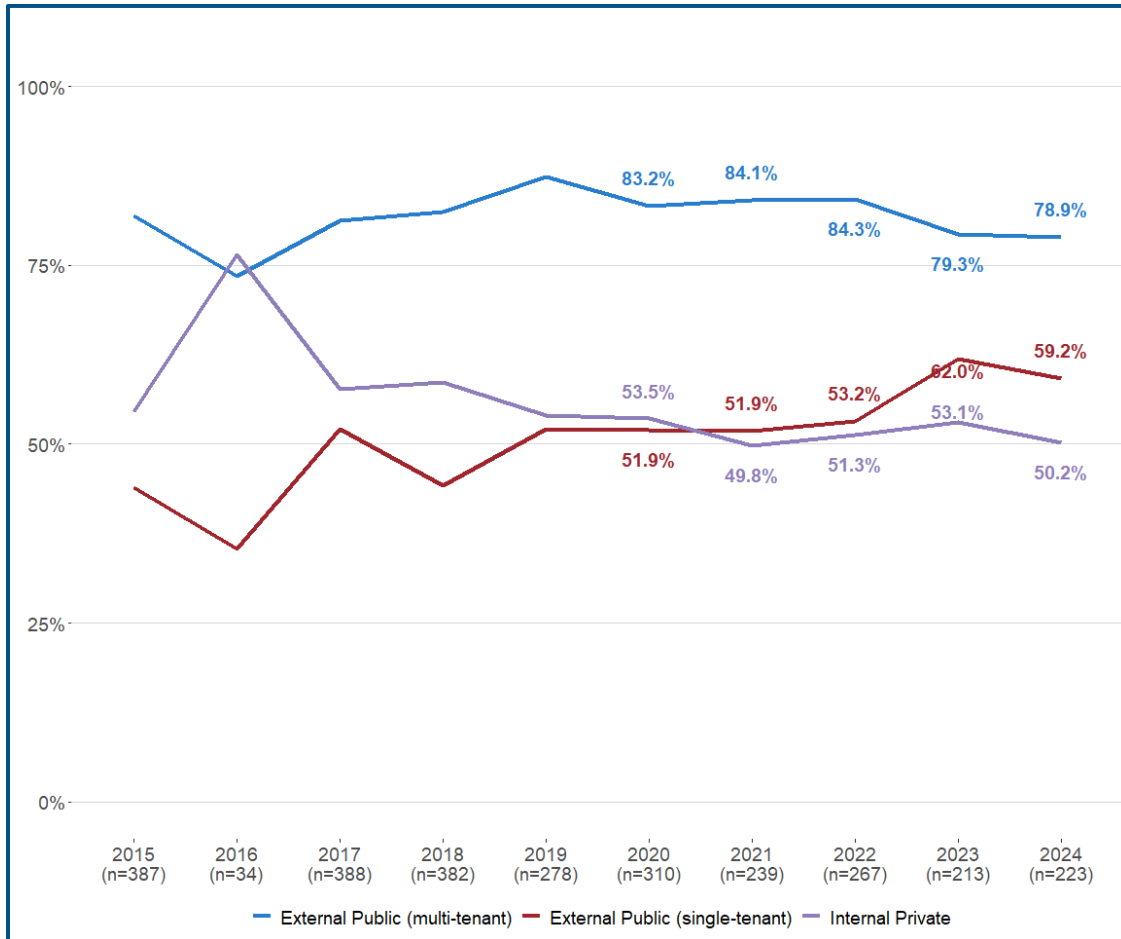
An increase in external cloud usage was reported by 65.8% of respondents, which continues a decline that began in 2021 when 77.0% of organizations were transitioning to external cloud. 32.4% reported no change in 2024 and 1.8% reported a decrease (Figure 10).

Figure 10: Changes in External Cloud Usage



As shown in Figure 11, the percentage of organizations using external public multi-tenant cloud decreased slightly from 79.3% in 2023 to 78.9%. This is the lowest percentage of organizations using external multi-tenant cloud services reported since 2016. The usage of external single-tenant cloud decreased from 62.0% in 2023 to 59.2%. In addition, the use of internal private cloud decreased from 53.1% to 50.2%.

Figure 11: Percentage of Organizations Using Each Cloud Category



IT services provided through external multi-tenant cloud increased slightly from 47.4% in 2023 to 48.9% while the use of external public single tenant service usage decreased from 29% in 2023 to 27.3%. Internal private cloud usage increased slightly from 23.1% to 23.3% (Figure 12).

Also, the percentage of companies using external public multi-tenant platforms for over 50% of their cloud-based IT increased slightly from 39.4% in 2023 to 40.6%. Meanwhile, the percentage of companies relying on external public single tenant rose from 18.8% in 2023 to 19.6% in 2024 and internal platforms increased from 16% in 2023 to 18.3% (Figure 13).



Figure 12: Average Percentage of All Cloud-based IT Provided by Category

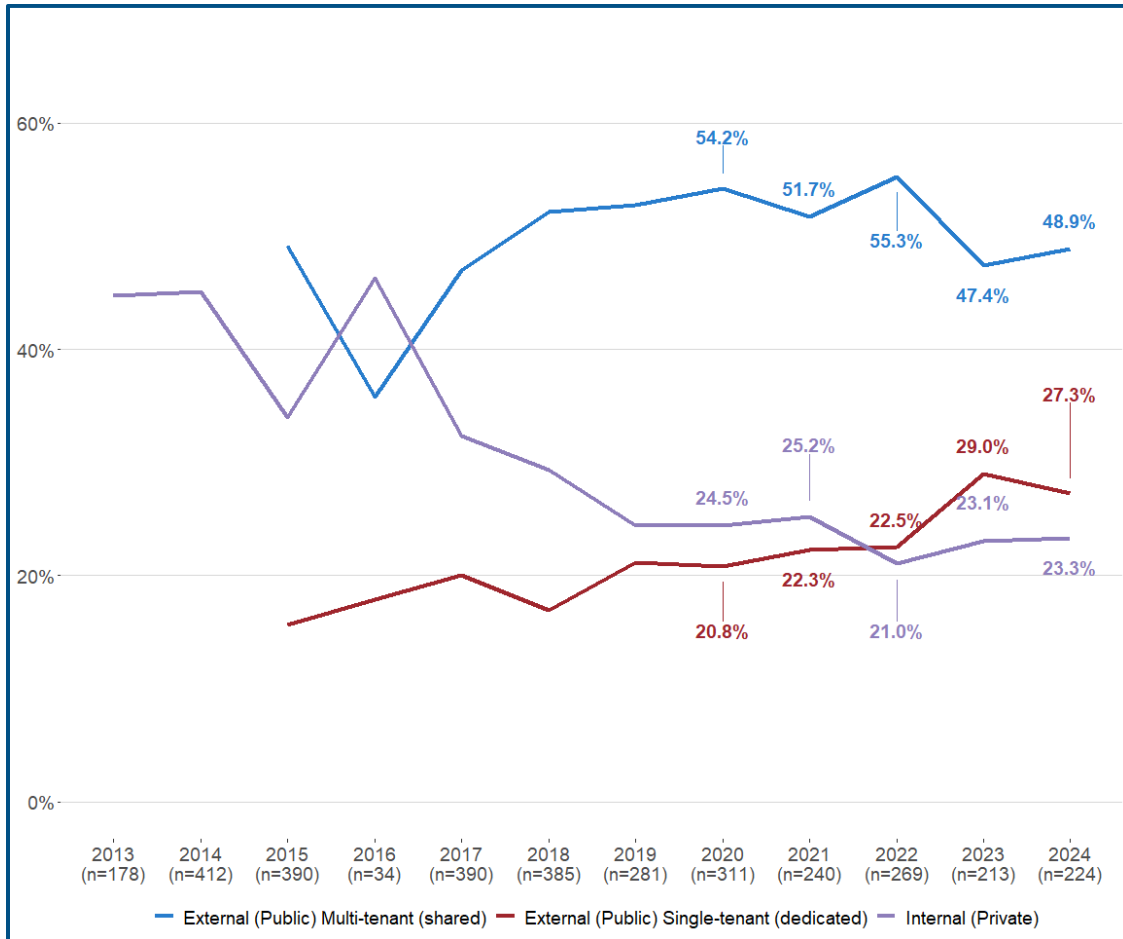
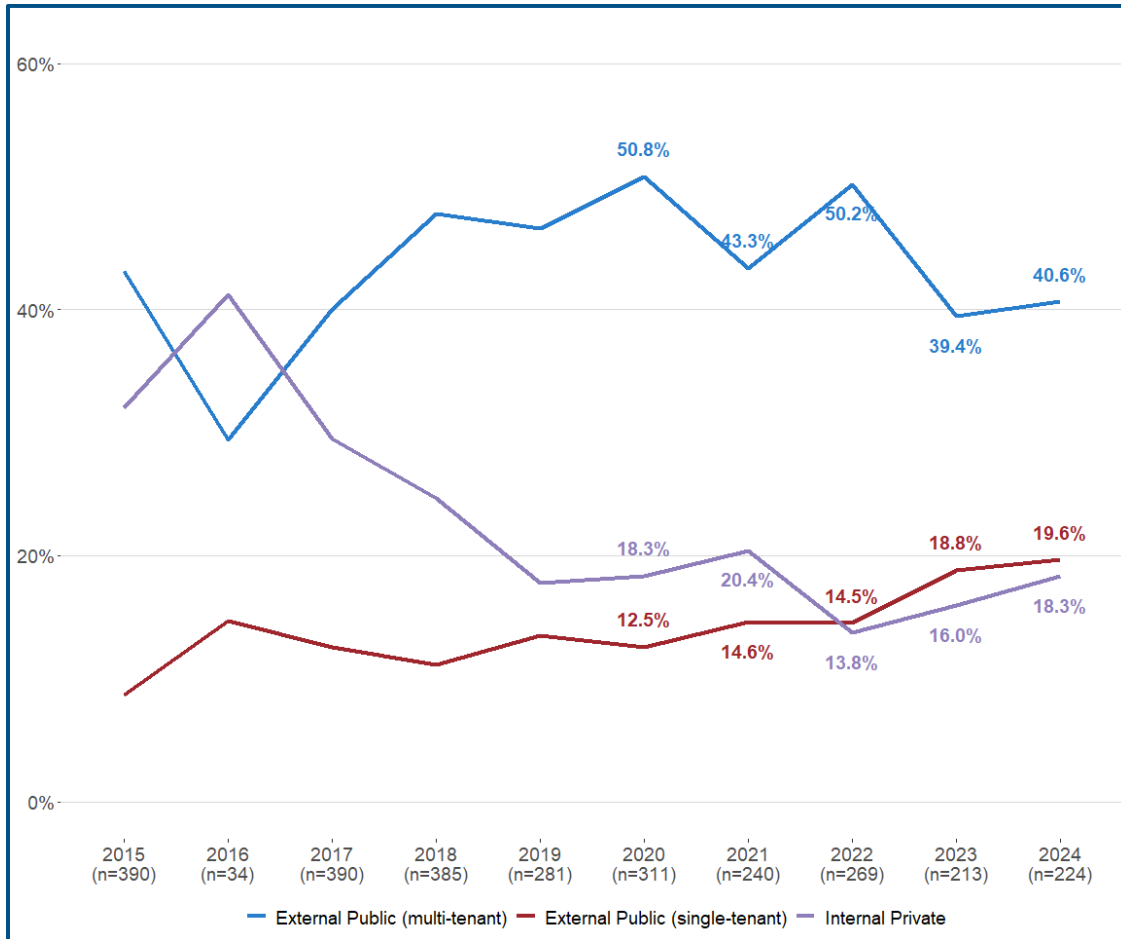


Figure 13: Organizations Using Each Category for Over 50% of Cloud-Based IT



Examining the cloud platform mix shown in Figure 14, companies that reported using exclusively external public multi-tenant platforms increased from its nine-year low in 2023 of 18.3% to 21.5%. Also, companies reporting using public/private hybrid platforms decreased from 46.9% in 2023 to 43.9% in 2024, a ten-year low. Companies utilizing only internal private increased to 6.3% while those using only external public single tenant platforms fell to 7.6%.

Figure 14: Corporate Cloud Platform Mix

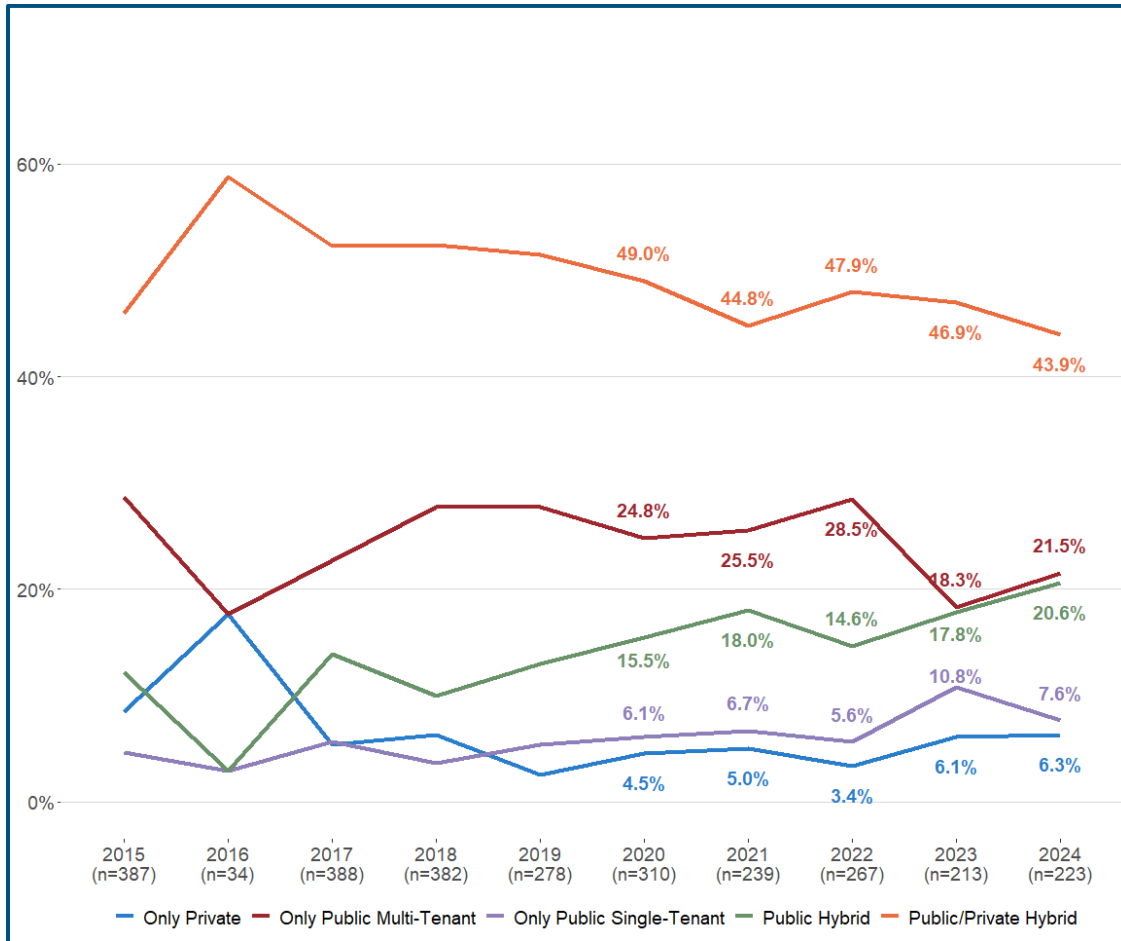
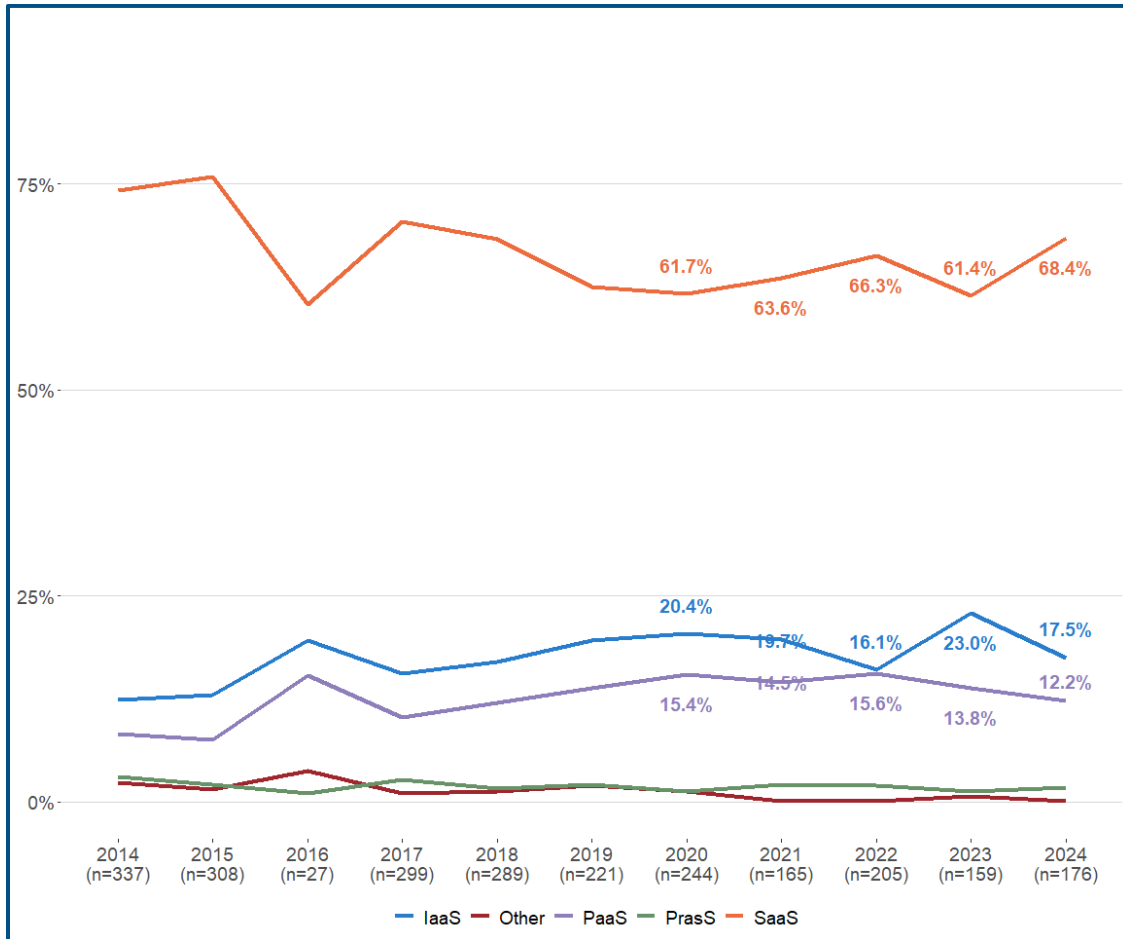


Figure 15 shows responses to the question: “What percentage of the external cloud-based IT services are provided in each of the following categories: Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), and Process as a Service (PaaS)?” In 2023, SaaS usage increased from 61.4% to 68.4%. IaaS decreased sharply from its ten-year high of 23% in 2023 to 17.5% and PaaS declined to 12.2% from 13.8%. PaaS increased from 1.2% in 2023 to 1.8% in 2024.



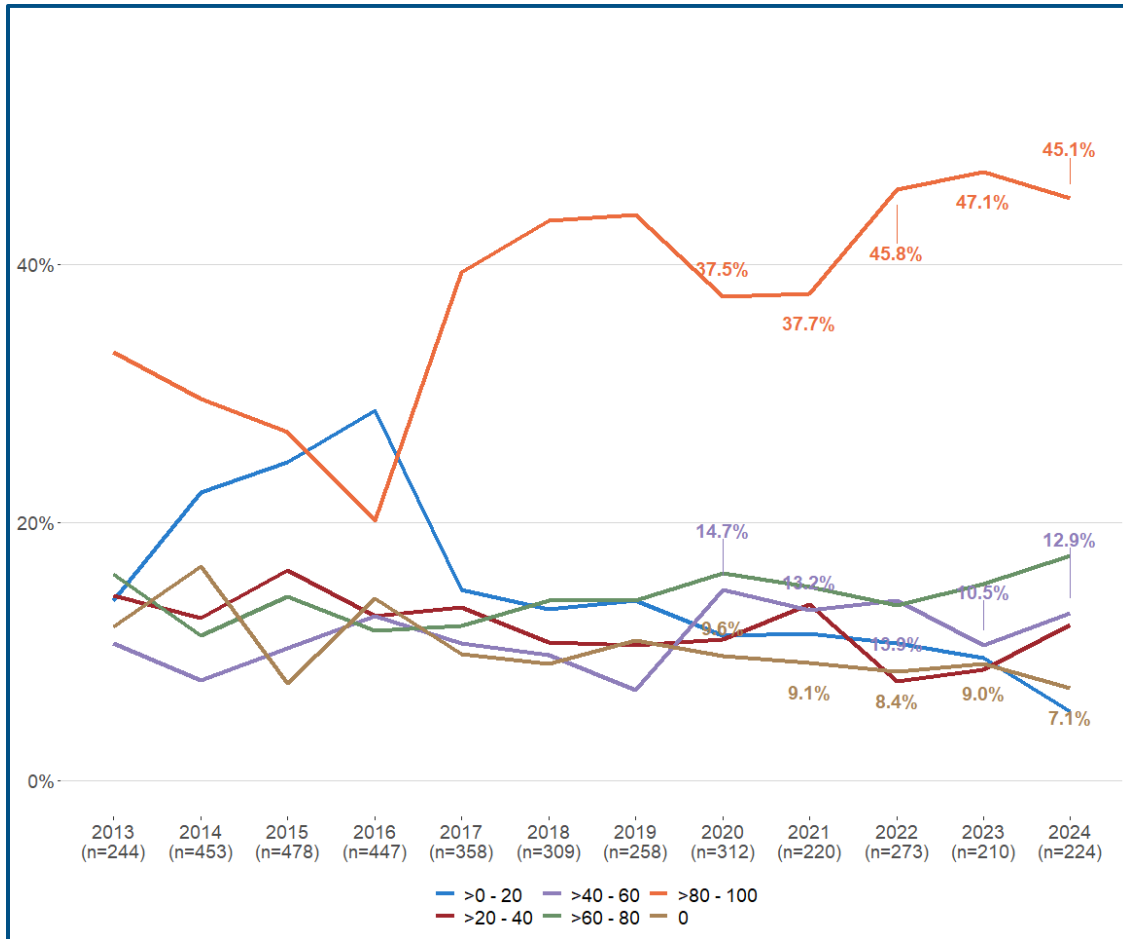
Figure 15: Percentage of External Cloud Services Delivered by Service Category



3.4.2. Shared Services for IT Delivery. In 2024, 92.9% of organizations indicated that they used at least some shared IT services. At 69%, the average amount of all IT services delivered as a shared service continued to increase from that reported in 2023 (67.8%) (Figure 16).

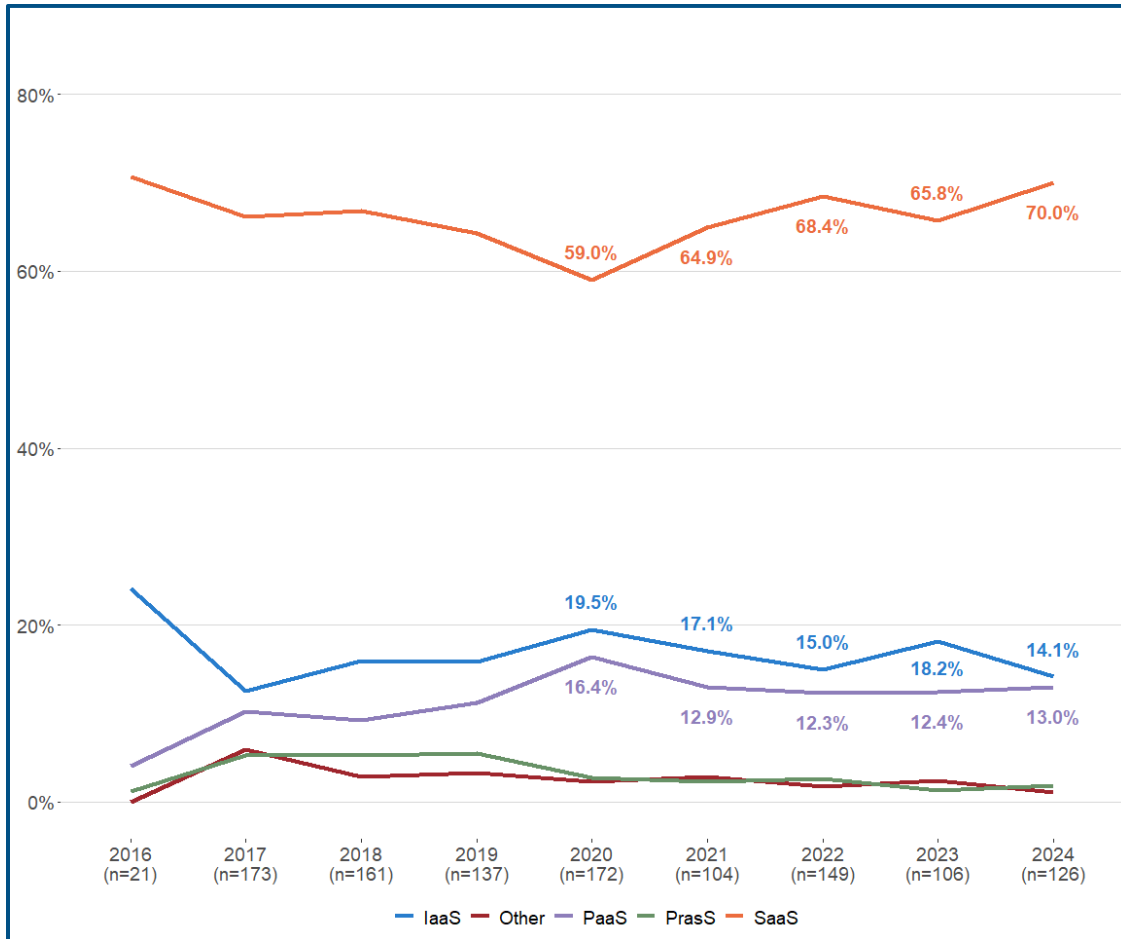


Figure 16: Percentage of All IT Services Delivered as Shared Services



Organizations where IT is delivered as a shared service through the cloud were asked “What percentage of IT shared services are provided in each of the following categories?” SaaS increased from 65.8% to 70% in 2024, its highest value since 2017. Other areas such as PaaS increased from 1.3% to 1.9%, IaaS increased slightly from 12.4% to 13%, and IaaS decreased from 18.2% to 14.1% (Figure 17).

Figure 17: Percentage of IT Shared Services by Category



3.5. Cybersecurity Practices.

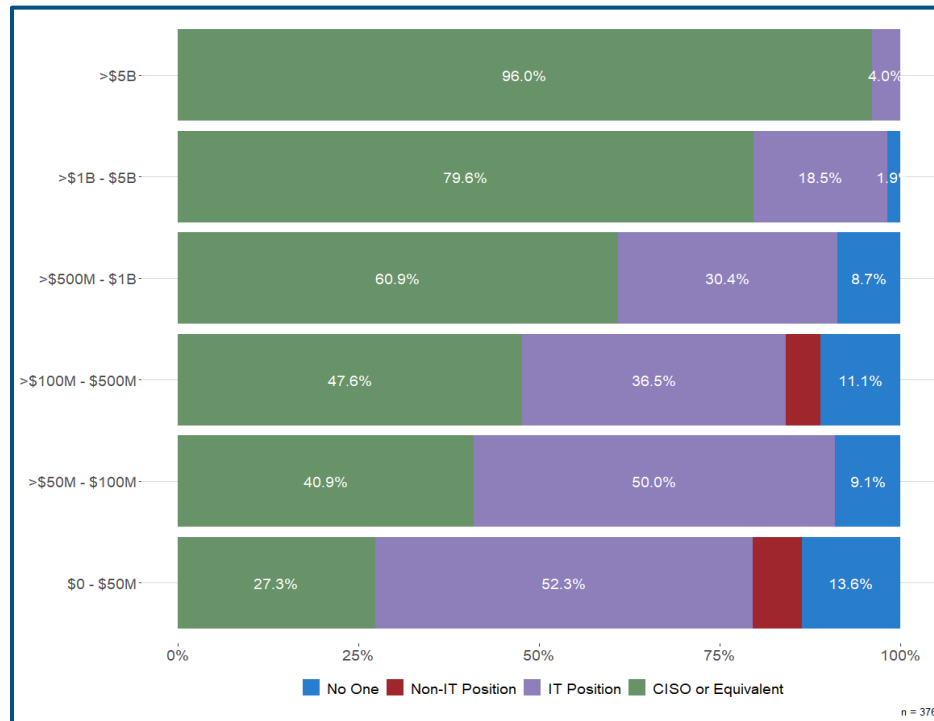
After dropping to the number two spot in 2023, cybersecurity once again topped the list of top organizational concerns in 2024 (Table 1). Despite its perennial appearance near the top of the list of concerns, activities related to cybersecurity appear to have plateaued. Like last year, 57.7% of respondents have a dedicated person in charge of Cybersecurity while 8% have no job position with formal cybersecurity responsibilities (Table 9). There is, however, a very clear relationship between cybersecurity leadership and organization size (in terms of revenue) (Figure 18).



Table 9: Cybersecurity Leadership

Does your organization have a person with formal authority/responsibility over cybersecurity practices?	2024 (n=376)	2023 (n=387)	2022 (n=479)	2021 (n=403)	2020 (n=550)
Yes, a dedicated person (CISO, VP of Cybersecurity, or equivalent)	57.7%	57.1%	54.7%	51.4%	50.4%
Yes, someone in the IT function that also has non-cybersecurity responsibilities	31.1%	30.7%	32.4%	33.3%	31.6%
No, there is no one with formal cyber authority/responsibility	8.0%	8.8%	8.4%	11.7%	13.8%
Yes, someone outside of the IT function that also has non-cybersecurity responsibilities	2.7%	1.8%	2.9%	2.2%	2.5%
Don't know	0.5%	1.6%	1.7%	1.5%	1.6%

Figure 18: Cybersecurity Responsibility by Revenue





Little has changed in the past five years in where the cybersecurity function resides within organizations. 63% of CISO (or equivalent) positions report to the CIO while 14.2% report to the CEO. While this latter figure is up from the reported value in 2023 (10.3%), it is slightly down from 2022 (15.3%) which may signal these changes are simply due to sampling error year over year (Table 10).

Table 10: To Whom Does the CISO (or Equivalent) Report?

	2024 (n=211)	2023 (n=213)	2022 (n=261)	2021 (n=206)	2020 (n=273)
CIO (Information)	63.0%	62.4%	58.6%	67.0%	57.5%
CEO / President	14.2%	10.3%	15.3%	7.8%	11.4%
CTO (Technology)	7.1%	9.4%	10.0%	9.7%	9.9%
COO (Operating)	6.6%	4.2%	3.4%	4.9%	6.6%
Other (specify):	5.2%	6.1%	8.8%	7.8%	8.4%
CFO / Treasurer / Finance	3.3%	5.6%	3.4%	1.9%	4.4%
Board / Board Member	0.5%	1.9%	0.4%	1.0%	1.8%

Similar to last year, respondents were asked whether they agree or disagree with several statements regarding the overall readiness of their organization to handle cybersecurity attacks on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The overall average readiness score was a 3.91 suggesting that the average organization “somewhat agrees” with statements regarding the readiness of their organization to address cyberattacks. The readiness score is identical to the 2023 score suggesting that organizations, on average, do not feel any more prepared to deal with cybersecurity attacks this year compared to last.

When asked what techniques organizations use to manage and enforce cybersecurity policies, respondents tended to rely more on requirements set by management and leading by example (Table 11). This is consistent with results from last year’s study. A small increase in the use of punishments was noted in 2024, this may represent a trend to keep an eye on in the future.



Table 11: Management Cybersecurity Compliance Motivation Strategies

Management Approach	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree	2024 Avg Score	2023 Avg Score
Requirements made from Management	2.0%	7.3%	15.0%	38.1%	37.6%	4.0	4.0
Leading Through Example	2.8%	8.5%	14.1%	37.6%	37.0%	4.0	3.9
Top-Down Initiatives	3.7%	8.5%	16.8%	41.0%	29.9%	3.8	3.8
Articulating Compelling Vision	6.0%	8.5%	27.0%	34.1%	24.4%	3.6	3.7
Issuing Punishments	12.8%	16.8%	34.1%	25.6%	10.8%	3.1	2.9
Offering Rewards	16.5%	23.4%	34.8%	15.7%	9.7%	2.8	2.7

Given it is difficult to estimate the true severity and frequency of cyberattacks across organizations, respondents were asked to rate the impact and frequency of breaches compared to their competitive rivals. Similar to 2023, most respondents believe they were “about the same” as rivals (Table 12). However, more than 50% of respondents indicated attacks on their organization were less frequent or less severe than rivals, indicating overall optimism that organizations are both preventing and effectively responding to cyberattacks.

Table 12: Frequency and Severity of Cyber-Disruptions, Relative to Rivals

	Significantly Less	Less	About the Same	More	Significantly More
Frequency of Disruptions	22.8%	33.9%	38.6%	3.2%	1.5%
Severity of Disruptions	22.7%	30.4%	41.2%	4.2%	1.5 %

To get a better understanding of the security incidents organizations experience, respondents were asked to estimate the frequency of attacks that originate outside the



organization, inside the organization, or through trusted partners. Little has changed since last year with the most common source being outside the organization followed by indirect attacks through trusted partners (Table 13).

Table 13: Frequency of Cyber-Attacks, by Origin

Origination	Never	Rarely	Occasionally	Often	Almost Always	2024 Avg Score	2023 Avg Score
Direct attacks from outside the organization	8.3%	25.4%	29.5%	20.1%	16.8%	3.1	3.0
Direct attacks from inside the organization	41.6%	45.2%	10.8%	1.2%	1.2%	1.8	1.8
Indirect attacks through trusted partners	15.0%	32.4%	34.8%	14.4%	3.3%	2.6	2.5

3.6. Digital Transformation.

Digital transformation involves using digital technology to meet changing business and market demands. These changes can often involve using technology to transform services or products to meet evolving customer expectations.

Organizations are increasingly appointing individuals to head up their digital transformation operations, as shown in Table 14. This upward trend may suggest that organizations are expanding efforts to better leverage digital technologies. Figure 19 shows that large organizations are much more likely to have a CDO or equivalent while smaller organizations are more likely to have no digital transformation leadership at all.

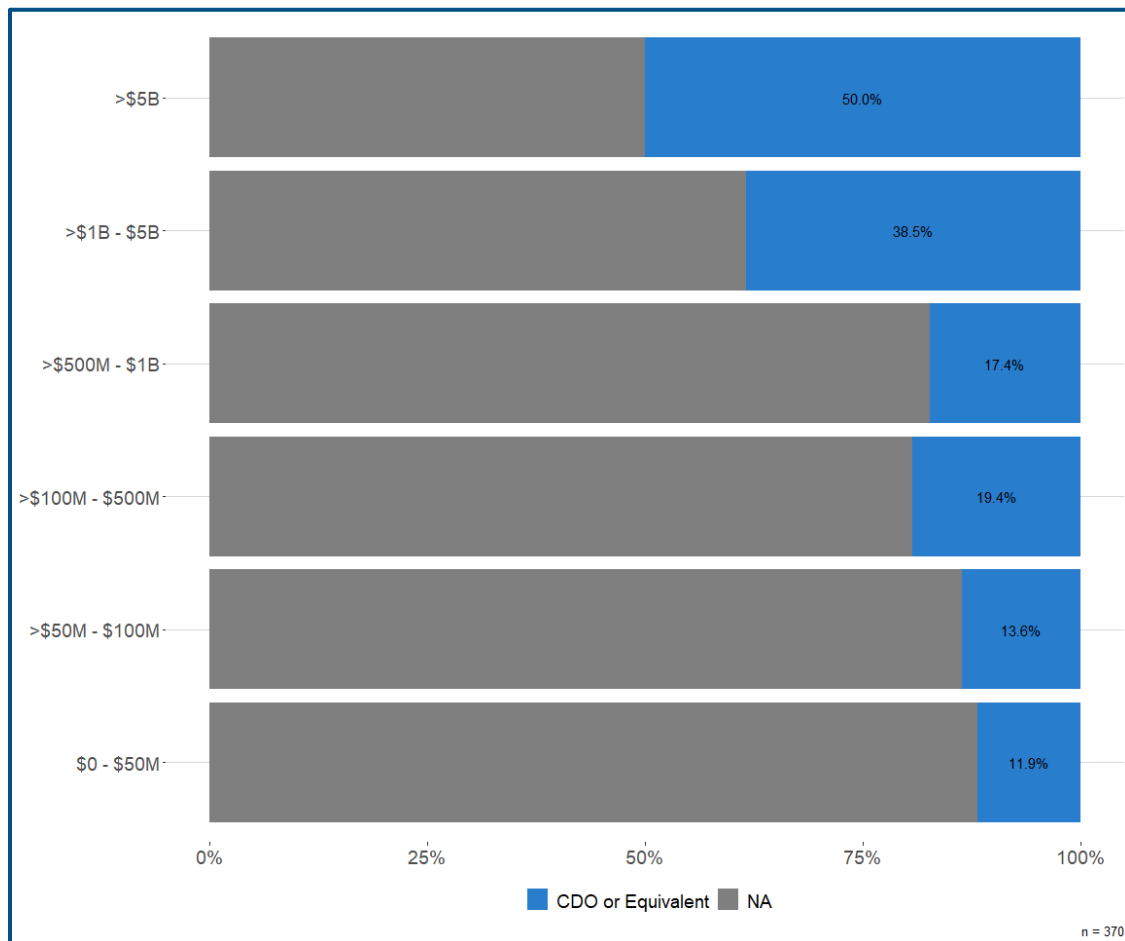
Table 14: Digital Transformation Leadership

Does your organization have a person with formal authority/responsibility over digital strategy?	2024 (n=370)	2023 (n=378)	2022 (n=479)
Yes, a dedicated CDO (Chief Digital Officer), VP of Digital Transformation, or equivalent	22.4%	24.3%	20.7%
Yes, someone in IT who also has non-digital transformation responsibilities	32.4%	25.1%	26.7%



Does your organization have a person with formal authority/responsibility over digital strategy?	2024 (n=370)	2023 (n=378)	2022 (n=479)
Yes, someone outside IT who also has non-digital transformation responsibilities	4.1%	5.8%	2.9%
No, there is no one with formal responsibility for digital transformation	36.8%	35.4%	40.1%
Don't know	4.3%	9.3%	9.6%

Figure 19: Digital Transformation by Revenue



While digital transformation efforts may impact many areas across the organization, there are many choices as to where digital transformation leadership should reside. For



those organizations with a dedicated CDO (or equivalent), the highest percentage report to the CEO (Table 15). The percentage of CDOs reporting to a CIO slightly increased in 2024 from 24.4% in 2023 to 29.1% in 2024. This suggests that more organizations are elevating visibility of the digital transformation initiatives across the organization. This is a trend worth keeping an eye on in coming years.

Table 15: To Whom Does the CDO (or Equivalent) Report?

	2024 (n=79)	2023 (n=86)	2022 (n=96)
CEO / President	39.2%	40.7%	37.8%
CIO (Information)	29.1%	24.4%	34.7%
CTO (Technology)	2.5%	14.0%	8.2%
CFO / Treasurer / Finance	5.1%	7.0%	7.1%
COO (Operating)	12.7%	2.3%	1.0%
Other	8.9%	11.6%	5.1%

Respondents were also asked where their digital transformations were focused. This was measured using a 5-point scale ranging from (1) “not at all” to (5) “a great deal”. From Table 16 it appears that the primary focus is on improving customer experience (average = 3.5) while there is less focus on organizational culture (average 2.8). However, it appears that digital transformation is having significant impacts across the organization.

Table 16: Digital Transformation Efforts are Geared Toward Improving ____.

	None at all	A little	A moderate amount	A lot	A great deal
Customer Experience	8.4% (5.7%)	11.7% (12.9%)	23.1% (23.7%)	33.5% (30.8%)	23.4% (26.9%)
Data Management and Organization	6.0% (6.6%)	13.4% (12.6%)	30.4% (27.6%)	33.7% (33.0%)	16.4% (20.1%)
Analytics / Machine Learning / Ai	10.5% (18.0%)	24.6% (26.4%)	25.1% (24.6%)	26.0% (18.3%)	13.8% (12.6%)
Cloud Utilization	13.1% (9.9%)	17.3% (17.7%)	32.5% (27.6%)	25.1% (27.9%)	11.9% (16.8%)
Business Processes	6.5% (4.7%)	16.0% (17.8%)	33.1% (30.0%)	30.5% (33.5%)	13.9% (13.9%)



	None at all	A little	A moderate amount	A lot	A great deal
Business Strategy / Business Model	7.7% (8.4%)	21.4% (19.4%)	33.6% (28.4%)	26.2% (30.7%)	11.0% (13.1%)
Organizational Culture	13.6% (13.2%)	32.3% (24.0%)	27.6% (29.1%)	17.2% (24.0%)	9.2% (9.6%)
• Value in Parentheses represents responses for 2023					

3.7. Artificial Intelligence.

Artificial Intelligence (AI) was first introduced in the 1950s. However, its adoption was hindered due to limitations in computing infrastructure, lack of specialized tools, and limited expertise. By the 2000s there were rapid advances in data processing, storage, and machine learning. This was especially the case with deep learning techniques fueled at least partially by the emergence of big data and powerful GPUs.

The anticipated benefits of AI included its ability to improve organizational efficiency, enable data-driven decision making, fuel automation, and improve customer service. As with technologies of the past it brings the promise of increased competitive advantage and when combined with the cloud broadly available regardless of company size.

However, AI does face challenges. It is currently expensive and there is a lack of skilled qualified staff to drive it forward. There are also ethical concerns related to, intentional or unintentional, bias built into systems, trust, and privacy. Companies must protect their intellectual property and they must be careful in how they implement and deploy AI within their organizations.

Given the growing interest in AI and AI solutions, this year a small section was added to the IT trends study to begin gathering data in order to better understand where companies are related to AI. Respondents were asked about how prevalent AI solutions in their organization. Perhaps surprisingly 51.8% responded that AI was extremely or somewhat rare (Table 17).



Table 17: Prevalence of AI solutions

	2024 (n=201)
Extremely rare	8.5%
Somewhat rare	43.3%
Neither Common nor uncommon	21.9%
Somewhat common	21.9%
Extremely common	4.5%

Next respondents were asked about the anticipated impact of AI within their organizations within the next 3-5 years. Here the response was quite positive with over 2/3rds indicating AI would have a significant impact (Table 18).

Table 18: Anticipated impact of AI

	2024 (n=200)
A lot	41.0%
A great deal	28.5%
A moderate amount	25.5%
A little	5.0%

While it is unclear what areas of organizations will benefit the most from implementing AI solutions, the AI organizations tend to view its use as being primarily in the IT organization at this time. However, as shown in Table 19 AI does appear to be used across the organization.

Table 19: Organizational areas that currently use AI

Functional Area	2024 (n=200)
IT	1 (74%)
Marketing / Sales	2 (42.5%)
Finance / Administration	3 (29.5%)
Management	3 (29.5%)
Manufacturing / Operations / Production	3 (29.5%)
HR / Talent	6 (29.0%)
R&D	7 (24.0%)
Other	8 (17.0%)

Challenges do exist for organizations as they decide how and when they want to move forward with AI implementations. In Table 20 respondents indicated there are several areas of concern. Currently, the main areas include a lack of understanding of the technology and budgetary constraints.

Table 20: Biggest challenges to implementing and Using AI

	2024 (n=199)
Unclear understanding of technology	1 (45.7%)
Budgetary constraints	2 (43.7%)
Inertia and/or skepticism regarding the effectiveness/maturity of AI	3 (41.7%)
Availability of skilled resources	4 (39.7%)
Constraints from existing governance	5 (28.1%)
Other	6 (11.6%)



Respondents were also asked where their AI efforts were focused. This was measured using a 5-point scale ranging from (1) “strongly disagree” to (5) “strongly agree”. From Table 21, it appears that the primary focus is on increasing competitiveness (average = 3.91), increased market opportunities (average = 3.78), and greater product quality (average = 3.74).

Table 21: Benefits of AI

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Improved profits	8.4%	6.3%	25.8%	40.5%	18.9%
Increased market opportunities	4.3%	4.8%	25.1%	40.1%	25.7%
Improved staff retention	5.3%	18.6%	38.8%	30.9%	6.4%
Improved staff satisfaction	2.1%	10.1%	28.2%	49.5%	10.1%
Increased competitiveness	2.1%	4.2%	20.0%	47.4%	26.3%
Greater product quality	4.7%	5.3%	22.6%	46.3%	21.1%
Increased customer loyalty	4.8%	11.8%	42.2%	31.6%	9.6%
Improved reputation	3.7%	13.9%	33.7%	38.5%	10.2%
Enhanced customer trust	6.4%	12.8%	40.4%	33.0%	7.4%
Greater social impact	7.5%	11.2%	47.1%	26.2%	8.0%
Other			18.8%	37.5%	43.8%

4. IT Performance Measurement

Measuring IT performance is important for organizations and each year respondents are asked to choose up to five of the most important measures they use to evaluate internal IT operations, outsourced IT, and the personal performance of IT leaders.

4.1. Performance Measures for Internal and Outsourced IT.

As shown in Table 22, there is little change in the top 10 performance measures, though IT budget compliance jumped from the 11th position in 2023 to 7th in 2024. On the



outsourcing front, Cyber-security related measures moved up into the fourth position potentially signaling a greater attention to the risk of security incidents at trusted partners.

Table 22: Performance Measures for Internal and Outsourced IT

Category	Performance Measure	Internal IT		Outsourced IT	
		2024 (n=431)	2023 (n=436)	2024 (n=431)	2023 (n=436)
I	Availability / Up Time	1 (50.6%)	1 (50.9%)	1 (40.1%)	1 (39.6%)
I/B	Customer Satisfaction - Internal Users	2 (40.4%)	2 (40.8%)	2 (28.4%)	2 (29.5%)
I/B	Cost Control / Reduction - IT	3 (27.6%)	4 (26.4%)	3 (27.7%)	3 (28.2%)
I/B	Cyber-security Related	3 (27.6%)	3 (27.8%)	4 (24.0%)	8 (19.5%)
I	Help Desk Performance	5 (26.5%)	6 (21.6%)	5 (23.6%)	4 (23.5%)
S	Value of IT to the Business	6 (19.7%)	5 (24.8%)	11 (10.6%)	11 (11.4%)
I/B	IT Budget Compliance	7 (18.6%)	11 (14.4%)	14 (8.6%)	20 (6.4%)
B	Customer Satisfaction - External Users	8 (16.2%)	7 (18.6%)	12 (10.3%)	16 (8.1%)
I/B	IT Service Quality	8 (16.2%)	8 (15.8%)	6 (17.8%)	5 (22.1%)
I/B	Products Delivered - on Time	10 (14.6%)	9 (15.4%)	7 (16.4%)	6 (21.1%)
S	IT's Contribution to Strategy	11 (13.5%)	12 (13.1%)	22 (5.1%)	29 (2.3%)
I/B	IT Spending - as % of Revenue	12 (13.0%)	10 (15.1%)	23 (4.5%)	18 (7.0%)
I/B	Products Delivered - on Budget	12 (13.0%)	17 (10.3%)	7 (16.4%)	7 (20.8%)
B	Productivity Improvement - Business	14 (11.6%)	14 (11.9%)	15 (8.2%)	19 (6.7%)
B/S	Innovative New Ideas	15 (11.4%)	12 (13.1%)	16 (7.9%)	21 (5.7%)
B	Cost Control / Reduction - Business	16 (9.5%)	15 (10.8%)	16 (7.9%)	12 (11.1%)
B	Total Cost of Ownership	16 (9.5%)	22 (6.7%)	18 (6.8%)	16 (8.1%)
B	Improved Decision Making	18 (7.7%)	15 (10.8%)	30 (1.4%)	24 (4.0%)
S	Increases in New Products or Services	18 (7.7%)	20 (8.0%)	20 (5.8%)	14 (9.1%)
I/B	Productivity Improvement - IT	20 (6.7%)	19 (8.5%)	13 (9.9%)	10 (13.4%)
I/B	Headcount Reduction - IT	21 (6.5%)	21 (7.6%)	19 (6.2%)	13 (9.4%)
S	Profit Growth	22 (6.0%)	30 (2.8%)	25 (3.1%)	33 (0.3%)
S	Revenue Growth	22 (6.0%)	25 (4.8%)	28 (2.4%)	27 (2.7%)
I	IT Employee Retention	24 (5.8%)	18 (10.1%)	31 (1.0%)	32 (0.7%)
I/B	Time to Market - IT	25 (5.3%)	25 (4.8%)	21 (5.5%)	23 (5.0%)
B	Project Return on Investment	26 (5.1%)	24 (5.7%)	26 (2.7%)	21 (5.7%)
I	SLA Target Compliance	27 (4.6%)	22 (6.7%)	9 (14.0%)	9 (13.8%)
I	Software Quality / Defect Rates in Software	28 (4.4%)	27 (3.4%)	10 (11.0%)	14 (9.1%)
B	Time to Market - Business	29 (3.9%)	27 (3.4%)	26 (2.7%)	25 (3.0%)
B	Headcount Reduction - Business	30 (3.2%)	29 (3.0%)	31 (1.0%)	27 (2.7%)



Category	Performance Measure	Internal IT		Outsourced IT	
		2024 (n=431)	2023 (n=436)	2024 (n=431)	2023 (n=436)
-	NONE / No Measures are Used	31 (2.8%)	33 (2.1%)	23 (4.5%)	29 (2.3%)
I/B	IT Spending - per Employee	32 (2.3%)	30 (2.8%)	28 (2.4%)	25 (3.0%)
S	Return on Equity	33 (1.2%)	32 (2.5%)	31 (1.0%)	31 (1.7%)

Category: I=IT, B=Business Operations, S=Strategic

4.2. Performance Measures for CIOs.

Little has changed in the way CIO performance has been measured over the past three years (Table 23). A marginal increase in the importance of IT's contribution to strategy was observed in 2024, but the top ten performance measures remained the same from 2023. These most commonly used measures of CIO performance continue to have a greater mix of IT, business, and strategic focus, as compared to the performance measures in Table 22 that focus on evaluating the operational performance of IT.

Table 23: CIO Personal Performance Measures

Category	Performance Measure	2024 (n=248)	2023 (n=251)	2022 (n=334)
I/B	Customer Satisfaction - Internal Users	1 (32.0%)	1 (31.0%)	2 (33.0%)
S	Value of IT to the Business	2 (25.5%)	2 (27.3%)	1 (35.2%)
I/B	Cost Control / Reduction - IT	3 (25.1%)	3 (25.0%)	6 (21.3%)
S	IT's Contribution to Strategy	3 (25.1%)	6 (21.1%)	4 (27.4%)
I	Availability / Up Time	5 (24.6%)	4 (24.5%)	5 (25.0%)
I/B	Cyber-security Related	6 (23.4%)	5 (23.4%)	3 (28.5%)
B/S	Innovative New Ideas	7 (17.2%)	8 (15.1%)	9 (16.7%)
I/B	IT Budget Compliance	8 (16.2%)	9 (14.4%)	12 (12.8%)
B	Improved Decision Making	8 (16.2%)	7 (17.2%)	8 (17.2%)
I/B	Products Delivered - on Time	10 (13.7%)	10 (13.8%)	13 (11.7%)
I	IT Employee Retention	11 (13.0%)	16 (9.6%)	11 (13.5%)
I	Help Desk Performance	12 (12.8%)	15 (10.3%)	18 (8.7%)
B	Customer Satisfaction - External Users	13 (12.3%)	11 (13.5%)	10 (14.4%)
I/B	IT Service Quality	14 (11.8%)	11 (13.5%)	7 (17.8%)
I/B	IT Spending - as % of Revenue	15 (11.4%)	17 (8.9%)	16 (10.0%)
B	Productivity Improvement - Business	15 (11.4%)	13 (13.3%)	14 (10.7%)



Category	Performance Measure	2024 (n=248)	2023 (n=251)	2022 (n=334)
I/B	Products Delivered - on Budget	17 (9.5%)	14 (11.0%)	15 (10.4%)
B	Cost Control / Reduction - Business	18 (8.6%)	20 (7.6%)	20 (8.0%)
B	Total Cost of Ownership	18 (8.6%)	21 (7.1%)	21 (7.6%)
I/B	Productivity Improvement - IT	20 (7.9%)	17 (8.9%)	24 (5.6%)
S	Increases in New Products or Services	21 (6.5%)	19 (7.8%)	19 (8.1%)
B	Project Return on Investment	21 (6.5%)	22 (5.7%)	23 (6.7%)
S	Revenue Growth	21 (6.5%)	24 (5.5%)	22 (7.0%)
S	Profit Growth	24 (5.1%)	22 (5.7%)	17 (9.4%)
I	Software Quality / Defect Rates in Software	24 (5.1%)	29 (3.2%)	28 (3.5%)
I/B	Time to Market - IT	24 (5.1%)	25 (5.0%)	25 (5.4%)
I	SLA Target Compliance	27 (3.9%)	25 (5.0%)	26 (5.0%)
B	Time to Market - Business	27 (3.9%)	28 (4.4%)	27 (4.4%)
I/B	Headcount Reduction - IT	29 (3.7%)	25 (5.0%)	29 (2.6%)
-	NONE / No Measures are Used	30 (3.5%)	30 (3.0%)	29 (2.6%)
I/B	IT Spending - per Employee	31 (2.3%)	32 (2.3%)	32 (2.2%)
B	Headcount Reduction - Business	32 (1.4%)	33 (1.4%)	33 (1.7%)
S	Return on Equity	32 (1.4%)	30 (3.0%)	29 (2.6%)

Category: I=IT, B=Business Operations, S=Strategic

5. CIO Tenure, Reporting, Background, and Activities

The average age of the 186 CIOs who responded to this question was 53 (standard deviation of 7 and median of 54.6). 83% of them were male, which is down from 86.3% in 2023. As shown in Figure 20, average tenure for the top IT person increased from 6.3 years in 2023 to 7.3 years (standard deviation 7.1 years and median 5 years).



Figure 20: Average Job Tenure of CIOs

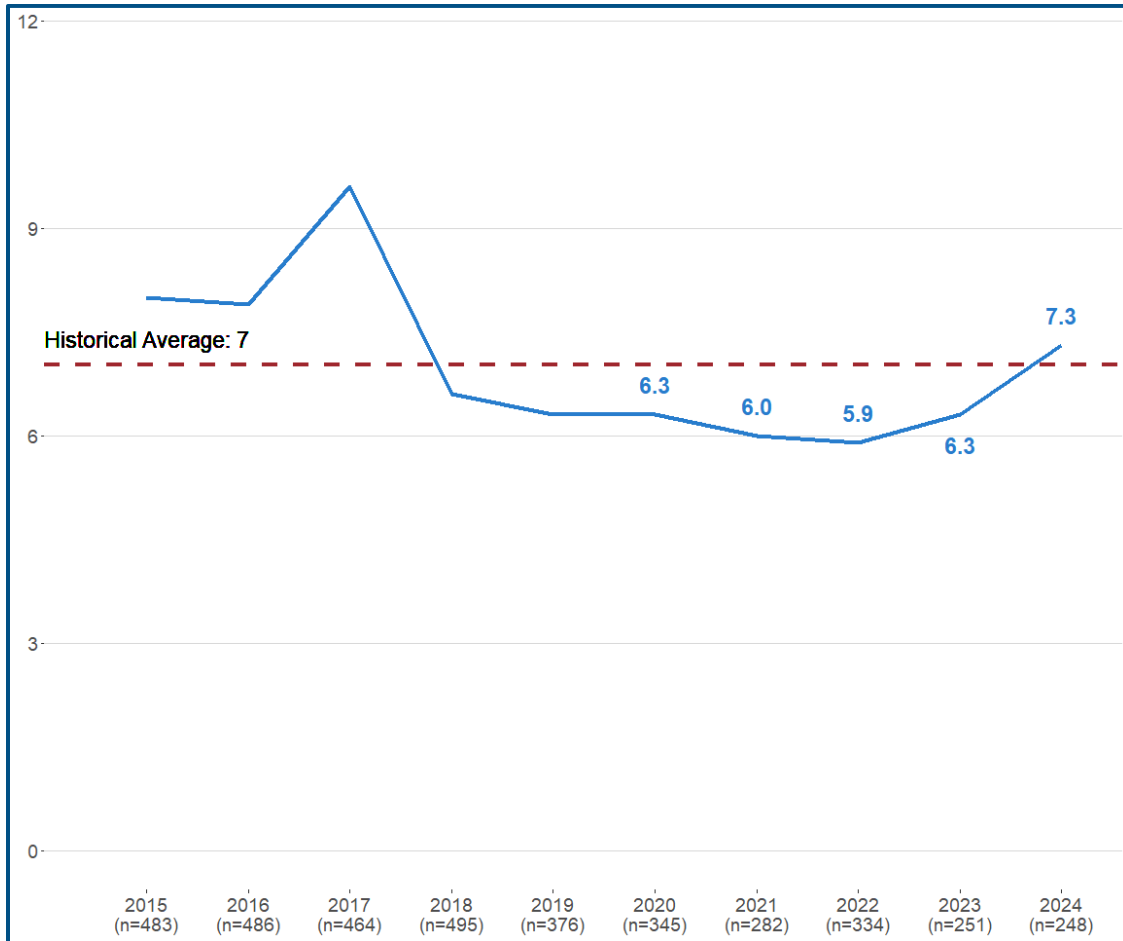


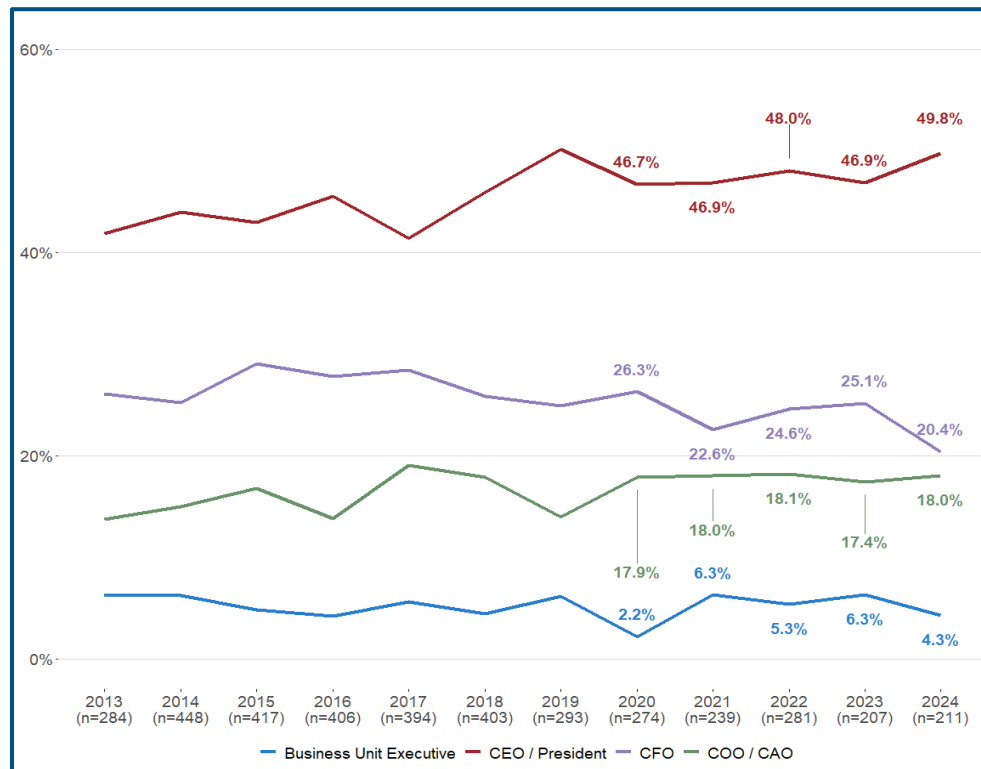
Table 24 shows CIO reporting relationships over the past decade and indicates that in 2024 88.2% reported to CEOs, CFOs, or COOs. This is down from 89.4% reported in 2023 and 90.7% in 2022. However, the number of CIOs reporting to the CEO is up while those reporting to the CFOs is down significantly. Figure 21 displays the data from Table 24 graphically.



Table 24: To Whom Does the CIO Report, by Percentage of Respondents

	2024 (n=211)	2023 (n=207)	2022 (n=281)	2021 (n=239)	2020 (n=274)	2019 (n=293)	2018 (n=403)	2017 (n=394)	2016 (n=406)	2015 (n=417)	2014 (n=448)
CEO / President	49.8%	46.9%	48.0%	46.9%	46.7%	50.2%	45.9%	41.4%	45.6%	42.9%	44.0%
CFO	20.4%	25.1%	24.6%	22.6%	26.3%	24.9%	25.8%	28.4%	27.8%	29.0%	25.2%
COO / CAO	18.0%	17.4%	18.1%	18.0%	17.9%	14.0%	17.9%	19.0%	13.8%	16.8%	15.0%
Business Unit Executive	4.3%	6.3%	5.3%	6.3%	2.2%	6.1%	4.5%	5.6%	4.2%	4.8%	6.2%
Other (Non-IT)	4.7%	3.9%	3.2%	2.5%	3.3%	2.4%	4.2%	3.8%			
Other (IT)	0.5%	0.5%	0.7%	2.9%	1.8%	1.7%	0.7%	1.3%			
Board / Board Member	1.9%			0.8%	1.8%	0.7%	1.0%	0.5%	1.0%	1.0%	
Other									7.6%	5.5%	9.6%

Figure 21: To Whom Does the CIO Report

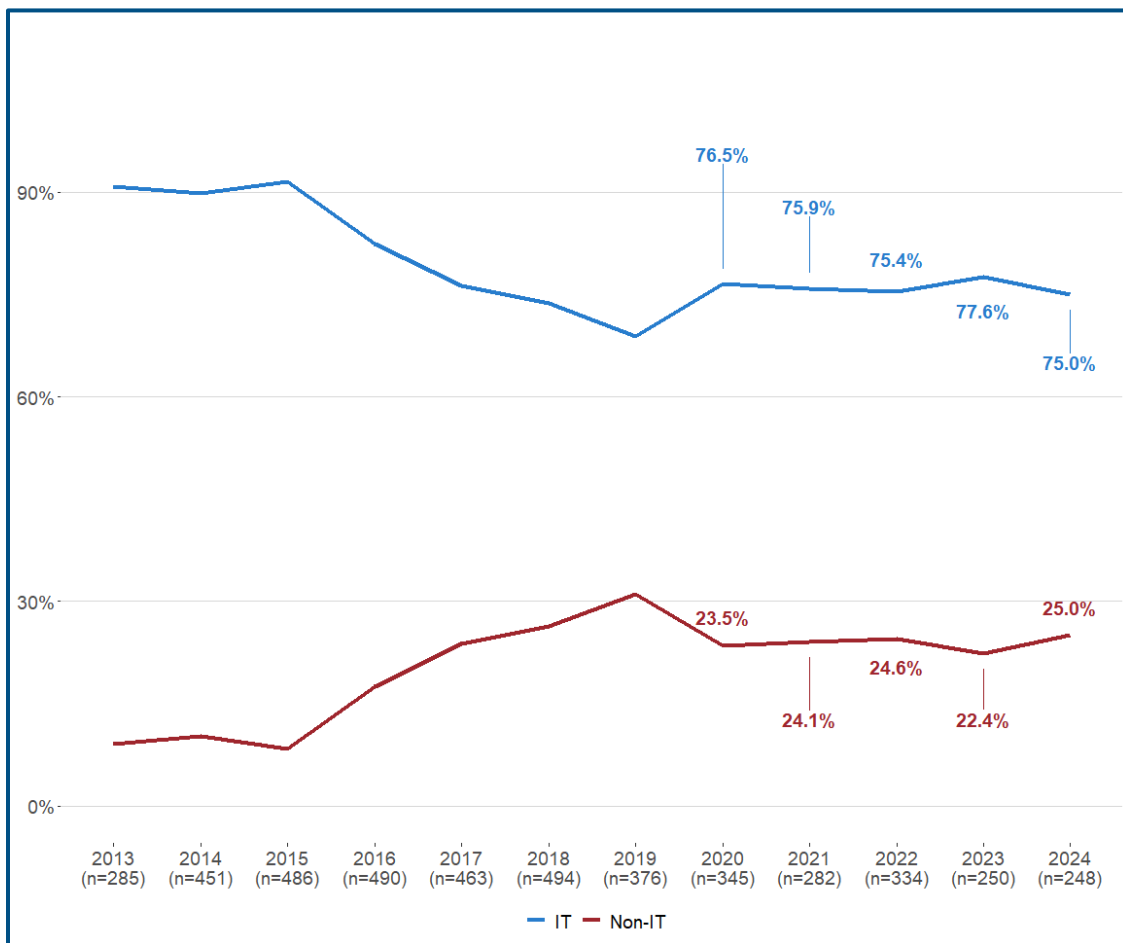




5.1. CIO Previous Employment.

CIOs coming from prior IT positions decreased from 77.6% in 2023 to 75.0% in 2024 (Figure 22). CIOs coming from outside of IT increased in 22.4% in 2023 to 25.0%. These percentages have remained somewhat stable since 2020.

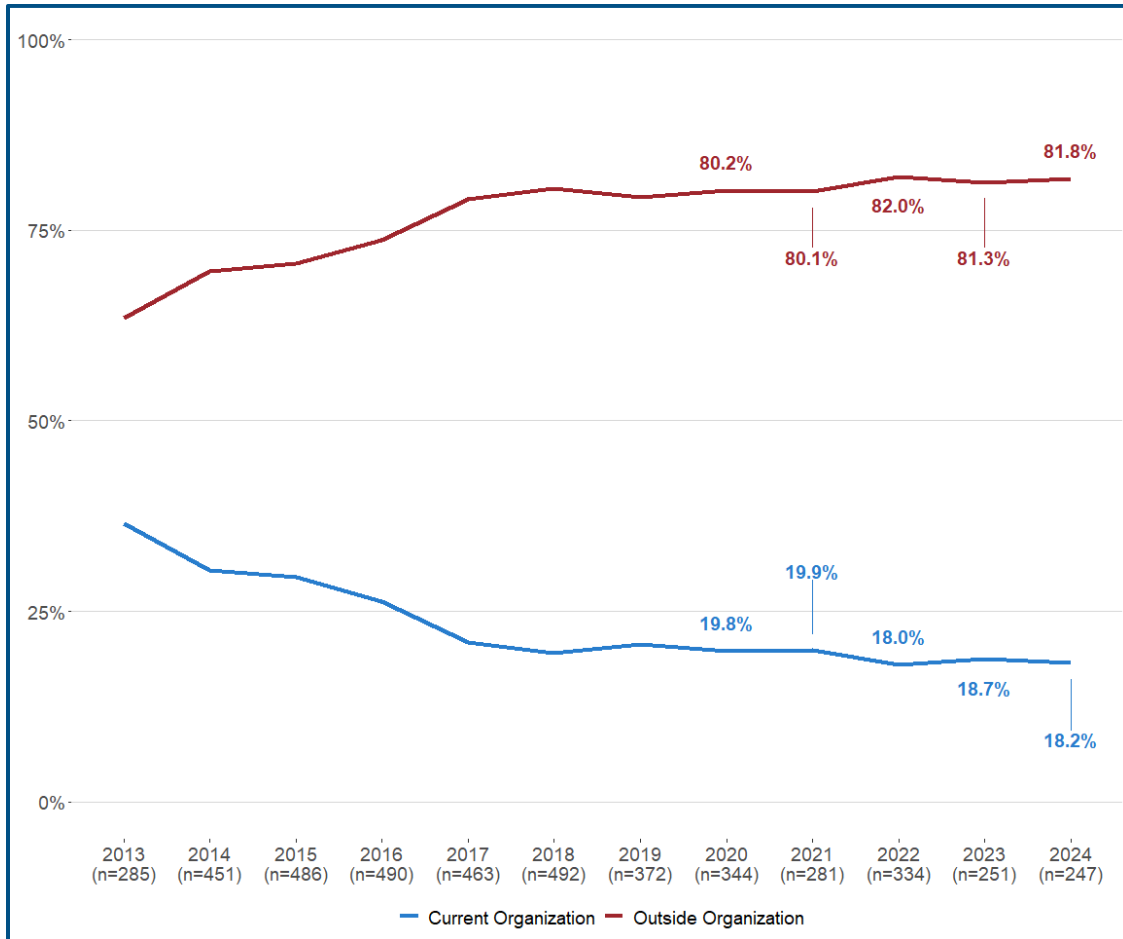
Figure 22: CIOs Prior Position - IT versus Non-IT



As shown in Figure 23, the percentage of CIOs coming from outside organizations increased slightly to 81.8% while those coming from inside decreased to 18.2%. This percentage seems to be stabilizing.

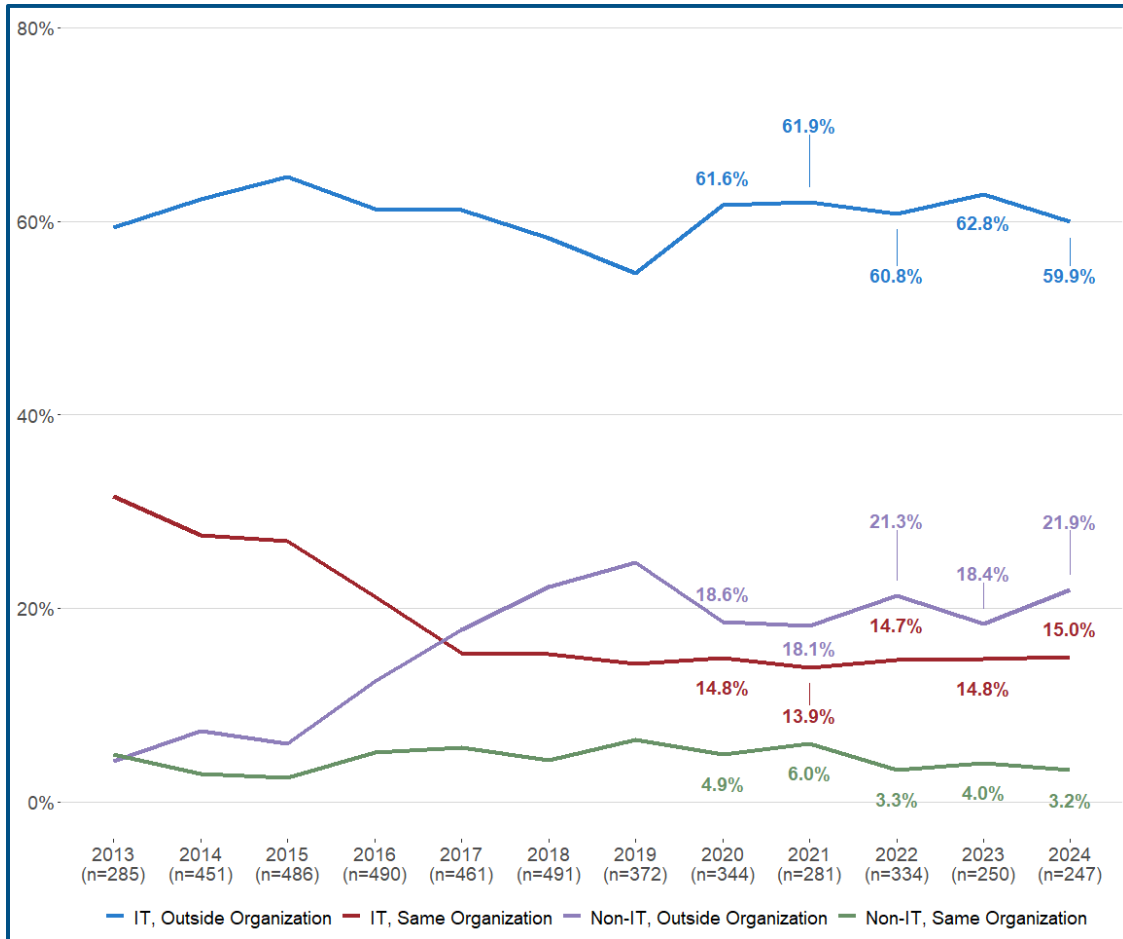


Figure 23: CIOs Prior Position - Outside versus Within Current Organization



The number of CIOs coming from IT roles outside their current organizations decreased from 62.8% in 2023 to 59.9% in 2024 (Figure 24). In addition, the number of CIOs coming from IT roles inside their current organization increased from 14.8% in 2023 to 15.0% in 2024. CIOs coming from non-IT positions outside their current organizations increased significantly from 18.4% in 2023 to 21.9%, while CIOs from non-IT positions inside their organizations decreased from 4.0% to 3.2%. Overall, the number of CIOs in 2024 that came from other organizations remained steady at 81.8%.

Figure 24: CIO Prior Employment

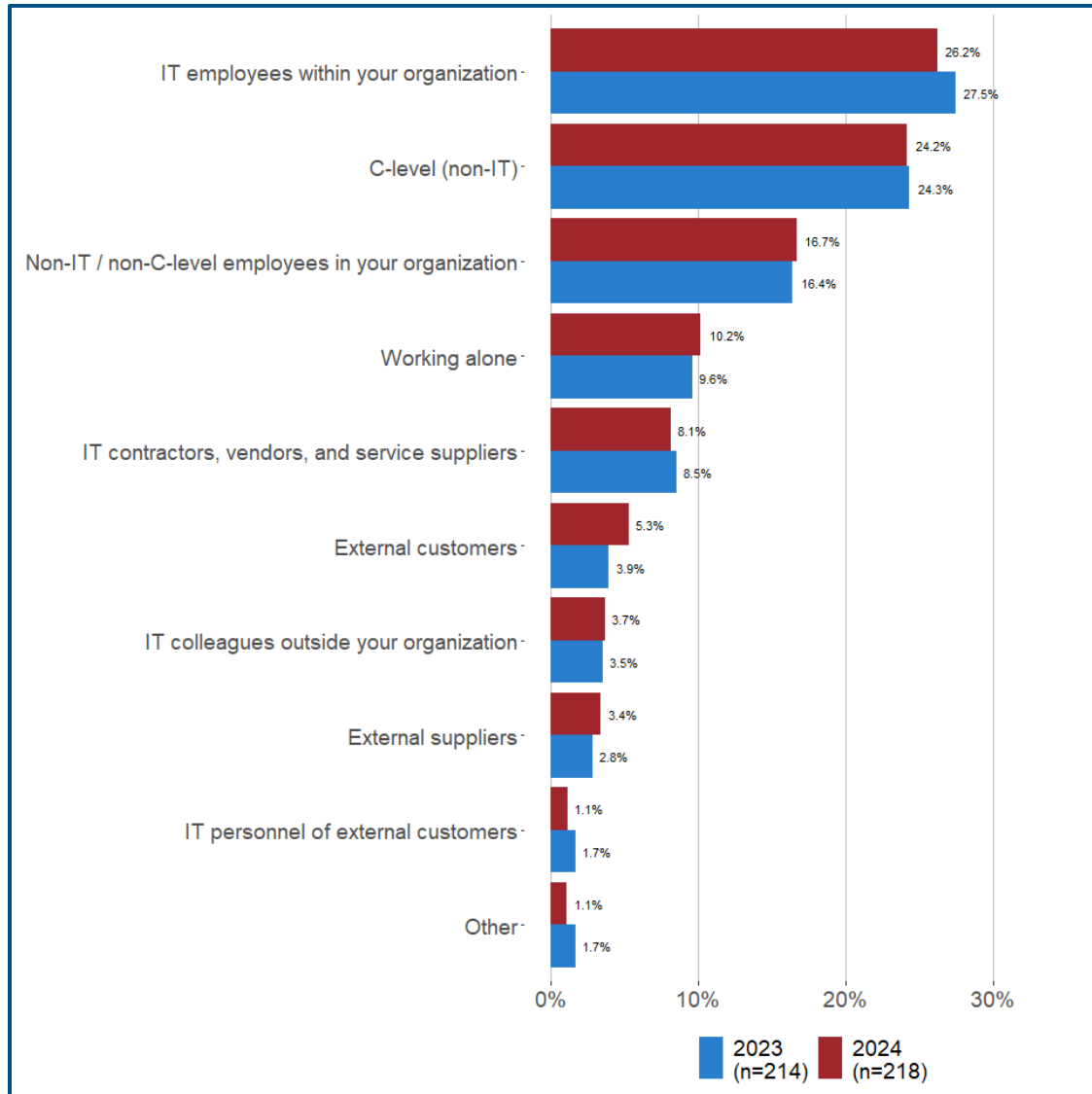


5.2. With Whom CIOs Spend their Time.

The job of the CIO is complex and involves interaction with people both inside and outside the organization. Figure 25 shows the average percentage of a CIO's time spent with different groups of people.

On average, the 218 responding CIOs spent more than three times with people in their own organization than with those from other organizations (77.3% vs 21.6%). The percentage of time spent with non-IT C-level colleagues remained relatively flat at 24.2%.

Figure 25: Average Percentage of CIO Time Spent Interaction with _____



CIOs spending any time with “C-level (non-IT) personnel” were also asked about the frequency of those interactions – specifically, if they met daily, weekly, monthly, quarterly, or annually with C-level executives and/or board members. Table 25 summarizes their responses and highlights the percentage of CIOs reporting “at least weekly” interactions (i.e., daily plus weekly). In 2024 the time spent with the CEO, CFO and the CTO remained relatively flat.

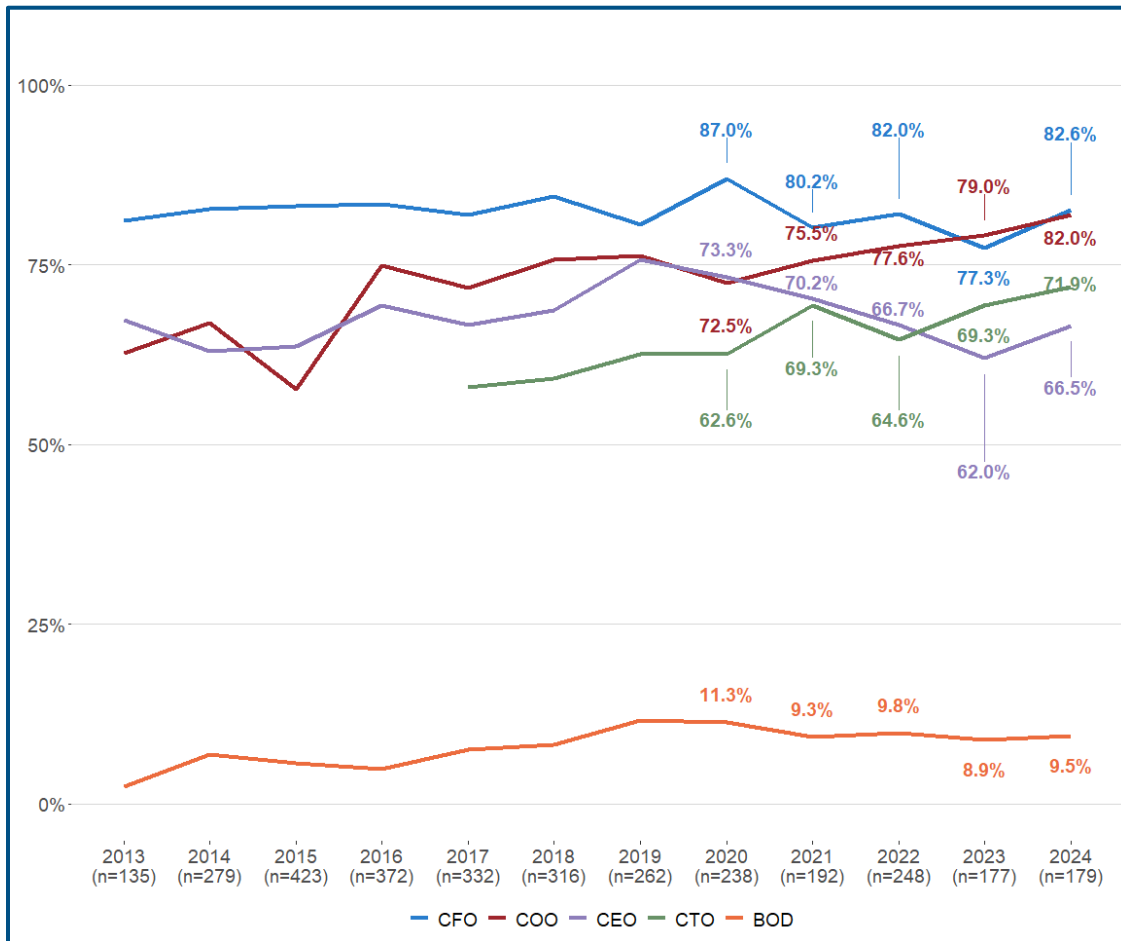


Table 25: Percentage of CIOs Interaction with C-level Peers, by Frequency

	Year	Daily	Weekly	At Least Weekly	Monthly	Quarterly	Annually	None
CEO (Executive)	2016 (n=404)	25.2%	44.1%	69.3%	19.3%	7.9%	2.2%	1.2%
	2017 (n=398)	24.4%	42.2%	66.6%	20.9%	8.5%	1.5%	2.5%
	2018 (n=386)	25.4%	43.3%	68.7%	21.5%	6%	1.8%	2.1%
	2019 (n=305)	29.8%	45.9%	75.7%	15.4%	6.2%	0.7%	2%
	2020 (n=277)	29.2%	44%	73.2%	18.8%	6.5%	0.4%	1.1%
	2021 (n=225)	22.7%	47.6%	70.3%	18.2%	8%	1.3%	2.2%
	2022 (n=273)	22.7%	44%	66.7%	19.4%	9.2%	2.2%	2.6%
	2023 (n=200)	25.5%	36.5%	62.0%	24.0%	11.0%	2.0%	1.0%
	2024 (n=197)	25.4%	41.1%	66.5%	22.8%	9.6%	0.5%	0.5%
COO (Operating)	2016 (n=318)	31.1%	43.7%	74.8%	12.3%	2.8%	0.3%	9.7%
	2017 (n=350)	31.7%	40%	71.7%	12.9%	4%	0.3%	11.1%
	2018 (n=330)	33.9%	41.8%	75.7%	10.6%	1.5%	0.6%	11.5%
	2019 (n=261)	31.4%	44.8%	76.2%	10.7%	2.7%	0.8%	9.6%
	2020 (n=247)	29.6%	42.9%	72.5%	16.2%	2%	0.8%	8.5%
	2021 (n=192)	28.1%	47.4%	75.5%	12%	1%	0%	11.5%
	2022 (n=255)	30.6%	47.1%	77.7%	11%	2.7%	1.2%	7.5%
	2023 (n=167)	33.5%	45.5%	79.0%	9.0%	2.4%	1.8%	7.8%
	2024 (n=183)	30.6%	51.4%	82.0%	12.6%	1.6%	0.0%	3.8%
CFO (Financial)	2016 (n=391)	33.8%	49.6%	83.4%	11.8%	3.1%	0%	1.8%
	2017 (n=387)	31%	50.9%	81.9%	12.9%	3.1%	0.8%	1.3%
	2018 (n=368)	34.5%	50%	84.5%	9.2%	3.5%	1.1%	1.6%
	2019 (n=298)	30.9%	49.7%	80.6%	14.1%	3%	0.7%	1.7%
	2020 (n=269)	32.3%	54.6%	86.9%	10.4%	1.1%	0%	1.5%
	2021 (n=222)	23%	57.2%	80.2%	13.5%	3.6%	0.9%	1.8%
	2022 (n=267)	30%	52.1%	82.1%	12.4%	3%	0.7%	1.9%
	2023 (n=198)	28.3%	49.0%	77.3%	14.1%	5.6%	1.0%	2.0%
	2024 (n=195)	28.2%	54.4%	82.6%	13.8%	3.6%	0.0%	0.0%
CTO (Technology)	2017 (n=257)	44.7%	13.2%	57.9%	4.7%	2.3%	0.4%	34.6%
	2018 (n=233)	41.6%	17.6%	59.2%	2.6%	2.1%	1.3%	34.8%
	2019 (n=211)	46%	16.6%	62.6%	8.5%	0.9%	0.9%	27%
	2020 (n=195)	42.6%	20%	62.6%	5.1%	0.5%	0%	31.8%
	2021 (n=150)	49.3%	20%	69.3%	4%	3.3%	0%	23.3%
	2022 (n=189)	45.5%	19%	64.5%	5.3%	3.2%	0%	27%
	2023 (n=127)	55.9%	13.4%	69.3%	4.7%	3.1%	2.4%	20.5%
	2024 (n=139)	54.7%	17.3%	72.0%	6.5%	2.2%	0.7%	18.7%
Board of Directors	2016 (n=376)	1.1%	3.7%	4.8%	17%	37%	15.4%	25.8%
	2017 (n=369)	2.4%	5.1%	7.5%	14.4%	30.9%	20.9%	26.3%
	2018 (n=350)	2.9%	5.4%	8.3%	12.6%	32.6%	19.7%	26.9%
	2019 (n=302)	6.6%	5%	11.6%	16.6%	33.4%	16.2%	22.2%
	2020 (n=265)	1.1%	10.2%	11.3%	14.3%	34.7%	16.2%	23.4%
	2021 (n=215)	2.3%	7%	9.3%	16.3%	32.6%	20%	21.9%
	2022 (n=255)	3.5%	6.3%	9.8%	16.9%	35.3%	19.6%	18.4%
	2023 (n=192)	2.1%	6.8%	8.9%	17.2%	36.5%	14.6%	22.9%
	2024 (n=179)	2.8%	6.7%	9.5%	21.8%	40.8%	12.8%	15.1%

Figure 26 illustrates that the 66.5% of CIOs meeting “at least weekly” with their CEO in 2024 which is up from 62.0% in 2023. The percentage of CIOs meeting at least weekly with their COO continues on a strong upward trend that began in 2020 to 82.0%. The “at least weekly” interactions with CFOs and BODs increased to 82.6% and 9.5%, respectively.

Figure 26: Trends in “at least weekly” C-level Interaction



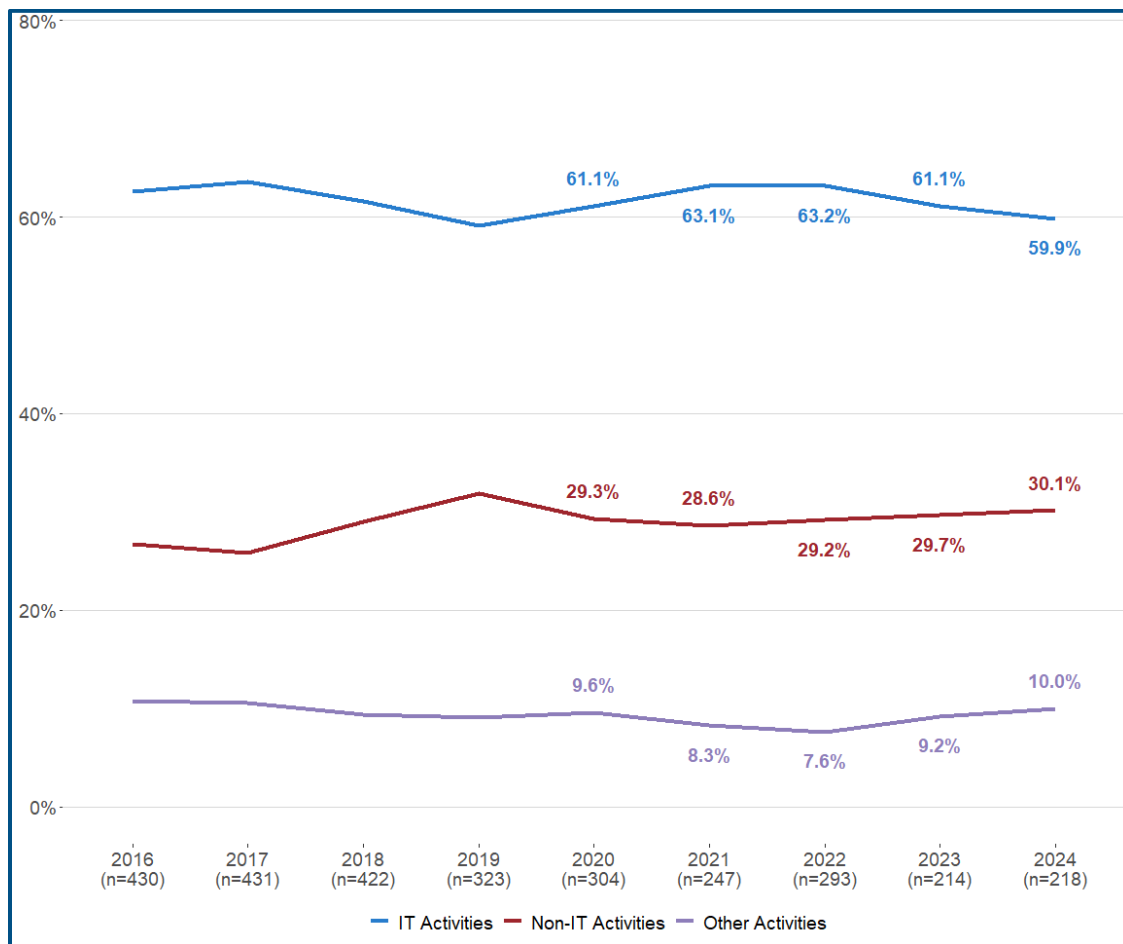
5.3. What CIOs Do with Their Time.

To understand how CIOs spend their time, a preliminary question asked about the overall percentage of time spent on three general activity categories: Business (Non-IT), IT-Related, and Other Work-Related activities. Allocations from 2017 to 2024 have remained somewhat flat (Figure 27). The percentage of CIO time allocated to IT-Related activities decreased from 61.1% in 2023 to 59.9% in 2024, while time allocated to Non-IT-Related



activities rose from 29.7% in 2023 to 30.1% in 2024. The change in Other Job and Work-Related Activities increased from 9.2% in 2023 to 10.0% in 2024.

Figure 27: How CIOs Spend their Time



Separate activity lists were then provided for each of the three categories and respondents were asked to indicate the top three areas where they spend their time. As shown in Table 26, IT Priorities and Strategy remains the top priority IT-Related activity by a wide margin and Innovation for IT and Evangelist for IT round out the top 3.



Table 26: IT Areas where CIOs Spend their Time

IT Activities	2024 (n=218)	2023 (n=208)	2022 (n=294)	2021 (n=242)	2020 (n=295)	2018 (n=369)	2017 (n=430)	2016 (n=430)
IT priorities / strategy	1 (73.2%)	1 (70.2%)	1 (74.5%)	1 (74.4%)	1 (75.3%)	1	1	1
Innovation for IT	2 (37.3%)	2 (38.5%)	2 (37.4%)	3 (34.3%)	2 (35.3%)	3	4	4
Evangelist for IT	3 (34.4%)	3 (36.5%)	3 (35.0%)	2 (36.8%)	3 (31.9%)	6	3	2
IT governance	4 (28.7%)	4 (28.4%)	4 (28.0%)	5 (26.9%)	4 (29.2%)	5	2	6
Project Management	5 (23.9%)	5 (24.0%)	5 (22.4%)	4 (29.8%)	5 (25.1%)	2	5	3
IT vendor management	6 (22.5%)	7 (19.2%)	7 (18.5%)	8 (16.1%)	8 (17.6%)	9	9	7
IT operations / facilities management	7 (21.1%)	6 (21.6%)	6 (21.3%)	7 (19.8%)	7 (19.0%)	4	6	5
Resource allocation / budgeting	8 (15.3%)	8 (17.8%)	7 (18.5%)	6 (21.5%)	6 (22.7%)	10	10	10
IT HR and talent management	9 (13.9%)	9 (15.4%)	10 (12.9%)	10 (12.0%)	10 (11.5%)	8	8	9
IT architecture	10 (13.4%)	10 (12.5%)	9 (14.7%)	9 (14.0%)	9 (16.9%)	7	7	8
Technical research	11 (7.7%)	12 (6.2%)	12 (6.3%)	11 (7.0%)	11 (7.1%)	11	11	11
Software development	12 (7.2%)	11 (6.7%)	11 (6.6%)	12 (6.2%)	12 (6.8%)	12	12	12

As illustrated in Table 27, for the fifth consecutive year, Organizational Priorities and Strategy remains the most commonly cited Non-IT Business area in which CIOs spend their time, an issue that has been present in the top four since 2016 when it was first added.

Table 27: Non-IT Business Areas where CIOs Spend their Time

Business (Non-IT) Activities	2024 (n=218)	2023 (n= 202)	2022 (n=294)	2021 (n=235)	2020 (n=291)	2018 (n=369)	2017 (n=430)	2016 (n=427)
Organizational priorities / strategy	1 (61.1%)	1 (66.8%)	1 (65.0%)	1 (63.0%)	1 (65.3%)	3	3	3
Knowing the needs of internal IT customers	2 (52.5%)	3 (51.5%)	2 (53.6%)	2 (58.3%)	2 (56.7%)	1	1	1
Managing organizational change	3 (48.8%)	2 (53.0%)	3 (48.2%)	3 (54.0%)	4 (46.0%)	4	4	4
Knowing the needs of customers of the organization	4 (42.9%)	4 (44.1%)	4 (44.2%)	4 (47.2%)	3 (51.5%)	2	2	2
Organization or business innovation	5 (38.9%)	5 (37.6%)	5 (39.4%)	5 (32.3%)	5 (31.3%)	6	6	5



Business (Non-IT) Activities	2024 (n=218)	2023 (n= 202)	2022 (n=294)	2021 (n=235)	2020 (n=291)	2018 (n=369)	2017 (n=430)	2016 (n=427)
Evangelist for the organization	6 (25.1%)	6 (25.2%)	6 (22.6%)	6 (25.5%)	6 (24.1%)	5	5	6
Knowing the needs of vendors and suppliers of the organization	7 (11.3%)	7 (7.4%)	8 (6.9%)	8 (6.0%)	8 (8.2%)	8	7	8
Organization architecture	8 (8.9%)	8 (5.4%)	7 (10.6%)	9 (3.8%)	7 (9.6%)	7	8	7
Organizational research	9 (3.9%)	9 (2.0%)	9 (4.4%)	7 (6.4%)	9 (5.2%)	9	9	9

6. Summary and Conclusions

This report presents the findings of the SIM IT Trends study, which collects data each year between April and June. This year, the study received responses from 691 IT leaders, representing 431 unique organizations and including 248 CIOs.

Top IT management concerns remained fairly stable, and include issues such as Cybersecurity, Alignment, AI, Analytics, and Compliance & Regulation. Among these, AI continues to improve its upward trend, moving from 6th to 3rd this year. The most significant change in importance was Business Agility, which increased its ranking over last year by 9 positions to enter the top ten as 7th (Table 1). For the 10th consecutive year, Cybersecurity was selected as the IT issue of greatest personal importance to IT leaders. Consistent with its position among organizational concerns, IT leaders are also highly concerned about AI, which was the second most selected topic. The remaining top five personal concerns include Alignment, IT Talent, and Credibility of IT, ranking 3rd through 5th respectively (Table 2).

The largest current or near-term investments of organizations also remained stable and included Analytics, Cybersecurity, Cloud Computing, and Software Development as the 1st through 4th ranked items (Table 4). We also see evidence that interest in AI is translating to investments, as AI moved up in importance by 3 places to the 5th position. Integration represents the largest change in spending priorities for organizations, moving from 19th in 2023 to 9th in 2024. Consistent with last year, AI represents the most frequently cited technology area IT leaders believe should receive more funding, followed by Cybersecurity, Analytics, Data Integration, and Disaster Recovery (Table 5).

The average IT budget increased slightly in 2024 but IT spending as a percentage of revenue (Figure 1) fell below the historical average of 5.7% to 4.9% which suggests revenue growth has outpaced IT budgets. Interestingly, spending on Cloud decreased slightly in 2024 while we see equivalent increases in Software (Table 7).



Average IT headcount decreased slightly but median IT FTEs remained steady at 30, consistent with the observation that the percentages of companies reporting that internal IT FTEs were increasing, decreasing, or unchanged remained relatively flat (Figure 4). 97% of all organizations reported increasing IT salaries. In general, there appears to be a slight decline in the use of IT Contractors and Consultants and the turnover rate for IT employees decreased significantly from 8.5% to 6.4% (Figure 6), the lowest level in over a decade. 72.1% of separations are voluntary.

Responding organizations indicated that 67.6% of all IT services are delivered via the Cloud (Figure 8). Use of external Cloud solutions continues to decline (Figure 11), though the trend of organizations shifting from multi-tenant to single tenant cloud offerings appears to have stabilized.

The role of the CISO continues to be a priority for most organizations, with 57.7% of companies reporting that they have a CISO or equivalent (Table 9). As seen in prior studies, CISOs tend to be more prevalent among larger companies (Figure 18), and tend to report to the CIO (Table 10). Organizational cyberattack readiness remains consistent from last year, though organizations tend to believe they experience less cyber-related disruptions than their competitors and that those disruptions they do experience are less severe (Table 12). Organizations continue to report that cyberattacks most frequently originate outside the organization followed by indirect attacks through trusted partners (Table 13).

In our second year collecting data specifically related to digital transformation, the study finds that the majority of organizations (54.8%) have a CDO or someone whose responsibilities include digital transformation (Table 14). Such individuals most commonly report to the CEO, though the number of CDOs reporting to the COO or CIO rose in 2024 (Table 15). The primary target of transformative efforts continues to be improving customer experience (Table 16).

This year, the study added questions related to AI utilization. Despite both interest (Table 1) and investment (Table 4) in AI and related technologies, the majority of organizations (51.8%) report that AI solutions are somewhat or extremely rare (Table 17). Where present, AI solutions tend to be most prevalent in IT and marketing. IT leaders indicate that their organizations anticipate significant impacts to their organization in the next 3-5 years (Table 18), but cite unclear understanding of the technology, budgetary constraints, and inertia and/or skepticism regarding AI and the largest challenges related to its adoption (Table 20). Organizations believe the benefits of AI to be primarily related to increasing competitiveness, increased market opportunities, and greater product quality (Table 21).

The average tenure of CIOs continued an upward trend that began last year, rising above its historical average to 7.3% (Figure 20). CIOs most commonly report to the CEO (49.8%), but organizations in which the CIO reports to the CFO (20.4%) or COO (18.0%) are



also common (Table 24). We see little change from last year in CIO performance assessment measures in 2024, although IT's Contribution to Strategy rose in importance to tie for the 3rd position in the rankings. The most frequently cited performance measures remain Customer Satisfaction of Internal Users, Value of IT to the Business, and IT Cost Controls (Table 23). Continuing a fairly consistent decade-long trend, the number of CIOs hired from prior IT positions fell slightly (75.0%), while those coming from non-IT positions rose (25.0%) (Figure 22). Consistent with another long-running trend, most CIOs are hired from outside the organization (81.8%) (Figure 23).

Collectively, our findings highlight continued interest and investment in AI technologies, which are perceived as strategically important to the organization. We also see evidence of ongoing cost concerns and relatively anemic budget growth, both of which may stem from inflation-related stressors and political uncertainty. Combined with a noticeable rededication to business agility, these findings highlight the complexity of managing IT solutions and suggest that IT organizations are being asked to do more with less.