THE RISING COST OF SOFTWARE COMPLIANCE:

2025 SURVEY ON SOFTWARE AUDITS

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THE SURGE OF ENTERPRISE SOFTWARE AUDITS: RISING COSTS AND FREQUENCY LEAVE CUSTOMERS STRUGGLING 2025 SURVEY ON ENTERPRISE SOFTWARE LICENSING AND AUDIT TRENDS *was sponsored by LicenseFortress and produced by Unisphere Research. Unisphere Research is the market research unit of Unisphere Media, a division of Information Today, Inc., publishers of* Database Trends and Applications *magazine and the* 5 Minute Briefing *newsletters. To review abstracts of our past reports, visit www.unisphereresearch.com. Unisphere Media, 121 Chanlon Road, New Providence, NJ 07974; 908-795-3702.*

PROLOGUE

Throughout this decade, the various approaches to enhancing profitability in the software industry have varied from acquisitions for the purpose of profit harvesting to incessant product diversification. However, the most consistent and pervasive method has been to extract supplementary funds from existing customers. The most effective approach within this sub-category of revenue generation relies on the presumption that a large percentage of customers fail to properly manage their software licenses and are vulnerable to the dreaded software audit.

This survey, a follow-up to a similar study in 2023, demonstrates through anonymous data collection and interviews that many software customers are woefully unprepared. They have neither prepared for the potential reckoning of improperly managed software nor do they possess the means to defend themselves when the inevitable and increasingly frequent software auditors come knocking at their doors. Unfortunately, this is a much greater problem than failing to properly utilize and optimize software. This is a problem of potentially crippling expense to firms with significant resources and an existential threat to smaller companies. The lack of understanding on the part of many companies of the impact is breathtaking. Not only will the customer potentially be required to pay exorbitant retail costs for improper or entirely unlicensed software features but the drain on both human and physical resources may be staggering. The human factor is often not considered in the calculation but will likely result in a multiple of the overall cost.

Finally, the worst part. The software audit, a venture profitable enough to have sparked the creation of a veritable industry, is increasing in frequency and overall costs. The motivation is simple to understand. It is extremely profitable. Please read the results of our study and become educated on this risk that has become far more prevalent.

OVERVIEW

All vendors, including software, hardware and services, have a fiduciary responsibility and a clear self-interest in collecting the contracted compensation for the privilege of using their intellectual property. It is, however, often difficult for all customers to maintain proper compliance and adherence to the terms and conditions of those contracts. Sometimes those challenges become prohibitive to effectively using the software and sometimes the companies, despite their best efforts, fail in that endeavor. It is equally difficult for an IT department or any business unit to maintain details of actual software usage, and it often becomes a verboten subject that isn't even discussed.

Obvious examples of common albeit accidental unlicensed software usage include database administrators installing Relational Database Management Software (RDBMS) without consideration of the location of an installation or the users who might have access. This common error may open access to developers or even external parties. It is possible that software which was purchased for a single application is inadvertently used for a different non-licensed application. Another unfortunate example is improperly licensed backup or disaster recovery locations. Most software vendors have different restrictions and requirements, and all of these requirements must be fully understood. Some are more lenient than others and some have their business model built around an assumption that customers will drown in lapses.

Given the criticality of understanding the breadth and depth of software audits, and the consequential costs, this survey has been conducted by Unisphere Research, a division of Information Today, Inc. to gain a better understanding of the current state of software licensing and audit trends. The sample group of volunteer respondents consists of the readers of Database Trends & Applications (DBTA) magazine. Database administrators, software developers, IT directors and C-Suite leaders comprise the sample space of this study. The survey was conducted in partnership with LicenseFortress, a software management company focused on software license management.

The total responses received exceeded 300—approximately 85% of which came from the United States. The remaining 15% were representatively scattered around the globe. The most prevalent industry representation, about 37%, came from the technology space. Other industries represented include Healthcare, Pharmaceutical, Education, Manufacturing, Retail, and Insurance. About 36% of the responses came from firms with 5,000 or more employees, but 17% came from small companies with less than 50 employees. The other respondents are in between these endpoints. Clearly, there is a wide range of industry types and organization sizes that support the inferences you will see below.

One analytical method that is used in this report is the comparison of data collected in the 2025 survey to the previous survey conducted on this subject in 2023. A theme that the reader will note throughout this report is that in all cases the numbers have moved in a consistent direction, which will be continuously cited. There are more overall audits, and the audits are occurring with greater frequency. The audits cost more to conduct. The audits result in customers being required to pay more to their vendors. Responding to an audit takes longer and requires the assignment of more resources both in terms of physical resources and personnel.

For example, audits often require personnel to spend long hours at the behest of the vendor running scripts that open access to the most intimate workings of the customer's business. Unfortunately, these personnel or anyone at the company being audited are usually insufficiently familiar with the details of the binding contract to know what actions they are legally required to perform. Amazingly, the audits often involve the most critical personnel, those who occupy the critical positions in the C-Suites. The only metric that does not seem to have increased based on our ongoing research into this subject is the customers' ability to respond to the onset of an audit. Ironically, despite the increased frequency of audits, customers are still shocked when confronted.

MOVING QUICKLY TO THE CLOUDS

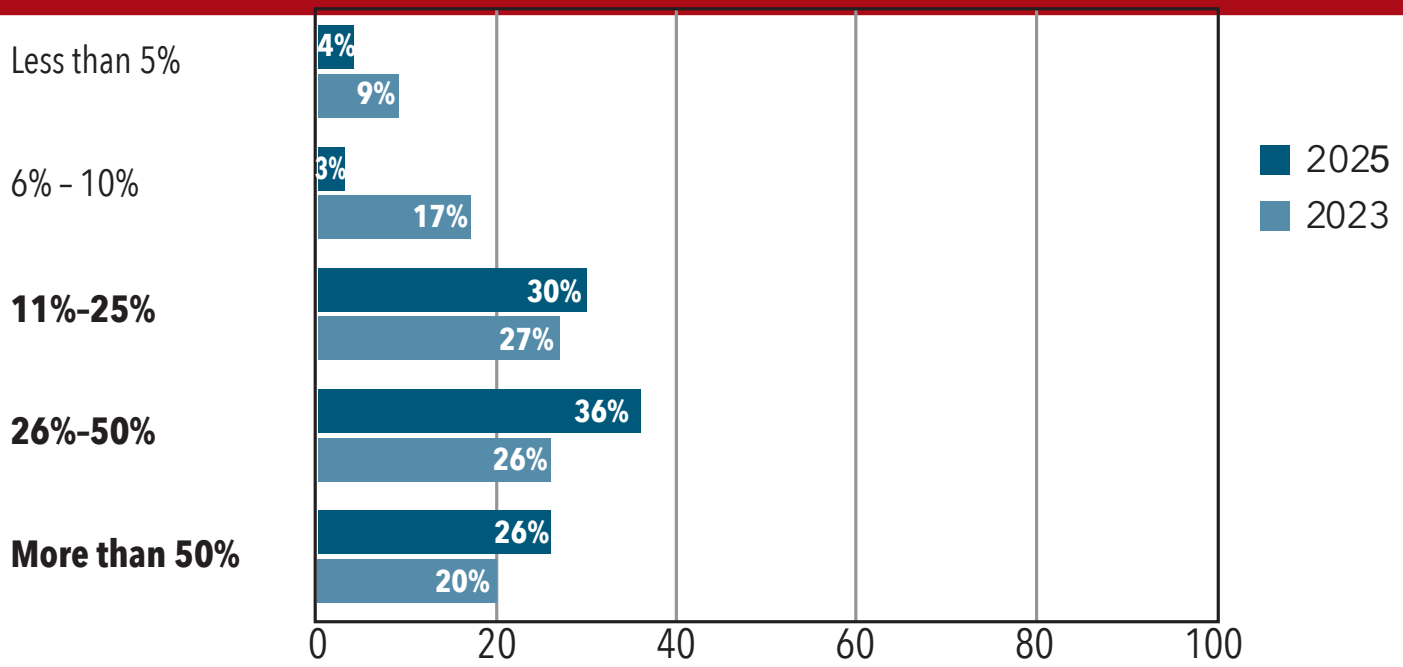
Throughout the decade of the 90s, the trend throughout IT has been to move computing services of all sizes and levels of criticality from their long-held on-premises (and presumably secure) homes to a variety of public cloud services.

The predicted "Return to on-Prem" has yet to materialize. The data displayed in Chart 1A shows that approximately 66% of the respondents have migrated between 11% and 50% of their applications to public clouds. Another 26% reported that more than half of their applications to someone's cloud.

Compare these numbers to our survey from only 24 months earlier when the respective totals were only 53% and 20%. This exhibits a non-trivial acceleration to cloud-based services. The respondents that now rely on the cloud for between 11% to 53% of their application/database portfolio has increased from 53% to 66% in two years.

It is also notable that larger companies, those with 5,000 or more employees, did not substantially skew towards cloud adoption acceleration any more than the smaller companies. Amongst larger organizations, the segment of respondents reliant on the cloud for between 11% to 100% of their application/database portfolio only increased from 71% to 83% in two years.

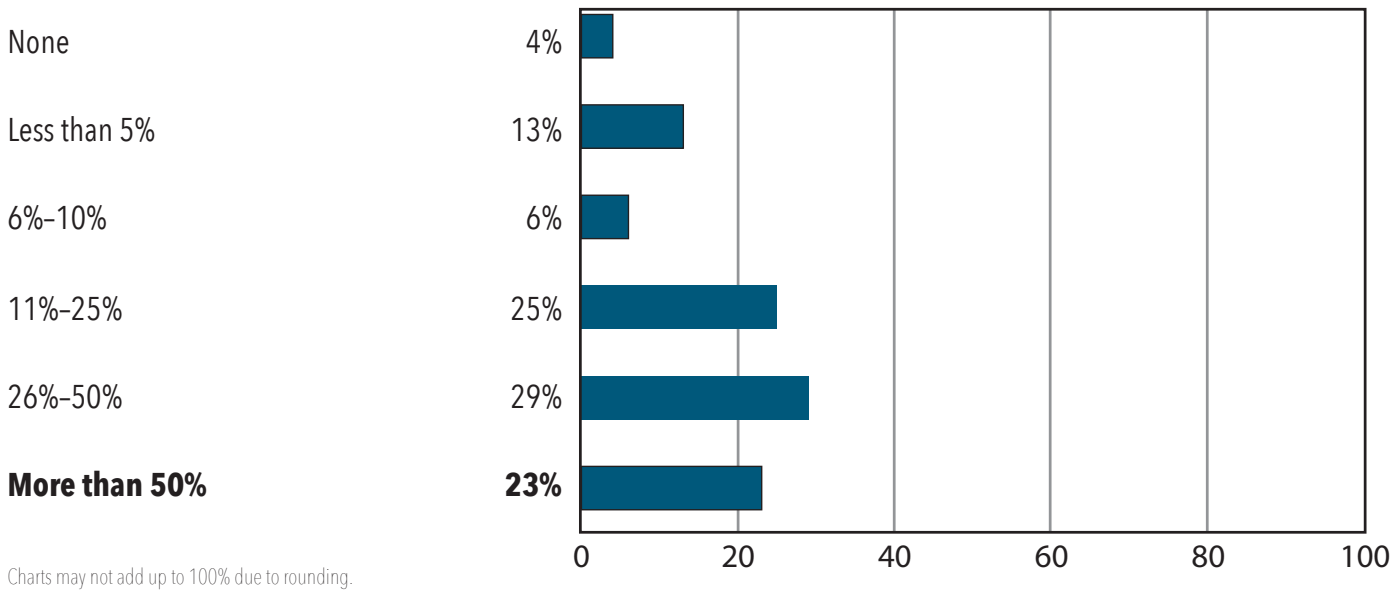
Chart 1A : What is the extent of your cloud-based application/database portfolio?



Charts may not add up to 100% due to rounding.

Digging deeper into cloud utilization, the 2025 survey reveals that the mindset towards critical databases, once thought to be anathema to running in a public cloud, has evolved considerably. Chart 1C displays the stunning results. No honest analyst of the last decade would have believed that companies would trust their critical databases to any platform aside from the most secure, self-maintained, and private of location. However, this survey shows that 96% of respondents have critical databases and applications in the cloud today. For close to a quarter of respondents, more than 50% of their critical databases and applications currently reside in a cloud-based platform (see Chart 1C).

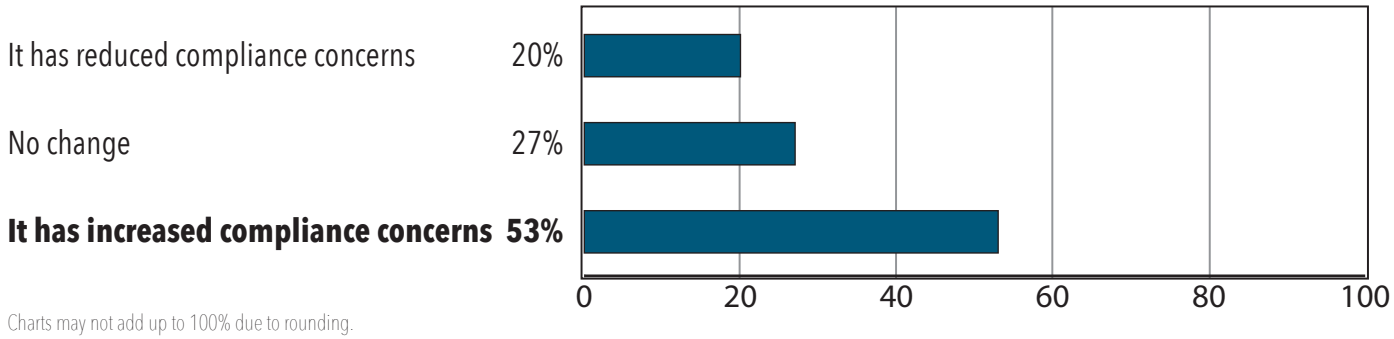
Chart 1B: What percentage of your critical databases and applications reside in a cloud-based platform?



Charts may not add up to 100% due to rounding.

When returning to the theme of this report one does not escape the vital questions that should be inferred from this data. Do customers have the resources and expertise to manage their software? Do the personnel responsible have the wherewithal to cope with the stress of potential surprise audits with shocking and often misunderstood costs? And the new question that can be understood from the above related data: How does migration to the cloud affect the present and future software expense, and how does the fact that your software now resides in a cloud or variety of clouds distort any historic understanding of license management? What are the new rules? It isn't ironic that 53% of this survey's respondents report that the introduction of clouds has added significant complexity to managing software (see Chart 1C). Two years ago, this same question elicited a response that showed far less concern amongst respondents.

Chart 1C : Does your approach to managing software compliance differ for cloud-based applications?



Charts may not add up to 100% due to rounding.

CHANGING LICENSING REQUIREMENTS AND COSTS

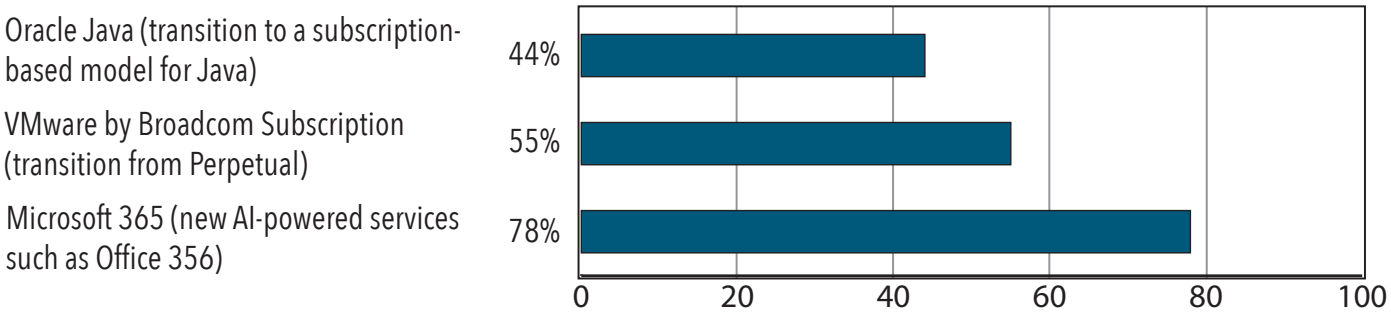
It is intuitively obvious that software expense increases are, at a minimum, equivalent to the rate of published inflation.

However, critical enterprise software is continuously evolving. As software becomes more feature rich, support fees increase, and dependencies are built in that make already critical software more critical. This survey shows the impact of the increased cost of software licenses on users as well as the intangible expenses related to ever-changing requirements attached to software usage. The survey found that the impact has been substantial—specifically, in the most critical applications.

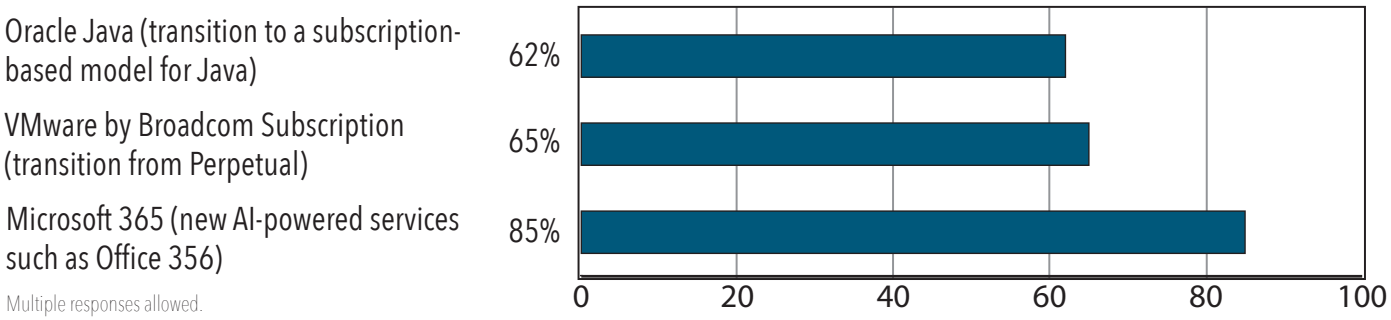
Some significant examples include the new subscription approach of Oracle Java as 44% of respondents report that they have been impacted. But that example is trivial when compared to the new AI-powered services offered by Microsoft which is impacting customers at a whopping 78%. And the newest, but perhaps greatest change in the market (based on findings covered later in this report) is presented by VMware by Broadcom whose customers report that they have been impacted at a rate of over 55%.

It is of particular interest to note that the largest companies have been affected to a greater degree in each of these examples.

Chart 2: Has your organization been impacted by any of these software licensing changes?



Companies with over 5,000 Employees



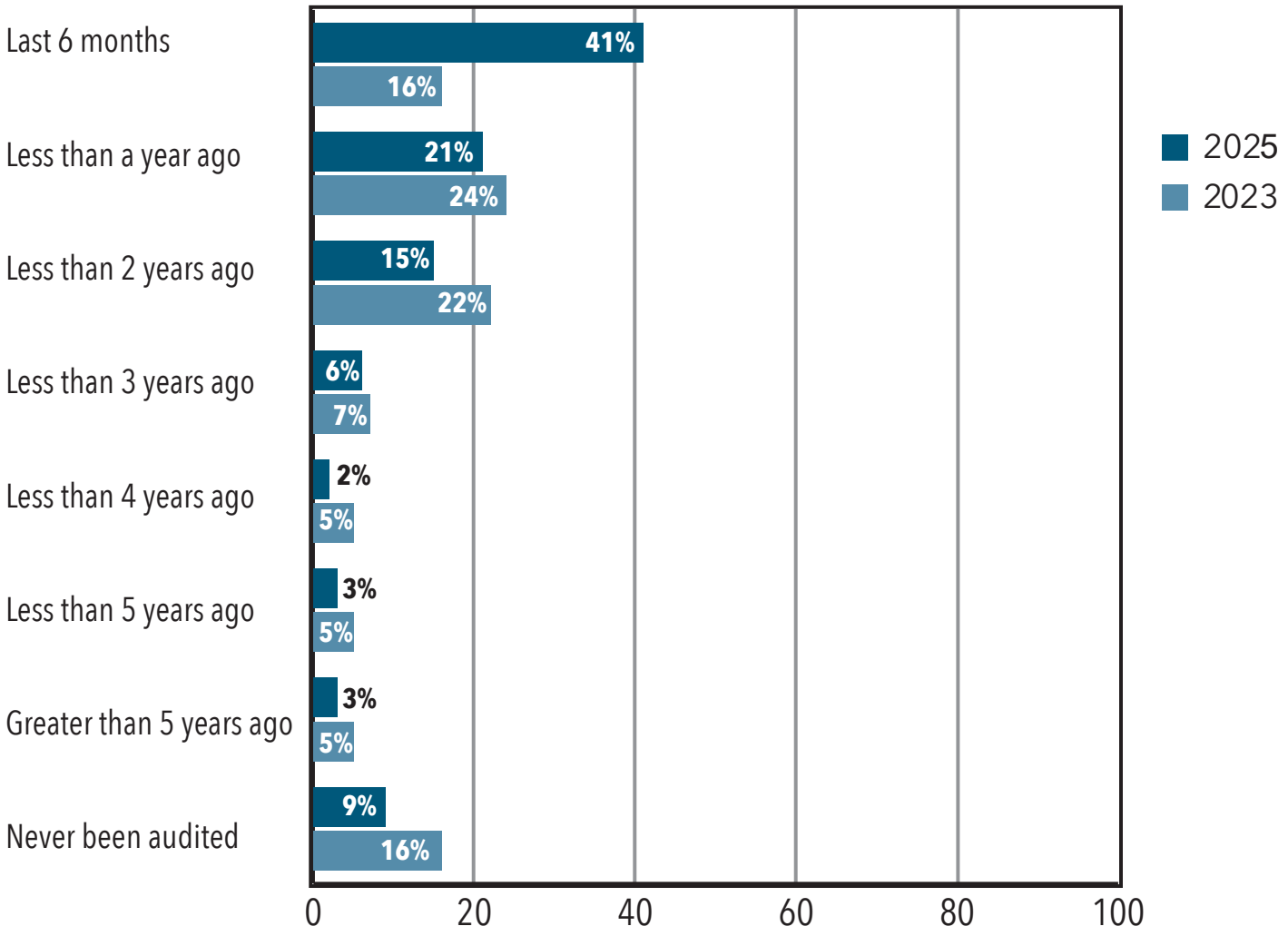
Multiple responses allowed.

AUDIT FREQUENCY AND CUSTOMER FINANCIAL EXPOSURE

The most shocking results of this survey may be in the category of audit frequency.

The delta between the 2025 survey and the respective results from 2023 is stark. An amazing 62% of respondents have been audited by what they self-describe as a major software vendor within the last year. Whereas two years ago, using the results from the 2023 survey, we can see that the same question shows markedly different results. The percentage of respondents audited within the previous year was only approximately 40%. The 2025 study shows the number of companies with over 5,000 employees that have been audited increases sharply to 66%, nearly two-thirds.

Chart 3: When was the last time your organization was audited by a vendor for software compliance?



Charts may not add up to 100% due to rounding.

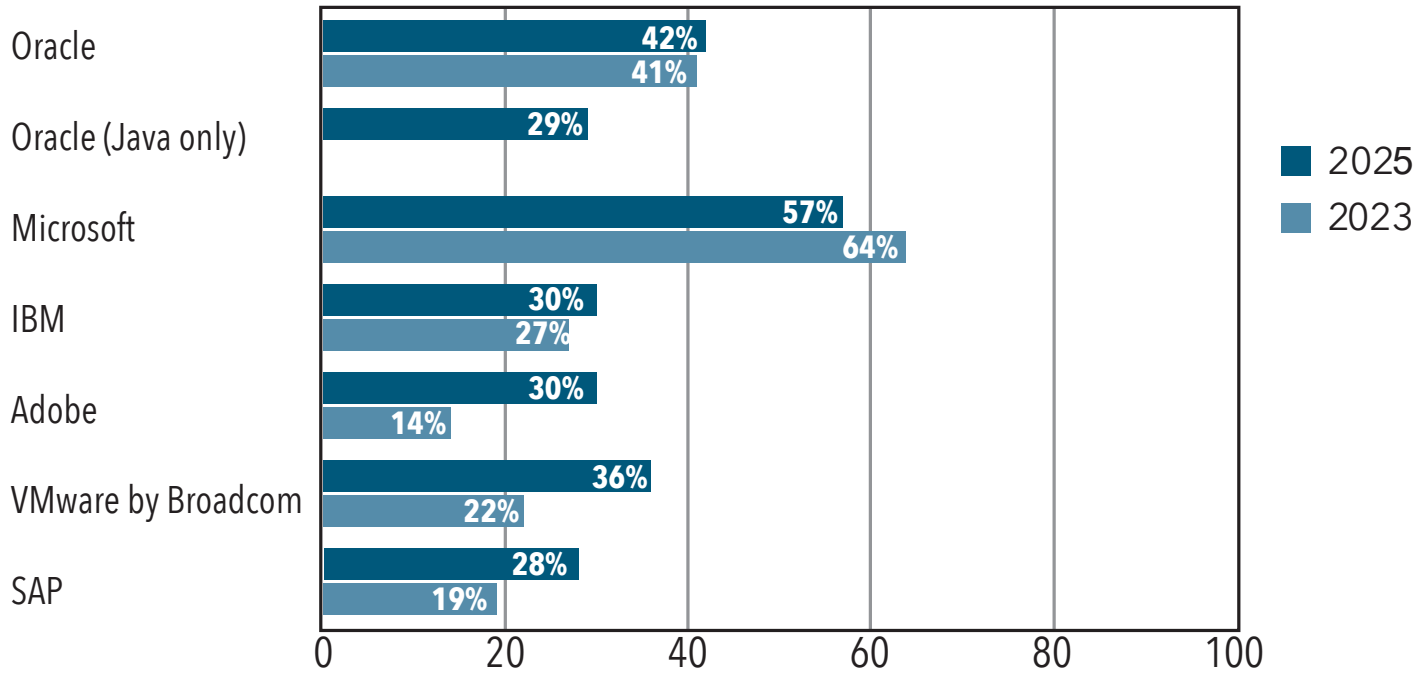
The most reasonable follow up is to inquire as to which software vendors are auditing the most and which are increasing their audit frequency. So, we asked, and the results are predictable with Microsoft and Oracle leading the pack. VMware by Broadcom is clearly accelerating their audit frequency more than any of its gigantic software peers. The number of respondents that were audited increased from 22% to 36%. A greater than 50% increase.

Following a predictable pattern, larger customers fared far worse as we can see the number of those reporting having been audited as even higher than the smaller firms. A notable example is that those respondents who have been audited by VMware by Broadcom in the previous three years is nearly 58%.

Specifically, when asked if they had been audited in the general area of Business-Critical Applications (BCA), more than half the respondents report that those audits have doubled or tripled in recent years (see Chart 4B).

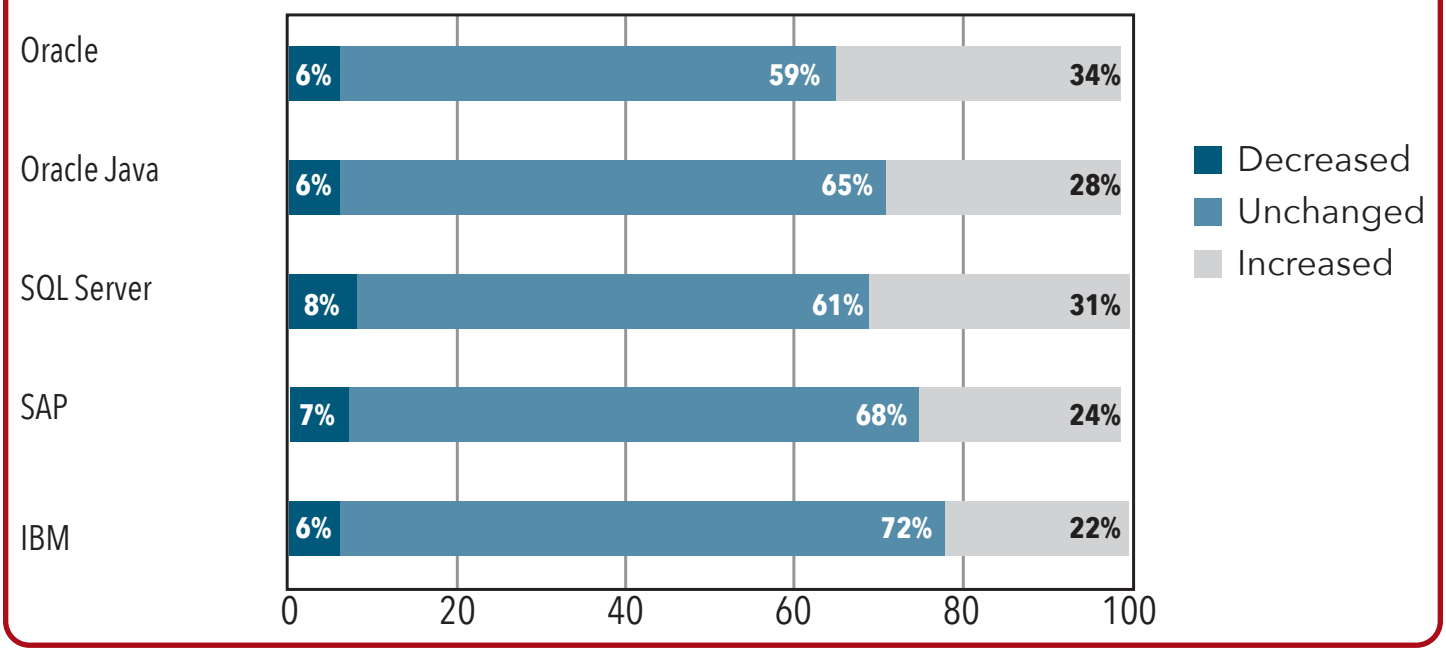
It is both insightful and concerning to wonder where and when this trend will reach maturity.

Chart 4A: Which software vendors audited you in the last 3 years?



Multiple responses allowed.

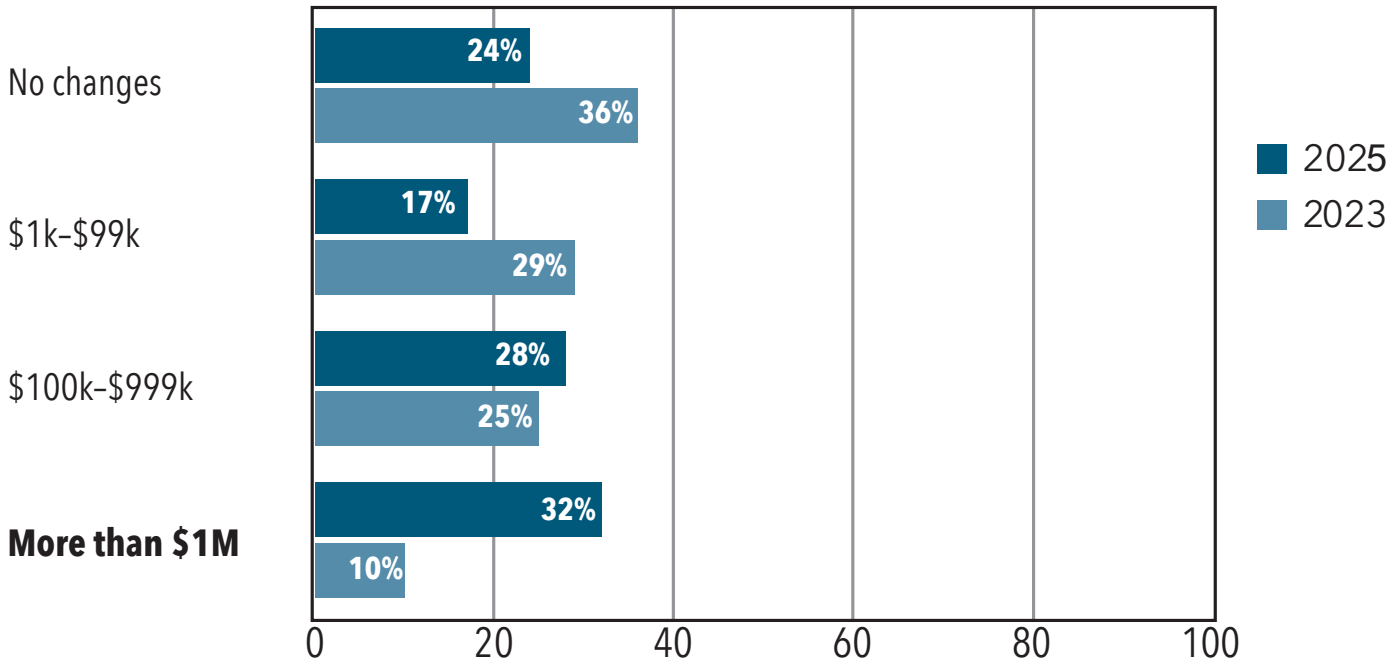
Chart 4B: What is the frequency of audits for business-critical applications?



Perhaps the most pertinent question is to inquire as to the cost of audits. There is the cost to manage and complete the contractual requirement of the audit, which can include staff time, operational disruption and delayed projects. And there is also the resulting monetary obligation to be satisfied based on what the audit determines the customer owes the software vendor for compliance issues, which is often the most tangible aspect of an audit.

Possibly the most remarkable value the 2025 survey reveals is that approximately 32% of the companies measured had to pay over $1Million. Only 10% in 2023 reached that level of financial liability. While most of the companies paying out the largest audit remittances were the largest companies with over 5,000 employees, it is obvious from the charts below that every category of organization experienced a significant burden.

Chart 5: Please estimate how much in additional charges your company has incurred as a result of software compliance audits in the last 3 years

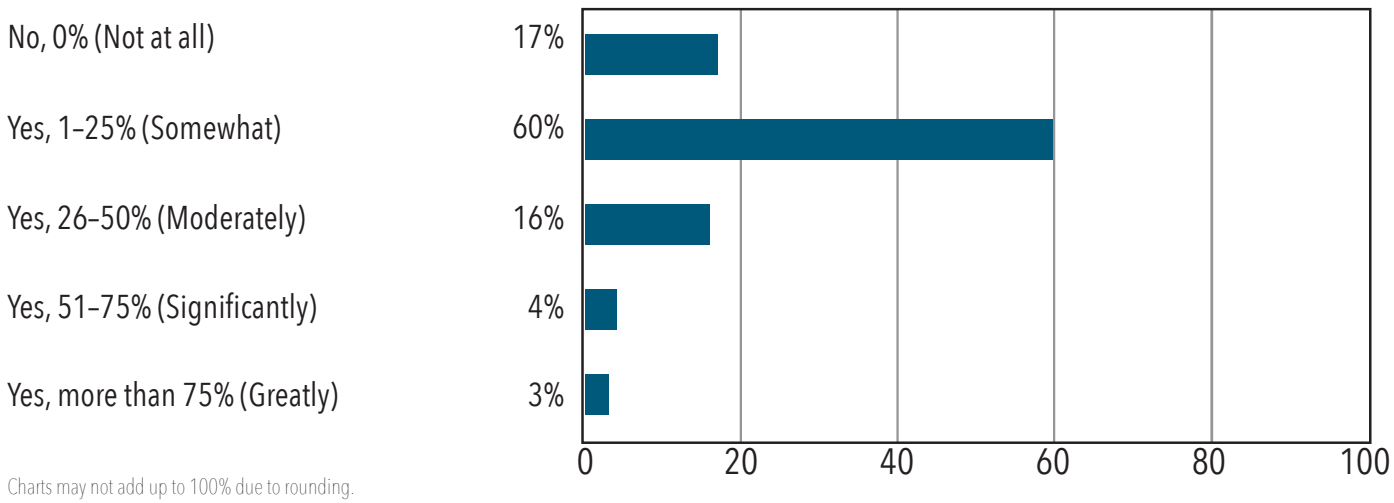


Charts may not add up to 100% due to rounding.

What constitutes some welcome news in this seemingly endless abyss of uncontrollable financial distress is that some companies exhibit uncommon wisdom. Those who utilized the services of experienced Software License Management companies or lawyers with significant experience in this field fared much better.

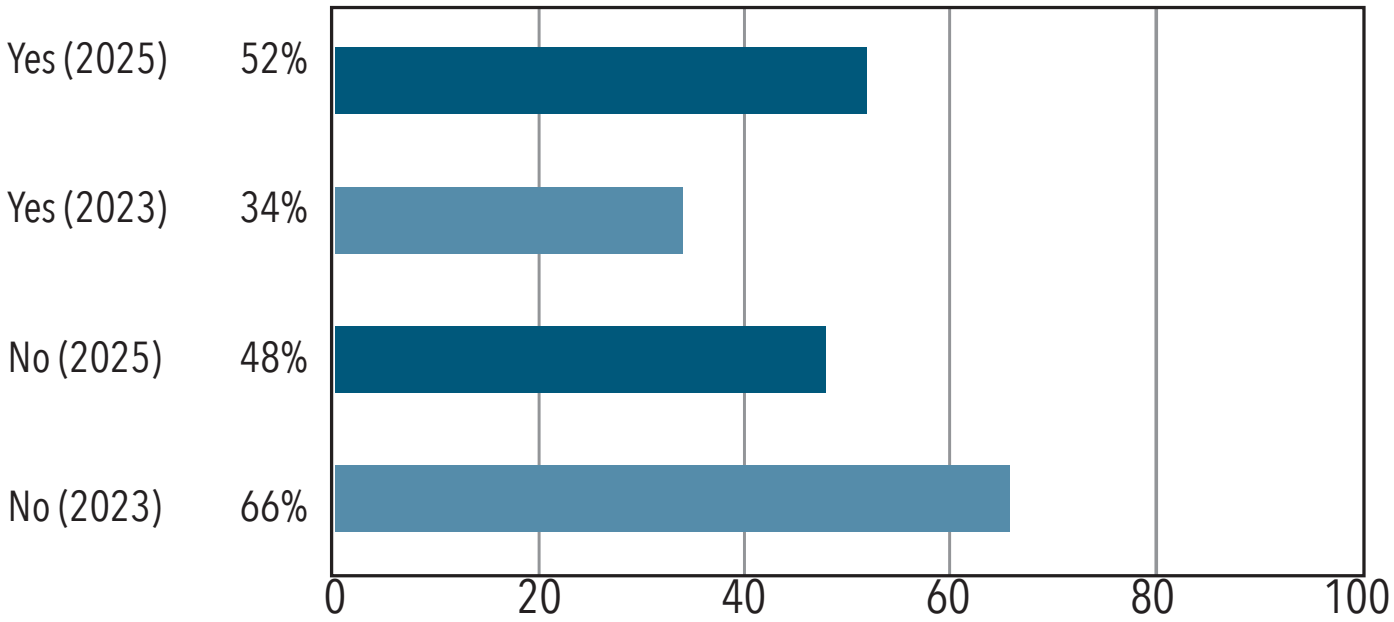
It is important to study some of the varied answers of those respondents who choose not to engage with an experienced third-party service or utilize an available tool. Some of the respondents were unaware that such services existed, and some had the impression that the expense of employing a third-party was prohibitive. In the future, it would be of great benefit for all customers to perform a financial cost-benefit analysis before making the decision to defend an audit with in-house resources as opposed to utilizing existing third-party expertise or tools. The reader should examine the charts below and, in particular, Chart 7B, which shows that over 95% report that using such a service or tool was at least somewhat helpful.

Chart 6: Were you able to reduce your audit bill through negotiation?



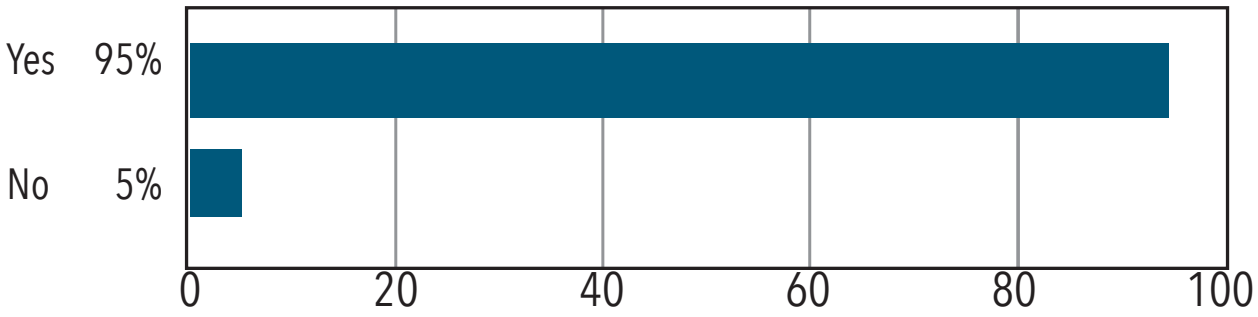
Charts may not add up to 100% due to rounding.

Chart 7A: Did you engage a third-party service/tool to assist with negotiating with the vendor conducting the audit?



Charts may not add up to 100% due to rounding.

Chart 7B: Was the third-party service firm helpful in reducing your liability?



Charts may not add up to 100% due to rounding.

CUSTOMER VULNERABILITIES UNCOVERED BY AUDITS

When software customers use the services and tools made available by third-party software management companies, they often proactively reveal significant vulnerabilities before the inception of an audit.

Absent significant experience, many of these vulnerabilities would likely go unnoticed and subject the customer to surprise findings if these violations are discovered through an audit rather than a friendly advisor.

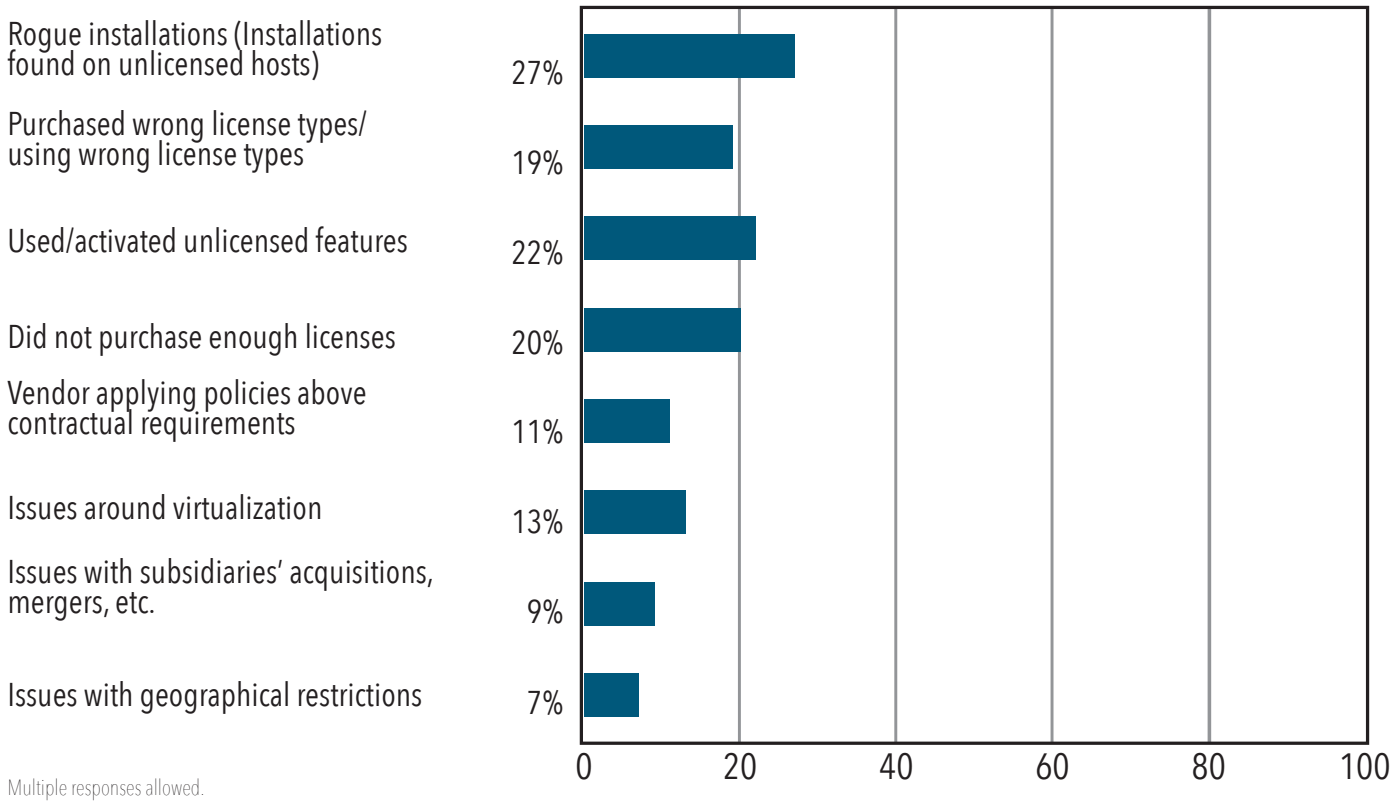
It is extremely important to note that these are common mistakes that occur through entirely accidental and innocent misuse, but these can result in considerable economic consequences.

Although some variance is found, this data is generally consistent with the 2023 survey. The most important interpretation for the reader to embrace is to grasp that the great majority of software users commit errors that lead to vulnerabilities. The damage caused by those mistakes and the respective liabilities can be minimized if discovered in a timely manner and proactively addressed before a legitimate audit takes place.

Some respondents chose to provide details in the form of comments, which could be useful in understanding the issue. A particularly insightful and revealing comment was provided:

"False positives due to downloaded utilities containing the flagged software. These were promptly removed from the system and the employee was warned of usage."

Chart 8: What types of issues were identified by the third-party service firm?



Multiple responses allowed.

TIME AND TEAM

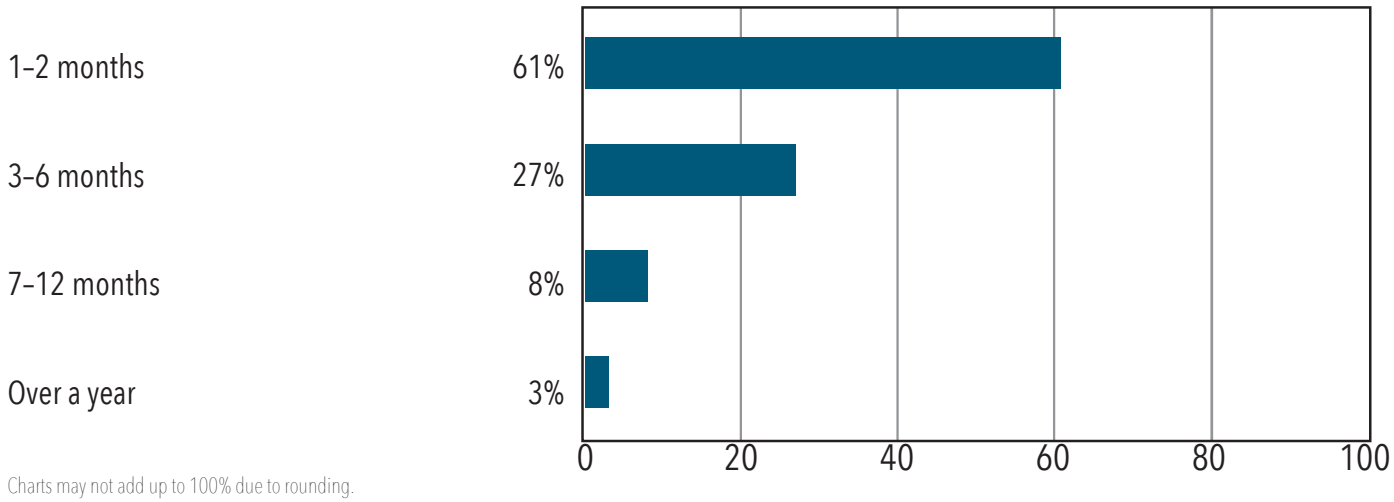
The next essential set of questions to consider involves the amount of time and resources that were necessary to dedicate to completing the audit process.

These questions need to examine multiple facets of the organization to be answered in a satisfactory manner. The customer should understand the amount of total time dedicated to the audit as well as the cost of physical resources. There may have been direct monetary costs sustained as well. Another concern would be the types of employees and how much time each was required to set aside to finish the various tasks. Obviously, the time of executive C-Suite personnel can result in substantial expense.

The charts below display the results of the survey as they pertain to the above queries. Some notable data points are summarized below:

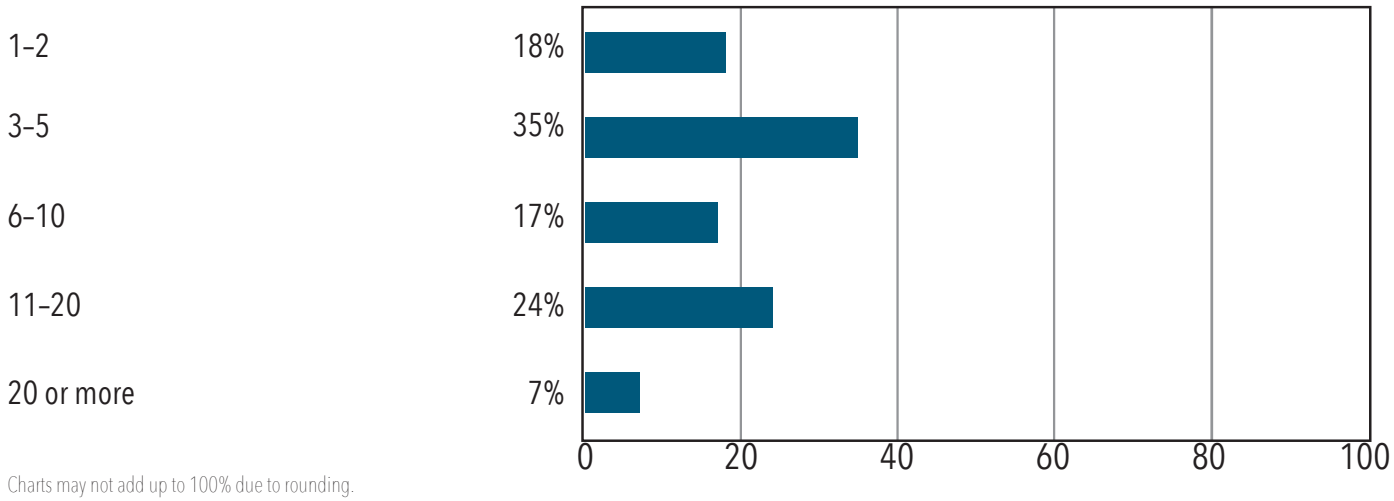
- More than one-third of respondents report that their software audit took 3-6 months to resolve, 11% required six months to a year, and a few customers dedicated more than a year.
- 52% of respondents report that they assigned between three and ten individuals to the audit and another 31% state that they allocated more than ten. This is a very large allocation of human resources for a task that was likely not considered to be within the "Core Mission" of any company at any time.
- Most firms would assume that the personnel hired to manage the computing systems would be the primary staff assigned to any software audit. However, that is often a miscalculation. As can be seen in Chart 9C, nearly 25% of the audits involve the direct participation of C-Suite executives. We didn't survey this point, but it is safe to assume that was not a cost that was originally in the yearly budget of any enterprise. Amonst organizations with under 1,000 employees, close to a third of audits involved the time of c-level executives.
- Finally, if any readers of this report believe that the time and effort required to conduct an audit is primarily on the software vendor and does not affect the customer, they would be mistaken. As Chart 9D shows, many of the personnel assigned to complete tasks required by audits have to devote a significant percentage of their time. For 56% of respondents, this added up to between 11% and 20% of their working hours. At 11% of respondents' organizations, this required more than 25% of their working hours—a quarter of every day.

Chart 9A: How long did it take you to resolve your software audit?



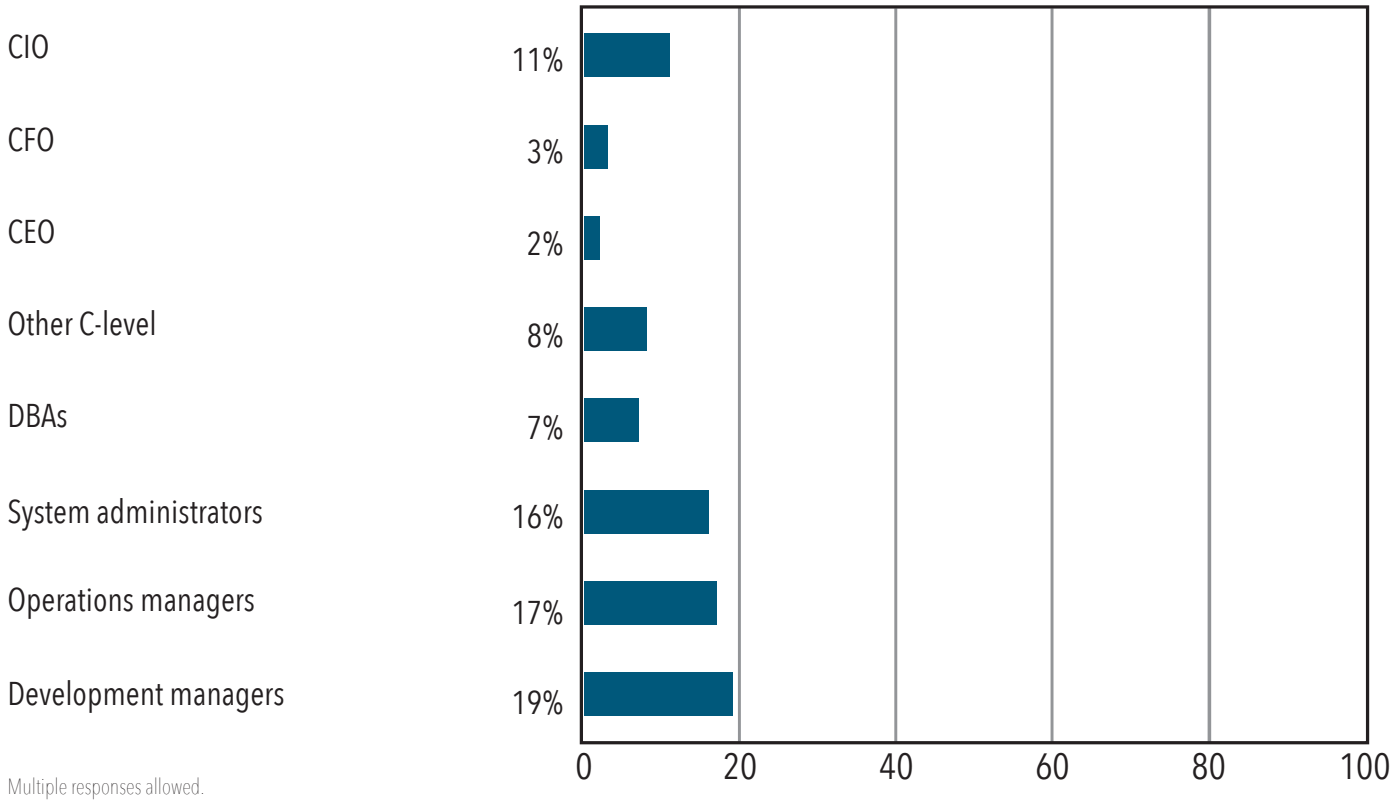
Charts may not add up to 100% due to rounding.

Chart 9B: How many team members were assigned to audit tasks?



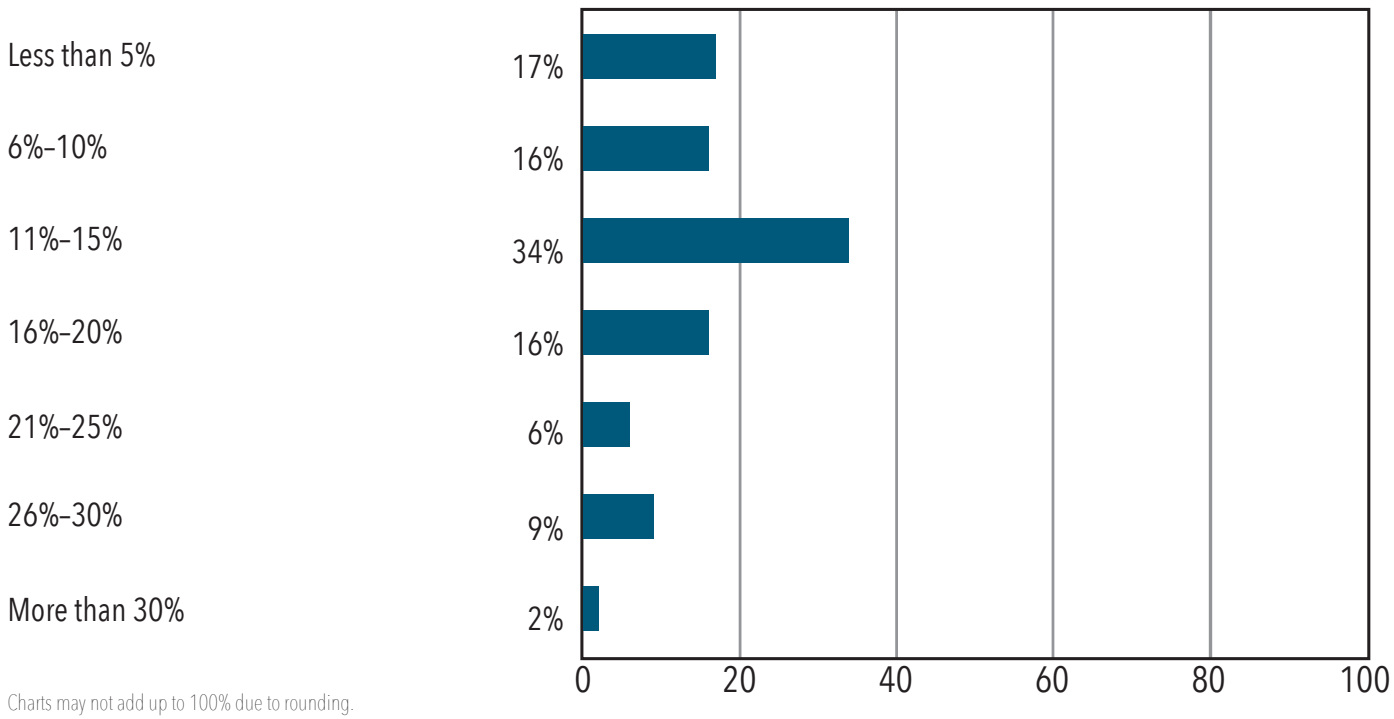
Charts may not add up to 100% due to rounding.

Chart 9C: What roles within your organization were involved in the audit?



Multiple responses allowed.

Chart 9D: What percentage of their working hours were dedicated to responding to audit requests?



Charts may not add up to 100% due to rounding.

PRESENT STATUS

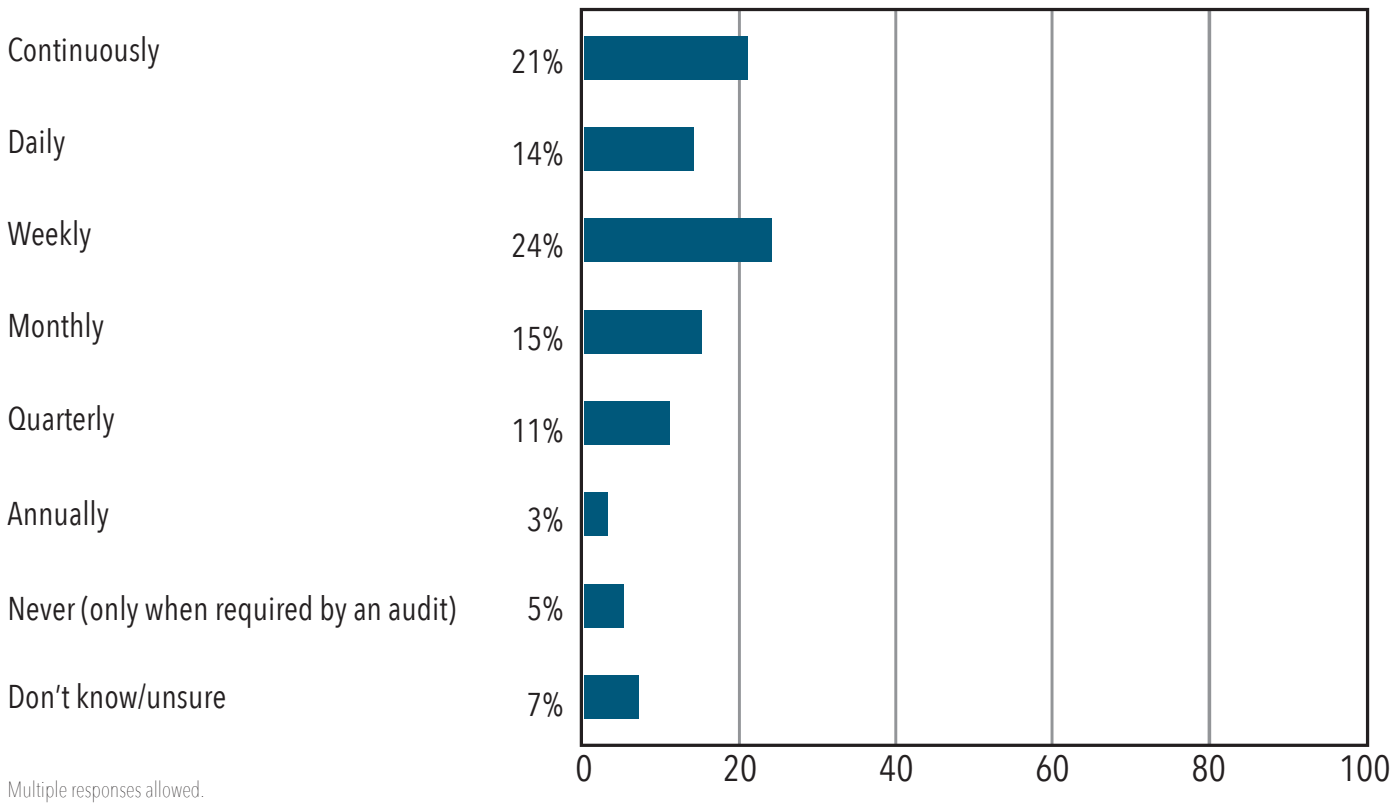
It's important to examine how customers are responding to the growing challenge of software audits.

Chart 10 shows that while most firms recognize the possibility—or even likelihood—of a pending audit, it remains a secondary concern for many. This is understandable, as businesses are typically focused on growth and operations rather than preparing for the risk of software audits.

In Chart 10, we can see that an impressive 21% of respondents continuously monitor their software estate, and that up to 75% monitor, in some fashion, monthly. The survey found that 73% of organizations that monitor on a continuous, daily, or even weekly basis resolved their software vendor audits within two months or less. This is more than double what the survey observed amongst organizations that monitor on a monthly or less frequent basis. Only 35% of this subset resolved vendor software audits in two months or less time.

At the same time, software compliance is more than just counting licenses; it encompasses technical, legal, and financial dimensions. And traditional monitoring approaches often fall short in addressing the complexities of modern software ecosystems.

Chart 10: How frequently do you scan your software resources and configurations as part of your software asset management (SAM) monitoring?



Multiple responses allowed.

CONCLUSION

Software is expensive. Enterprise grade Business Critical Applications software is extremely expensive

Failing to monitor, optimize and accurately compensate the software vendors according to binding contracts can be financially catastrophic.

Although it is far from intuitively obvious, every company entering into a voluntary contract with a software vendor has a responsibility to both the vendor and their own shareholders to conscientiously manage the use of that software. To do otherwise is negligent and possibly even reckless.

The conclusions in this report remain the same whether the software is being utilized as part of a third-party application or standalone in an on-premises implementation. Also, there are no substantial differences in the conclusions if the customer is utilizing a noticeably complicated contractual arrangement in a public cloud.

It is plausible that a company that employs highly-experienced and professional IT staff—along with seasoned legal personnel—can manage their software in-house. The challenge, however, can be overwhelming. What we have discovered through this survey is that not only is the situation around any audit extremely complicated, but that they are increasing in both nuance and frequency every year. We have also revealed the unfortunate fact that many companies—even the most diligent and regardless of size—are ill-prepared to answer the demands of a major software audit. And it should now be obvious to any reader that the costs of an audit—both direct to the vendor and indirect in the form of expended resources—can be enormous.

Our conclusion, in the form of advice, is simple. We urge you to prioritize audit readiness as a critical strategic responsibility and essential safeguard for your organization.

We have seen, in this survey, that software audits are increasing in frequency and costs. We have seen that those audits have obvious direct costs, but equally ominous hidden costs. And we have seen that a software audit is a very difficult task to navigate—absent considerable experience and preparation.

We decidedly recommend that all software customers thoroughly consider the value of a Software Asset Management service or tool with an accompanying license management service. Perform your due diligence and shop the market as many services and tools are available. Pick one that you believe will be up to the task.