



# 2023 KPMG SOX report

**Based on a 2022 external survey of SOX teams and their experiences with regards to their SOX program governance and execution**

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**01**

# **Executive Summary**

# KPMG 2022 SOX Survey

## 01

### Background

- This survey was completed by KPMG clients or other US companies representatives based on their experience in managing SOX programs for their company
- The respondents were professionals with a detailed understanding of their company's internal controls over financial reporting

## 02

### Demographics

- The experiences of 153 participants, from companies of varying sizes and industries, are represented in the survey responses
- Detailed demographics have been presented within a separate section of the survey report

## 03

### Results

- The results were derived from a web-based survey that was conducted from July through September 2022
- The data presented has been categorized by industry and company size, wherever necessary
- Results and figures reported are as of the most recent fiscal year end (predominantly 12/31/21)

## 04

### Other considerations

- Readers should consider multiple benchmarks (e.g., mean, median, etc.) for comparison and should draw their own conclusions regarding an individual company's SOX 404 program relative to their appropriate peer group

# KPMG 2022 SOX Survey

## Survey demographics by annual revenue

**71%**

Revenue less than \$10B

**12%**

Revenue between \$10B-\$19.9B

**17%**

Revenue greater than \$20B

## Key industries covered



Technology & Software



Energy & Natural Resources



Industrial Manufacturing



Financial Services



Banking and Capital Markets



Retail or Consumer goods



Insurance



Building, Construction & Real Estate

KPMG LLP (KPMG) is pleased to present the findings from our latest internal controls survey. Our survey provides a detailed look at the SOX programs implemented by companies of varying industries and sizes, from governance and strategy to details on execution and costs.

Our report presents summary findings and key measures from the survey data and is designed to provide insight, useful direction, and provides a basis for comparison and further analysis.

Additionally, KPMG analyzed comparative metrics from this survey to our 2016 survey to highlight notable differences in the SOX program landscape over the past 6 years.

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# KPMG 2022 SOX Survey – Key Takeaways

## SOX program budgets and costs

- The average SOX program budget, across all size companies, was reported as \$1.6M and 11,800 hours
- The average cost of compliance, including cost of control performance and testing, was calculated as \$3,200 per control
- The average hours to test a control for operating effectiveness was reported as 12 hours per control which is an increase from 9 hours per control in 2016 \*

## Control Environment

- The average total key control count (including IT controls), was 463 key controls in 2022 which represents an increase from 329 key controls in 2016
- 21% of total controls were reported as automated in 2022, an increase from 18% in 2016

## Technologies

- 69% of the companies used a Governance, Risk and Compliance (GRC) technology for their SOX program (increased from 49% in 2016)
- 92% of companies that use a GRC tool were either fully or somewhat satisfied with their current GRC technology (increased from 70% in 2016)
- 66% of participants reported use of data analytics in their SOX program (increased from 8% in 2016)

## Focus areas

- Improvement in quality of control evidence, communication with External Audit, and increase in External Audit reliance were reported as the key focus areas for SOX programs
- Controllership played a significant role in the non-testing SOX activities. Third party outsourcing was most prevalent in controls testing

\* Note that the population size and composition of company's survey in 2016 and 2022 is different, so this comparison is a data point but not directly comparable

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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**02**

**Program  
structure/  
Governance**

# Key observations: Program structure/Governance



- 90% of the participants considered their SOX program to be in a matured or an evolved state
- Controls optimization and Improving business processes were reported as key focus areas for SOX programs



- 88% of participants reported that their organization's culture is supportive of the SOX program
- 67% reported that the SOX program's impact is considered while planning business initiatives



- 89% of the companies reported External Auditor reliance on their SOX program
- Use of External Auditor templates and modifying sample sizes were reported as ways to increase reliance



- Despite high External Auditor reliance, 85% of the companies couldn't quantify the savings achieved on their organization's testing



- A fifth of the companies reported that SOX testing contributes to >60% of their total Internal Audit budget each year

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

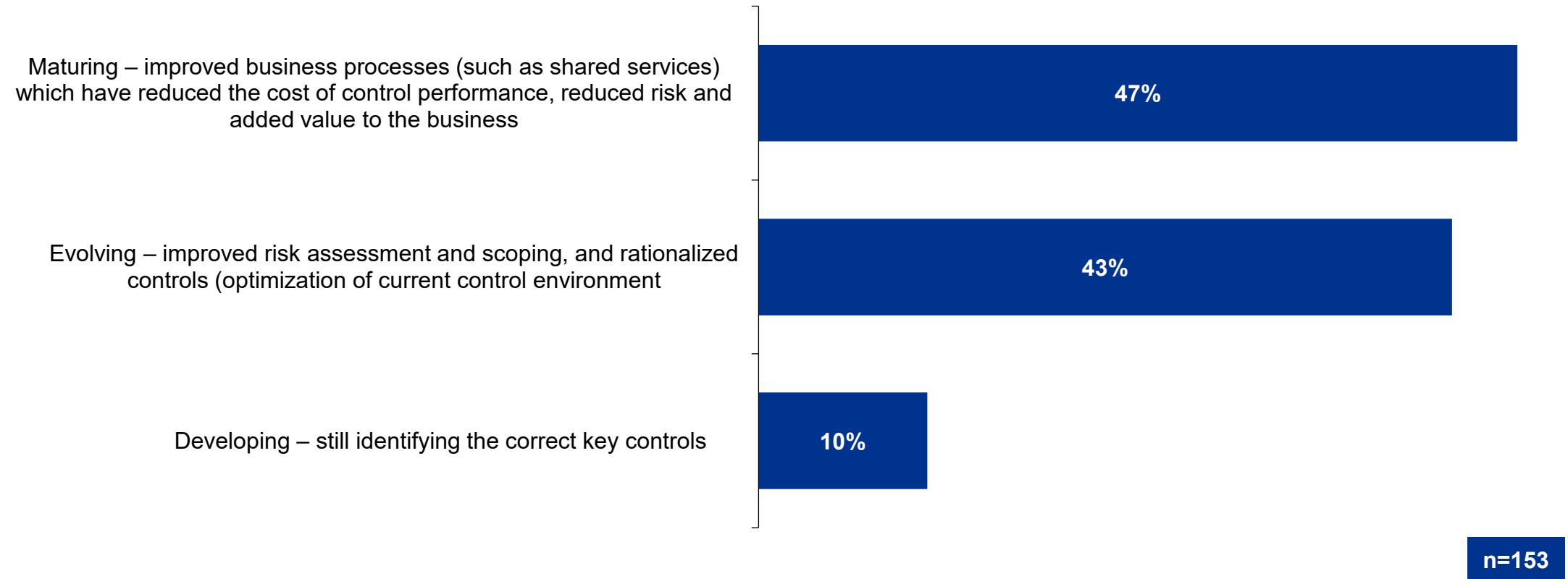


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# 90% of the participants considered their SOX program to be in a matured or an evolved state

Q. Where do you consider your SOX program's maturity level is at?



Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



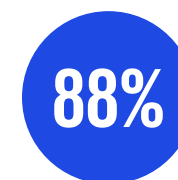
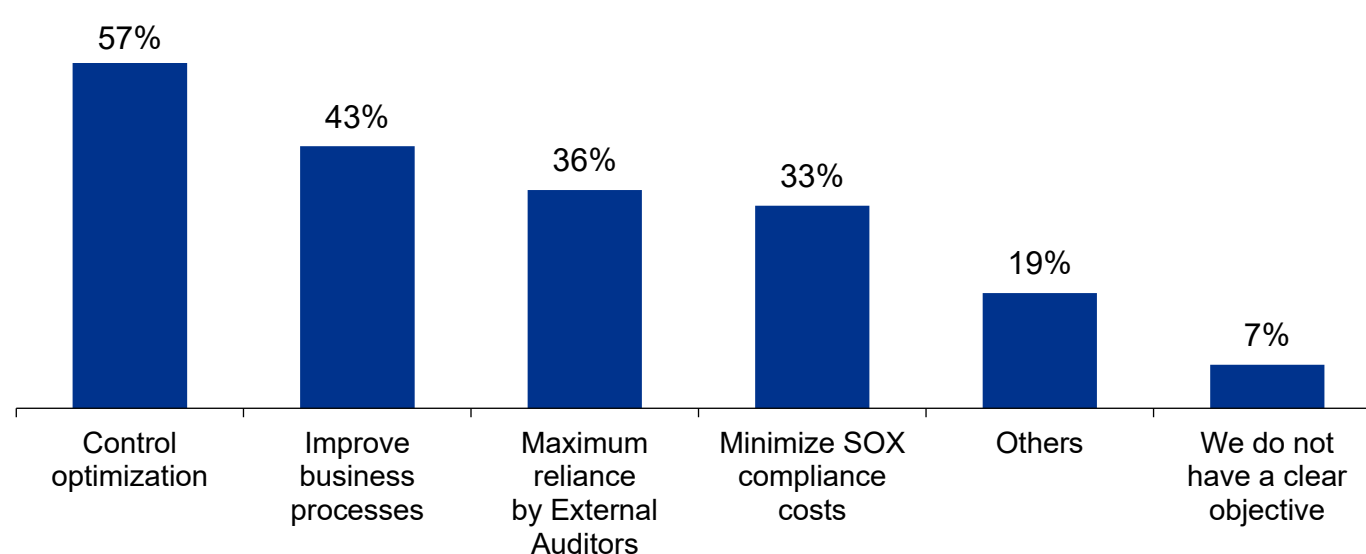
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# 'Control optimization' and 'improving business process' were reported as key focus areas

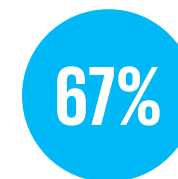
## KPMG Point of View

Companies have rightly shifted focus from minimizing compliance costs in 2016 (83% of the respondents selected the option) to minimizing performance costs, in 2022. This strategy will allow companies to focus on the total cost of controls and the quality, effectiveness and efficiency of the controls.

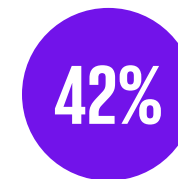
## Q. What were the organization's objectives for its SOX program?



Participants reported that their company's culture and tone at the top support the SOX program



Companies considered the SOX program's impact when planning significant business initiatives



Participants reported involvement of the IA team in developing SOX strategy

Respondents could select more than one option.

n=153

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



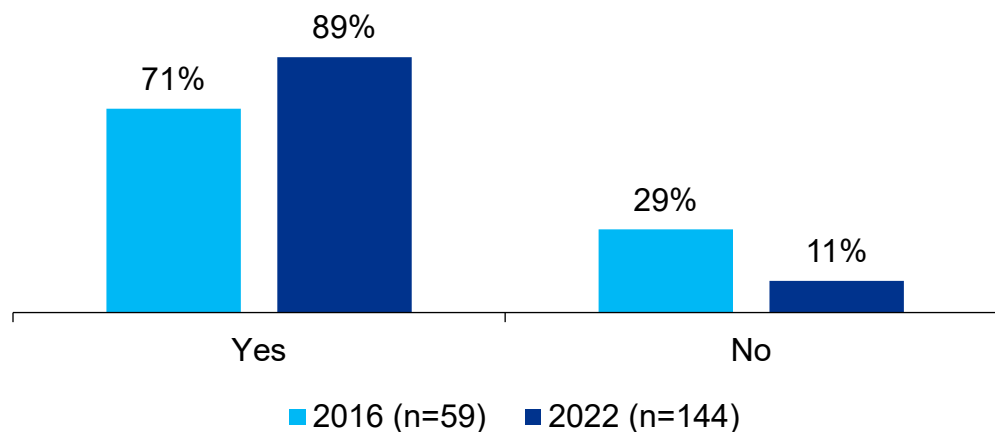
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# External Auditor reliance on Internal Audit/Management teams' testing increased from 71%, in 2016, to 89% in 2022

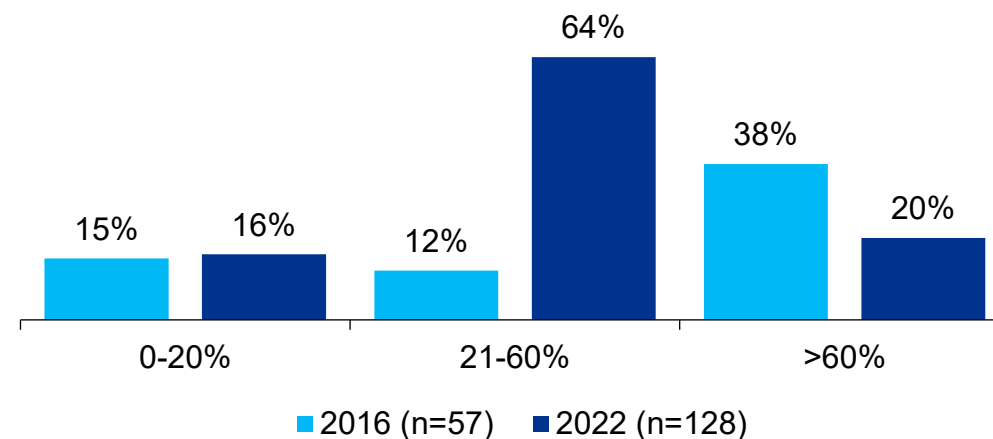
## KPMG Point of View

Internal and external auditors have increased their communication and collaboration efforts in order to reduce the impact of compliance on control operators by streamlining the testing programs. In response, organizations have seen an increase in external auditor reliance as a result of adopting the external auditors testing templates and agreeing control testing procedures.

Q. Did the External Auditor rely on the SOX controls testing performed by IA/SOX/management testing teams? (2016 Vs 2022)



Q. What percentage of your Test of Operating Effectiveness (ToE) procedures did the External Auditor rely on? (2016 Vs 2022)



This question is only answered by the respondents who selected "yes" in External Auditor reliance

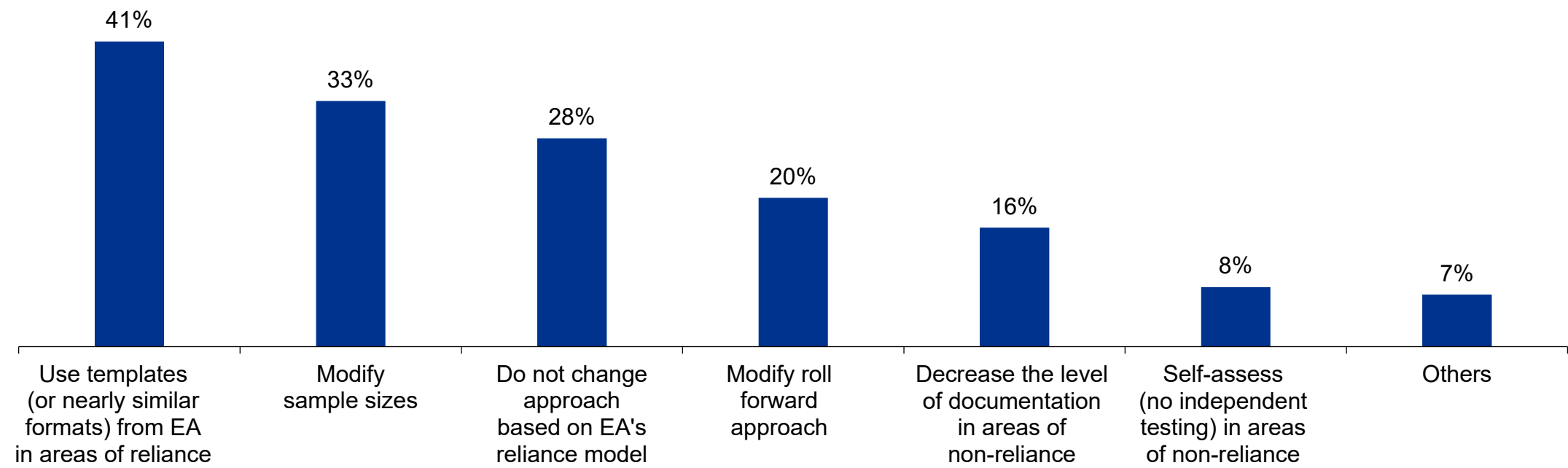
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# Many companies used the same or similar testing templates or modified their sample sizes to increase External Auditor reliance

Q. How did your organization modify its approach based on your External Auditor's (EA) reliance model?



Respondents could select more than one option.

n=153

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



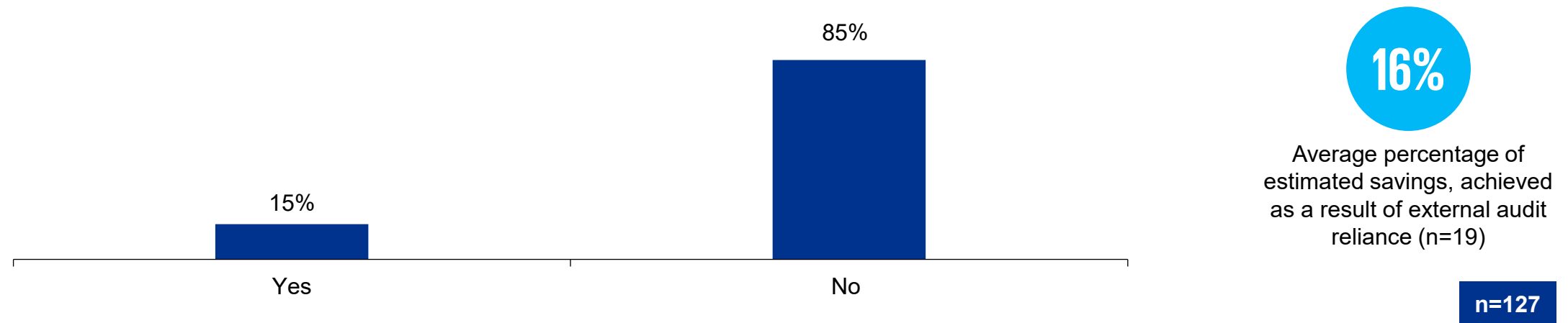
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# 85% of participants reported that they were unable to quantify savings achieved due to External Auditor reliance on their management testing

## KPMG Point of View

- There have been significant efforts made by companies to align their SOX program with the External Auditor requirements. However, companies have not been able to analyze a return on this investment
- Companies must assess the impact, if any, of their External Auditor reliance strategy and take an informed decision about the same

Q. Are you able to quantify the savings achieved as a result of External Audit reliance on your organization's testing in 2022? If yes, please provide percentage of estimated savings.



Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



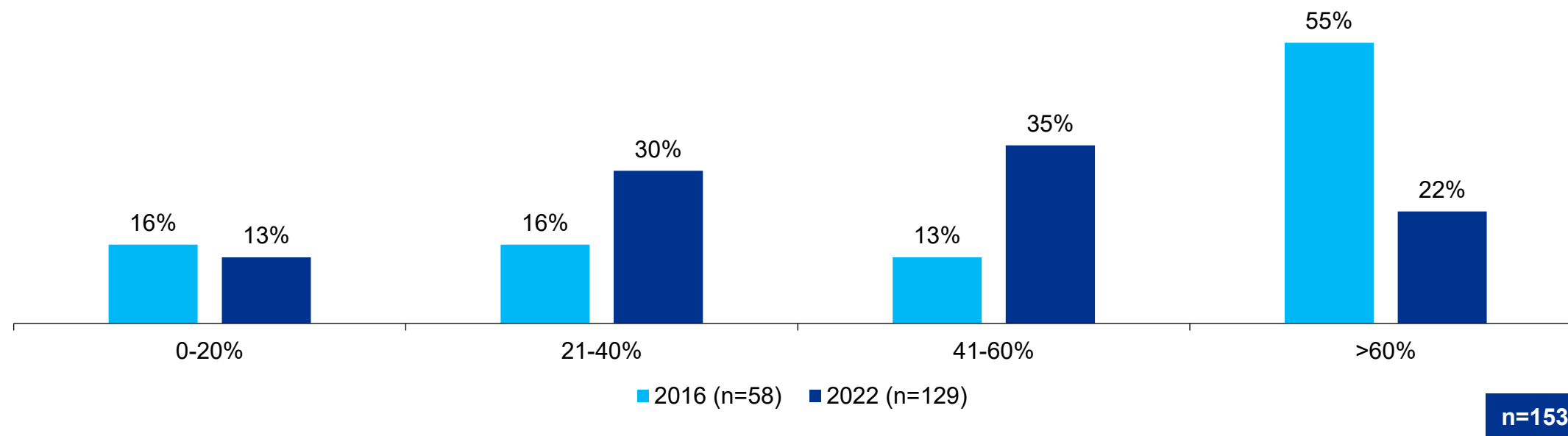
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# Majority of the IA teams participating in SOX spent 40% or more of their hours in SOX

## KPMG Point of View

The decrease of hours spent by the Internal Audit department, as compared to 2016, is reflective of the evolving role of Internal Audit. Traditionally seen as a compliance shop, companies are now taking advantage of the process and risk expertise within the Internal Audit department and leveraging that skill-set to assess operations across the organization.

Q. For Internal Audit departments participating in SOX, what percentage of total Internal Audit hours were related to SOX in 2022?



Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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**03**

# **Program Budget**

# Key observations: Program budget



- 40% of participants reported an increase in the year-over-year cost of their SOX program
- Participants indicated the increase was driven by changes in company structure, increase in key control counts, and new system implementations



- Overall, average budget for the SOX program was reported to be \$1.6M, and 11,800 hours



- Average cost of compliance per control, basis responses, was calculated as \$3,200
- Average hours per control for ToE testing was reported to be 12 hours



- Transactional controls required the most hours (16 hours per control) for ToE testing, whereas entity-level controls required the least hours per control (9 hours per control).



- ToE was reported as the most time-consuming SOX activity followed by process walkthroughs, and test of design

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



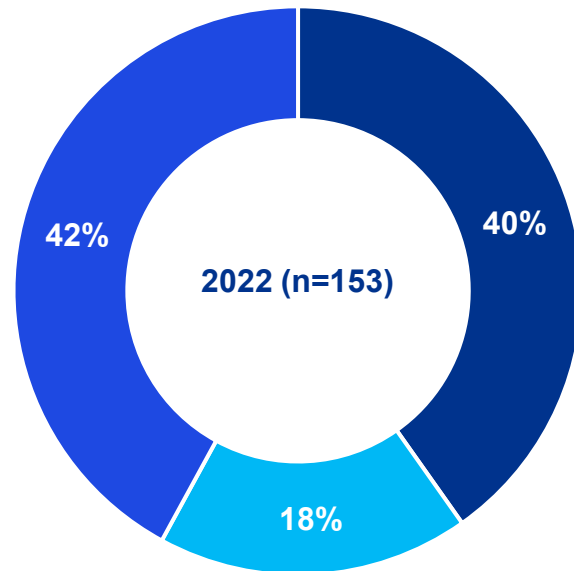
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# 40% of companies experienced increasing costs in their SOX program from 2021 to 2022

The cost trends below reflect costs related to control documentation, testing, SOX program governance, etc. (and do not include the cost of control performance).

Q. Did your SOX program costs increase/decrease over the past year (2022 compared to 2021)? If so, what was the driver of the change?



■ Increased ■ Decreased ■ No change

## Drivers for the increase in the SOX program cost (2022):

- Change in business structure (e.g., acquisitions, decentralization, etc.)
- Increase in testing, documentation, and number of controls
- Implementation of new systems
- Increase in labor cost

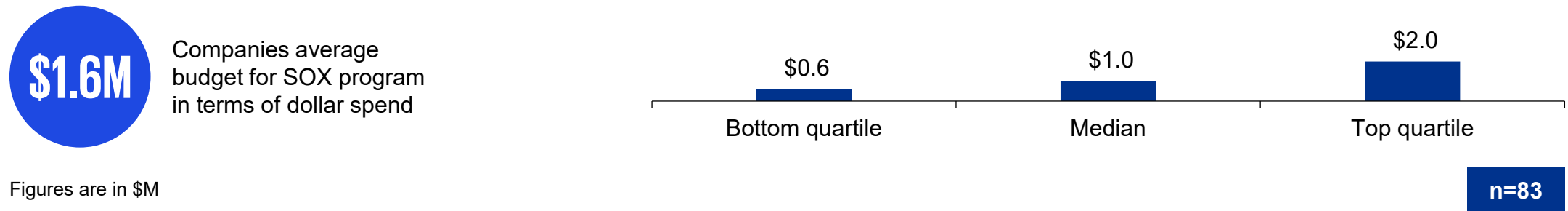
## Drivers for the decrease in the SOX program cost (2022)

- Technology enablement in SOX programs
- Increased efficiency in controls testing
- Change in audit approach/support, and company's cost control activities

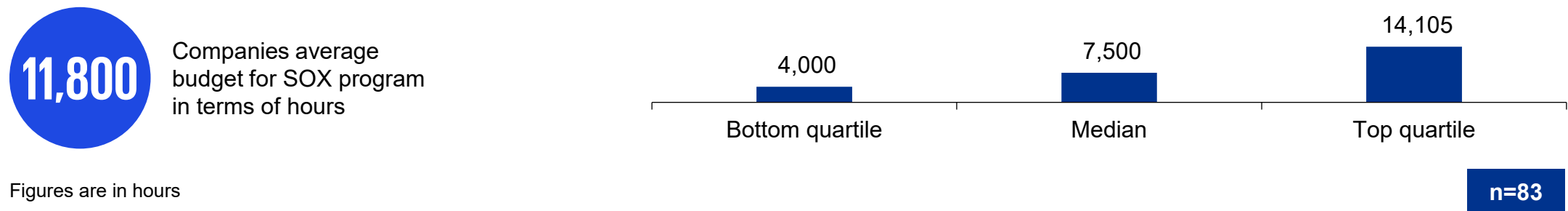
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

# Average budget for the clients' SOX program, across industries and company sizes, was reported as \$1.6M and 11,800 hours

Q. What was the budget, in dollars, for your SOX program, including both internal and external resources?



Q. What was the budget, in hours, for your SOX program, including both internal and external resources?



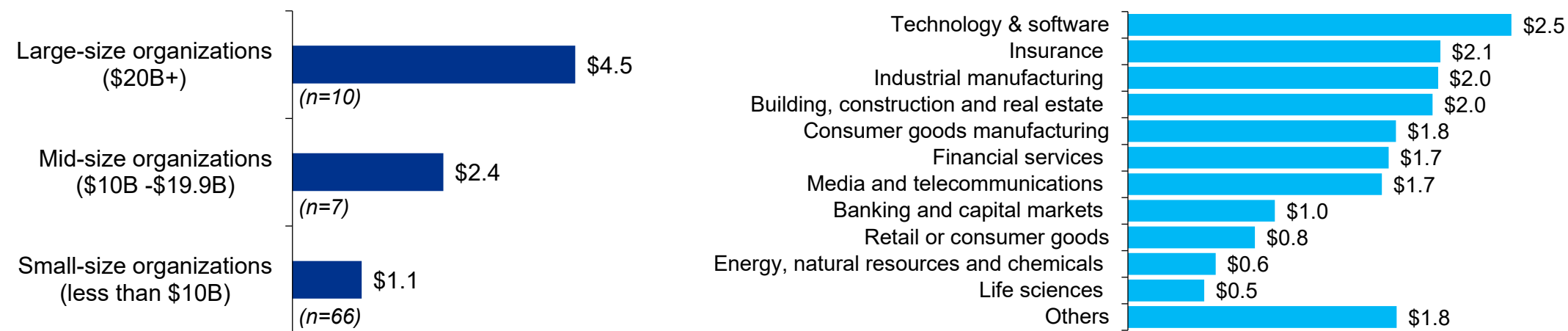
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# Companies with revenue over \$20B reported a significantly higher SOX program budget Technology and insurance companies allocated the highest budget to their SOX programs

Q. What was the budget, in dollars, for your SOX program, including both internal and external resources? – (By company size and Industry)



Figures are in \$M

n=83

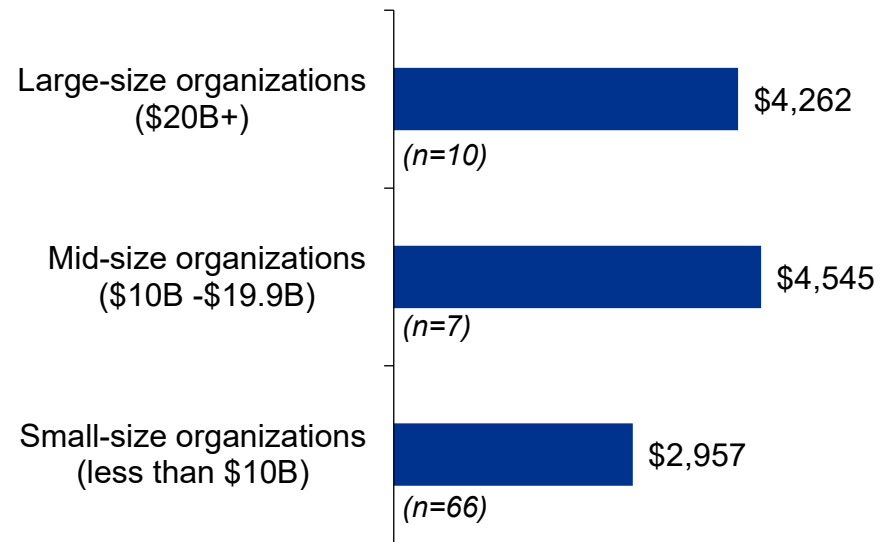
- Similar averages were noted for company sizes \$100M-\$500M, \$500M-\$1.5B and \$1.5B - \$9.9B. Therefore, the population counts were merged resulting in a total count of 66 companies.
- Differences in SOX program budgets were driven by varying company sizes and not by industry
- Other industries - Asset Management, Alternative Investments, Automotive, Agriculture, Human Capital, Healthcare, Federal, State and Local, Education, Research, Mining, Power and Utilities, Waste management, and Logistics

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

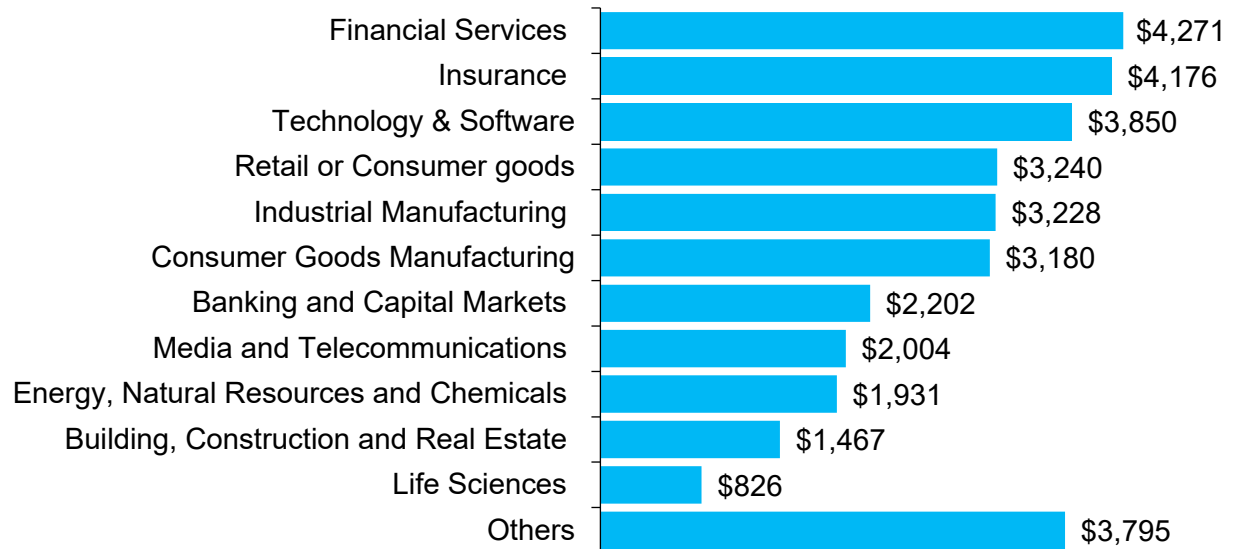


# Average cost of compliance per control, across companies, was calculated as ~\$3200. Significantly higher cost was noted for companies with revenue >\$10B

Cost of compliance, by company size



Cost of compliance, by industry



n=83

- Similar averages were noted for company sizes \$100M-\$500M, \$500M-\$1.5B and \$1.5B - \$9.9B. Therefore, the population counts were merged resulting in a total count of 66 companies.
- Differences in SOX program budgets were driven by varying company sizes and not by industry
- Cost of compliance includes the cost of performance and testing a control (ToD and ToE). The numbers shown above were calculated by dividing the SOX budget by the control count reported by the participants.
- Other industries - Asset Management, Alternative Investments, Automotive, Agriculture, Human Capital, Healthcare, Federal, State and Local, Education, Research, Mining, Power and Utilities, Waste management, and Logistics

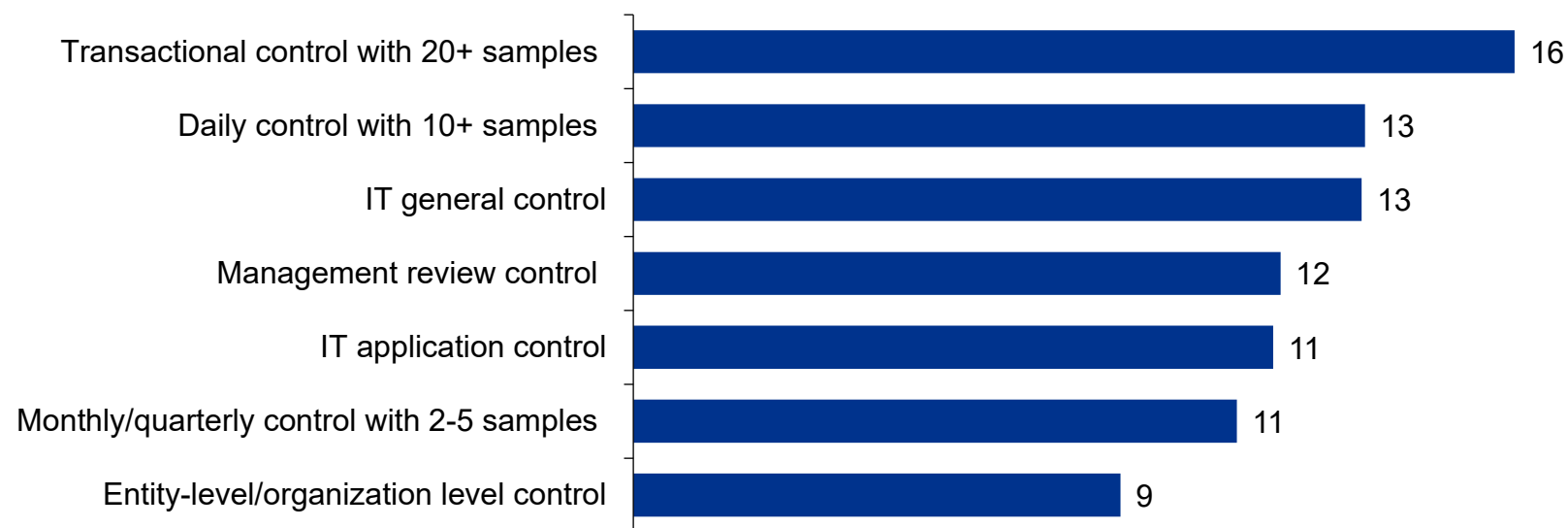
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



# Transactional controls had the highest average testing hours at 16 hours per control

Transactional controls have higher average testing times due to the larger sample sizes tested for controls with frequencies of daily or more than daily. 62% of the participants reported the testing is performed in 2 or more phases during a year, which adds to the efforts to test these controls.

Q. How many hours did you spend per control, on average, testing the operating effectiveness for the following control types for the fiscal year?



12  
hours

Average testing hours per control for test of operating effectiveness (ToE)

n=83

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# Companies, across sizes, spent the majority of their efforts on test of operating effectiveness

97% of the participants reported that they perform walkthroughs. However, the majority of these companies spend <1000 hours on this activity. Companies must assess the value being derived from performing walkthroughs and determine whether the money and time spent is justified, and also adapt how they perform and/or document walkthrough activities

Q. What was the approximate effort (in% of total hours), in total across all processes, for each of the following activities during the most recent SOX compliance year?



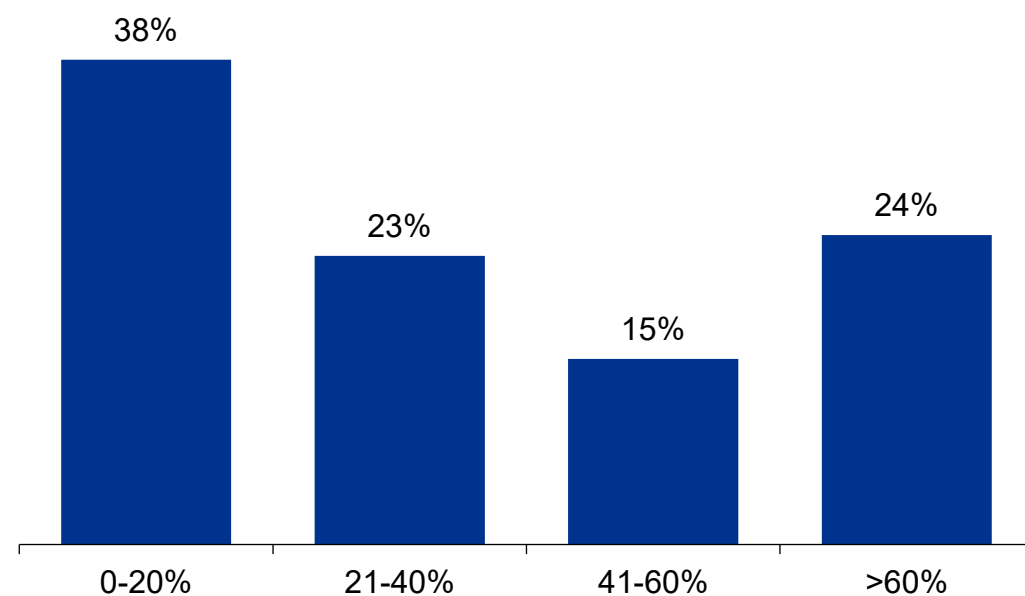
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# Of the companies requiring to be SOX compliant, the majority reported that >20% of their SOX program budget was fulfilled by outsourced providers

Q. What% of your SOX program budget was fulfilled by outsourced providers (e.g., co-sourced programs)?

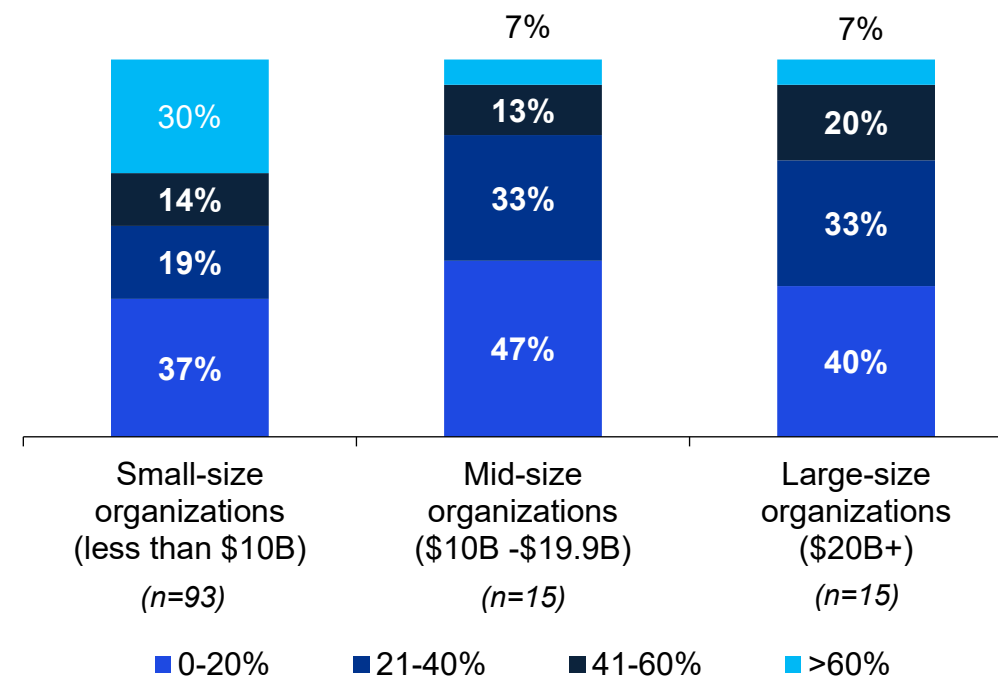


Only those participants who selected 'Yes' for the company requiring to be SOX 404a or 404b compliant question were considered for this section (n=130)

**n=123**

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

Q. What% of your SOX program budget was fulfilled by outsourced providers – by company size



**04**

**Risk  
assessment**



# Key observations: Risk assessment



New system implementation, process reengineering, and acquisitions, divestitures and/or reorganizations were reported as the most considered factors during SOX risk assessment in 2022



New or superseded accounting pronouncements and regulatory changes were some other common factors considered in the risk assessment process



A majority of the participants reported their company's in-scope control count to be more than or same as the External Auditor



46% of participants reported that their IA team is responsible for the performance of SOX risk assessment related activity



Maximum outsourcing was seen in ToE activity and the least outsourcing was seen in SOX strategy and reporting activities

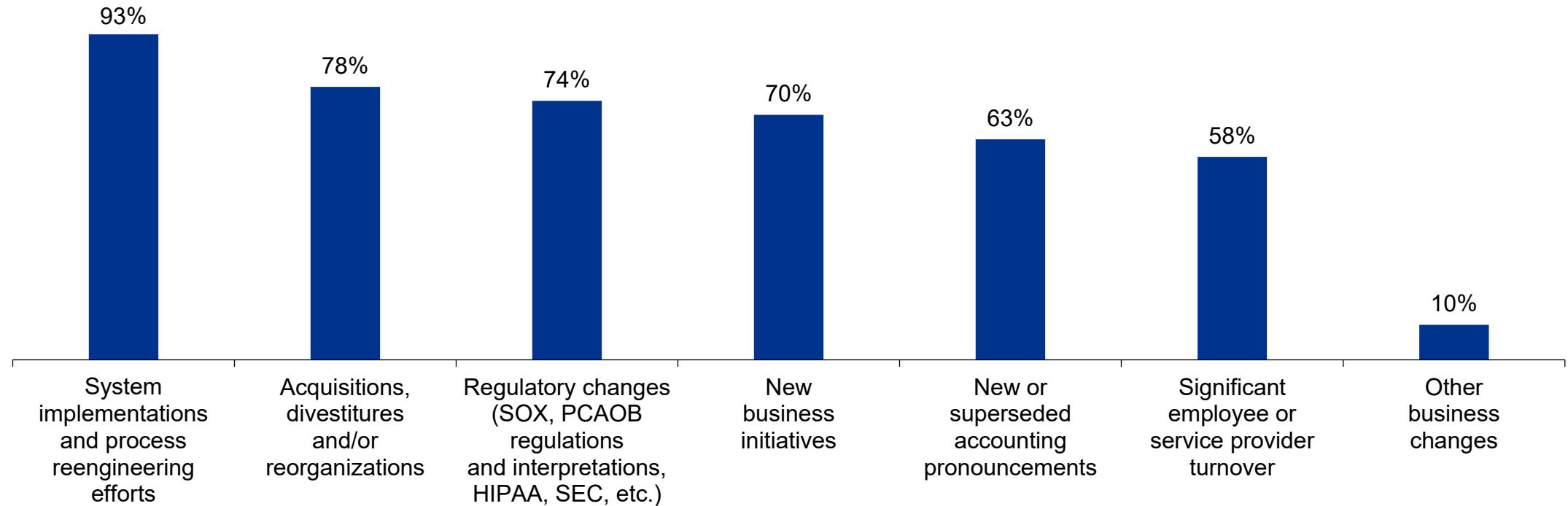
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# 93% of the companies considered system implementation/ process re-engineering during their SOX risk assessment

## Q. What factors were considered during the SOX Risk Assessment?



Respondents could select more than one option.

n=153

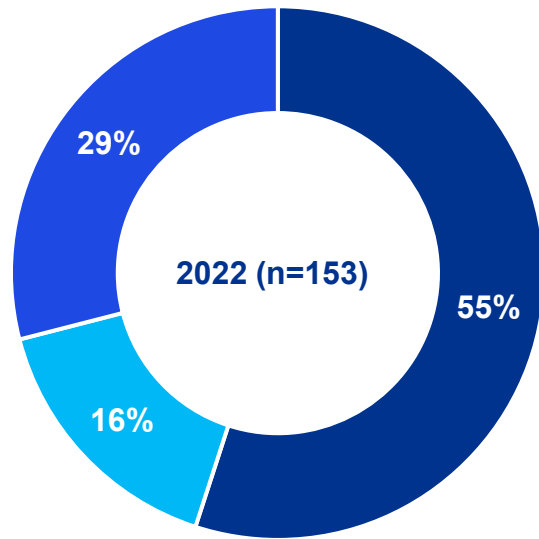
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# >80% of the participants reported their company's in-scope controls (business & IT) were either more than or the same as the External Auditor

Q. Were there differences between what your organization had in-scope and what the External Auditor had in-scope for business process controls testing in 2022?

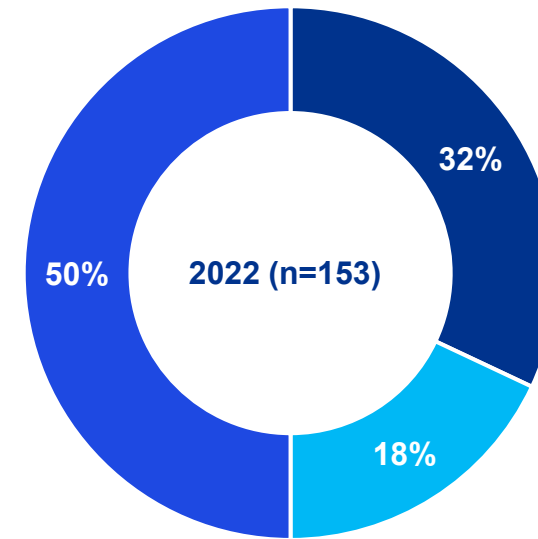


External Auditor had less controls in-scope

External Auditor had more controls in-scope

Company had the same controls in-scope as the External Auditor

Q. Were there differences between what your organization had in-scope and what the External Auditor had in-scope for IT controls testing in 2022?



Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

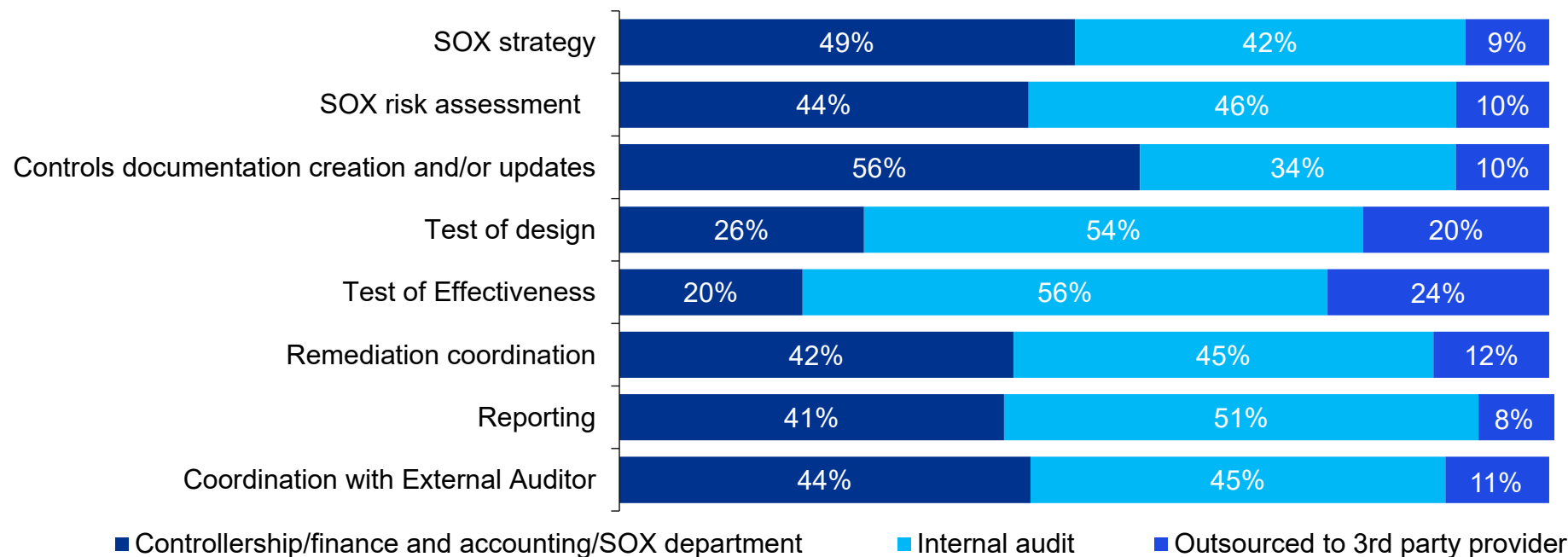


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# Majority of the participants reported that IA function was responsible for their SOX program's testing activities

Controllership played a significant role in the non-testing SOX activities. Third party outsourcing was most prevalent in controls testing.

Q. Who was responsible for the performance of the following activities in 2022?



n=153

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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**05**

# **Control environment**

# Key observations: Control environment



- On average, key control count increased by 41% in 2022 (463 controls) when compared with 2016 (329 controls)



- Non-key controls constituted 44% of the total controls and 66% of the companies document non-key controls



- ~80% of total controls were reported as manual or IT dependent manual controls



- In large-size companies (\$20B+), 37% of total controls reported to be automated
- Overall average of automated controls stood at 21%



- 65% of participants reported they have modified their control portfolio in 2022

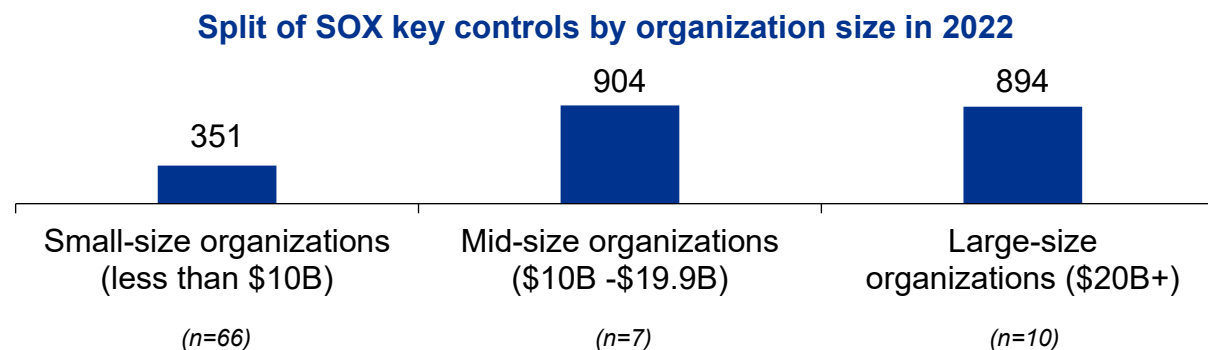
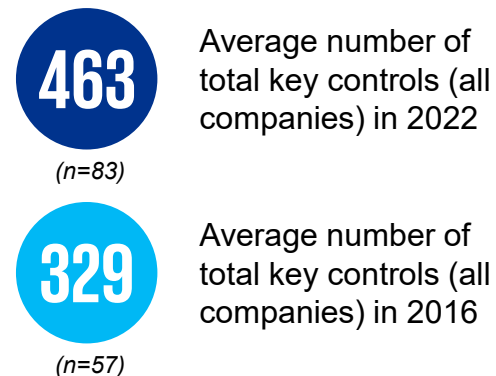
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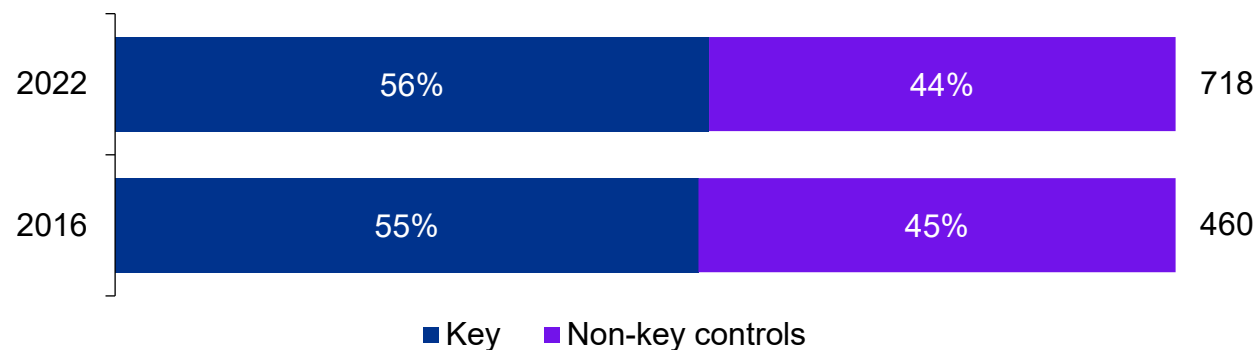
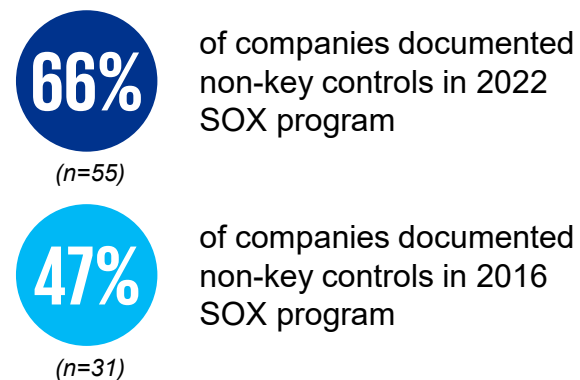
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# On average, key control count increased by 41% in 2022 (463 controls) when compared with 2016 (329 controls)

Q. What was the total number of SOX key controls (Business Process and IT)?



Q. Split of average total key and non-key controls (for companies documenting non-key controls)

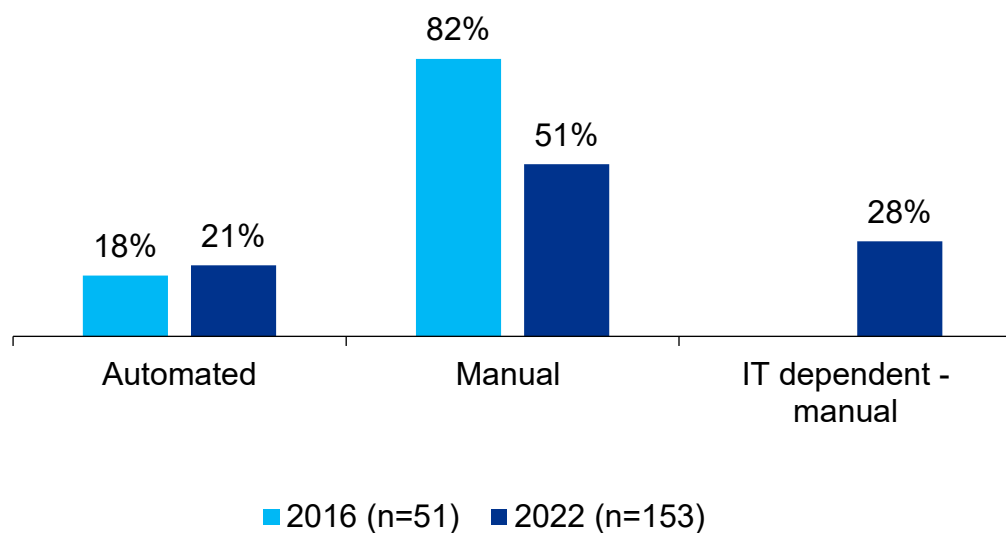


Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



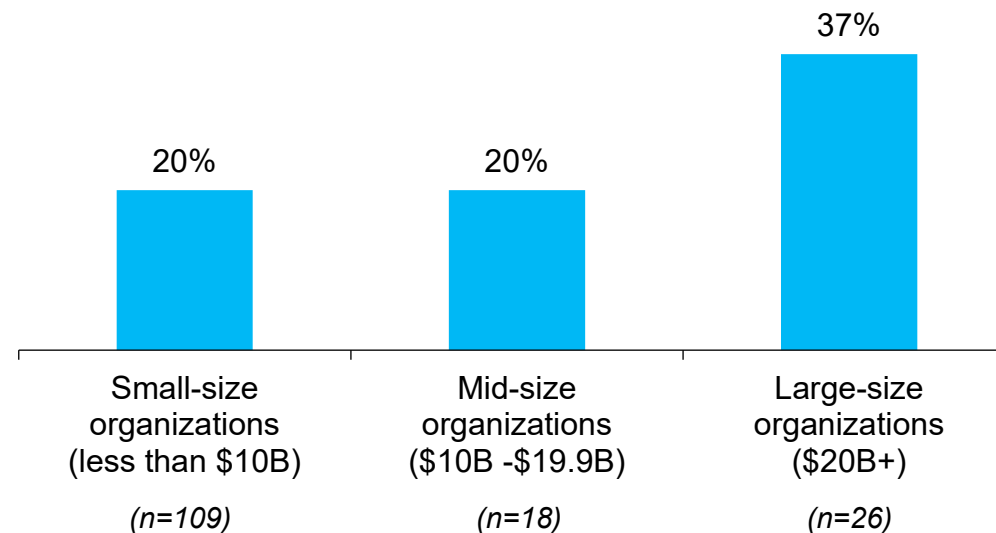
# On average, 21% of the total controls were automated. This percentage was significantly higher for companies with revenue >\$20B

Q. What percentage of your total 2022 SOX in-scope controls were automated/manual/IT dependent manual?



Percentage figures are the averages of total firms surveyed, respectively. 2016 survey did not include 'IT dependent' as a response option

Q. Percent of total controls that are automated in% – by revenue size



Above chart depicts the percent of total controls that are automated across varying company's size, respectively.

**n=153**

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

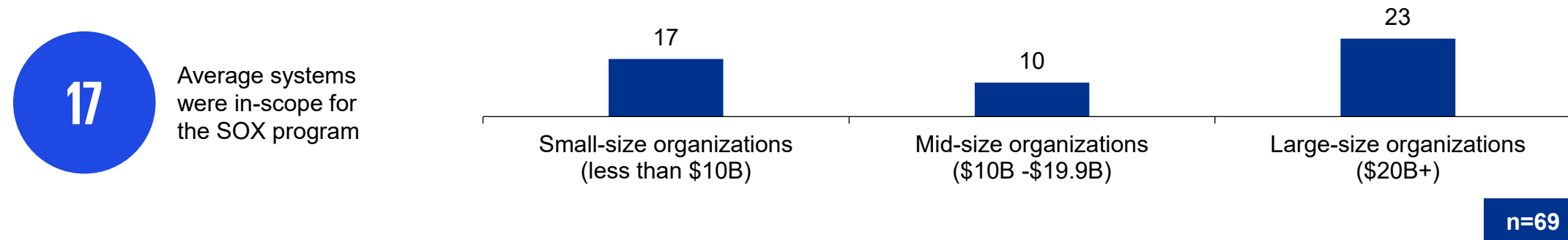


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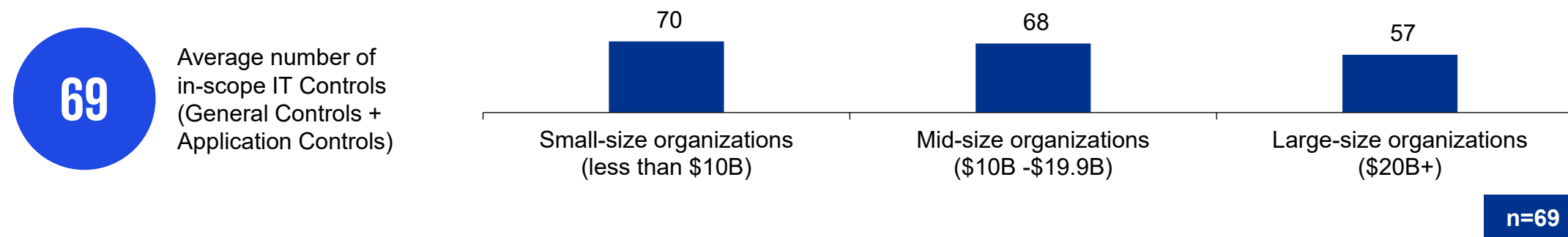


# IT SOX program – In-scope systems and average control count

Q. How many systems were in-scope for the SOX program in 2022?



What were the number of in-scope IT Controls (General Controls + Application Controls) in 2022?



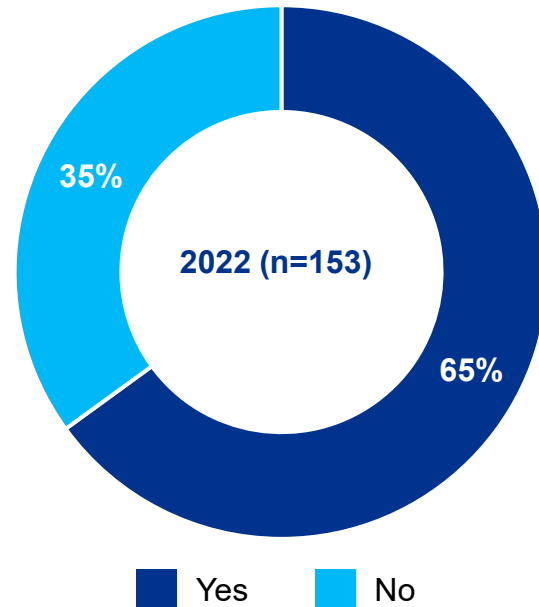
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# 65% of participants reported modification to their control portfolio

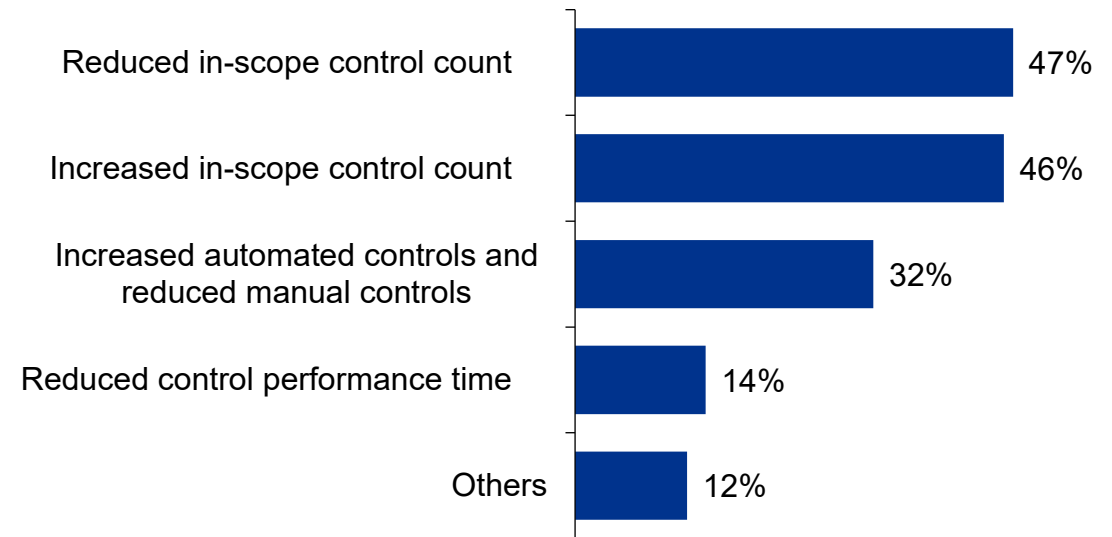
Q. Did you modify your control portfolio in 2022?



A modification would entail a significant change in control count/scope. Minor changes to existing control information wasn't assumed as a modification.

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

Q. Which of the following areas were impacted by the modifications to your control portfolio?



Participants who have selected "yes" in modifications to their control portfolio section, can respond to this question. Hence the varying sample size.

Respondents could select more than one option.

**n=99**

**06**

# Testing

# Key Observations: Testing



- 94% of companies performed their ToE in two or more phases
- >60% of companies assigned risk levels to their controls
- 76% of companies modified their sample size based on the risk levels



- 66% of participants reported use of data analytics in their SOX program
- Sample selection and control testing phases were noted as areas with the highest application of data analytics



- 38% of companies report reduction in their program's in-scope control count. Tech enablement and controls optimization noted as key drivers for the decrease



- Audit committee communication and reporting focused on reporting control exceptions and the associated remediation activities



- Companies reported an average of 9 control deficiencies in 2022
- Majority number of control deficiencies were reported in GITC, order to cash, and financial reporting and close processes

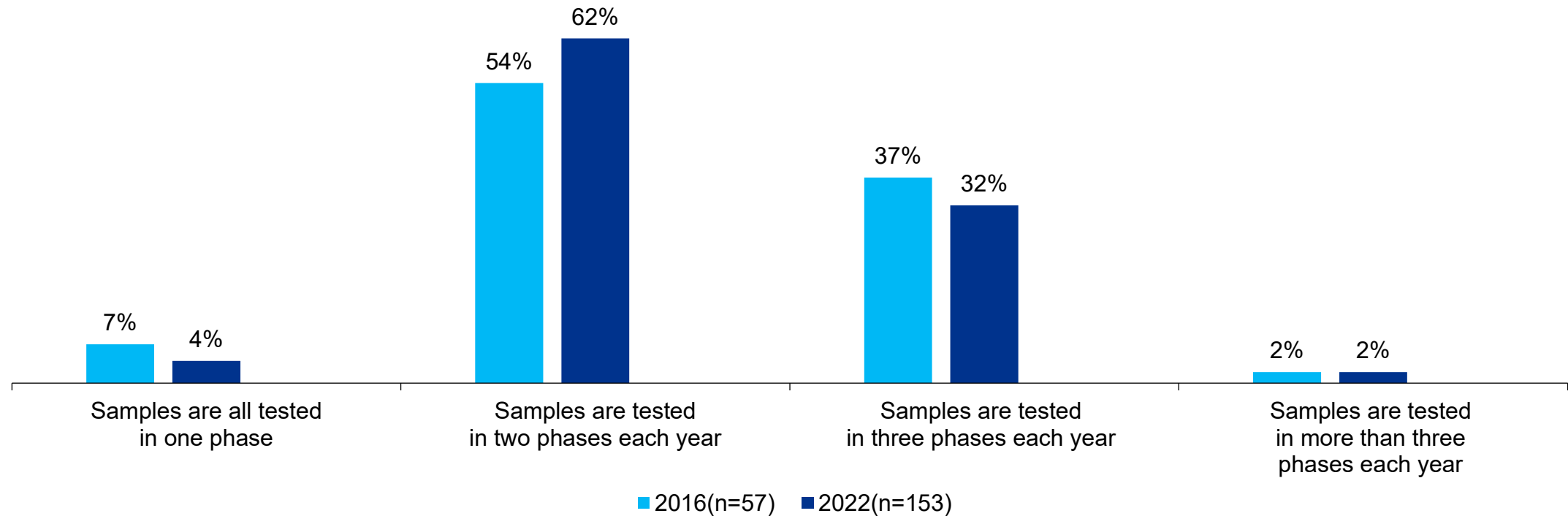
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# 94% of the participants reported that their company SOX program's effectiveness testing is conducted in two or more phases, each compliance year

Q. How many Test of Effectiveness (ToE) phases occur each compliance year to cover the sample size in completion?



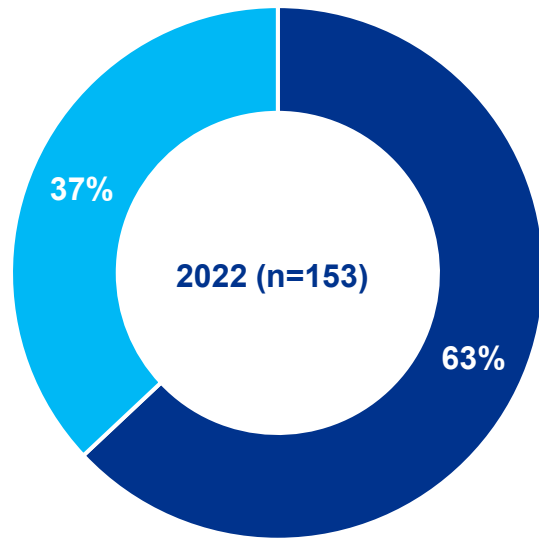
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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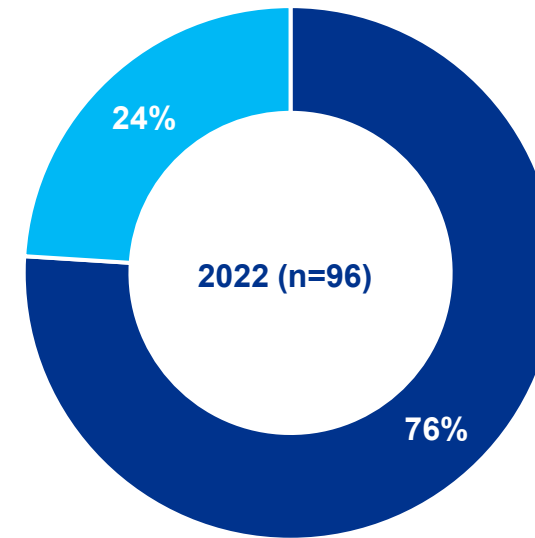
# 63% of participants reported assigning of risk levels to their SOX program controls. 76% of these companies modified their sample sizes based on the risk levels

Q. Did you assign risk levels to your controls?



■ Yes ■ No

Q. Did you modify sample size based on the risk associated with the control?



Participants who have selected "yes" in assign risk levels to their controls, can respond to this question. Hence the varying sample size

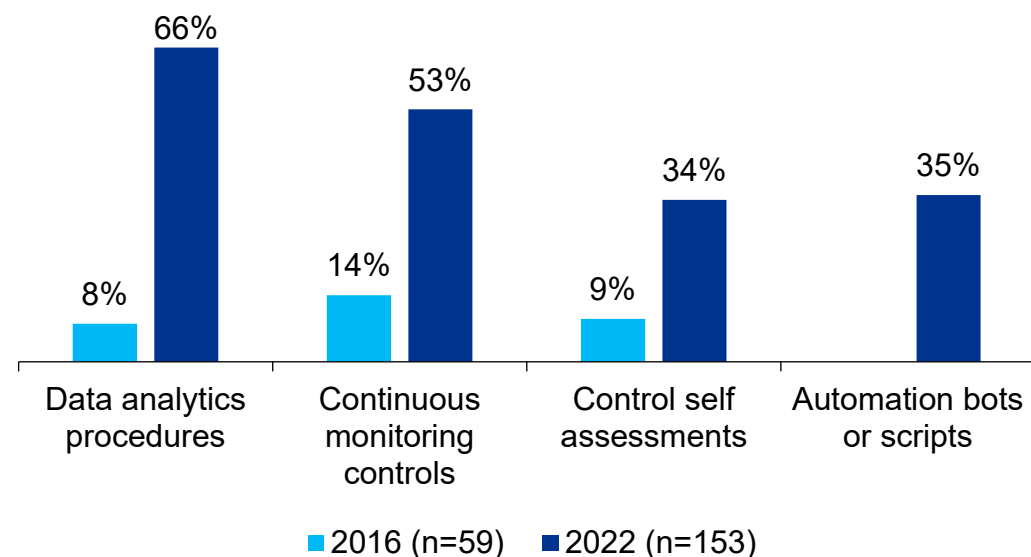
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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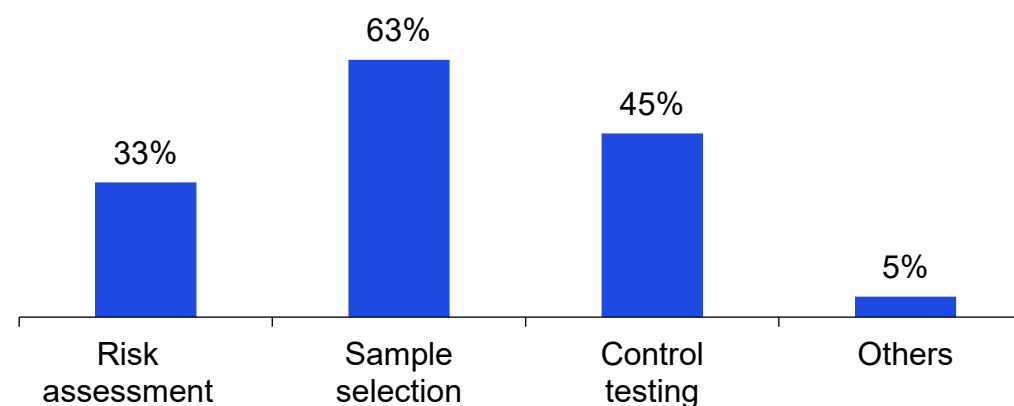
# Compared to 8% in 2016, 66% of participants reported use of data analytics in their SOX program. Most prevalent in 'sample selection' and 'controls testing'

Q. In the execution of any phase of the SOX program, to what extent did you use the following activities?



Above chart depicts the combined percentage of participants, who have selected - Minimal, Moderate, and High usage of various activities, while executing their SOX program, respectively.

Q. In which phases of your SOX program did you use data analytics?



Participants who have selected "yes" in use of data analytics, to execute SOX program section, can respond to this question. Hence the varying sample size.

Respondents could select more than one option

**n=101**

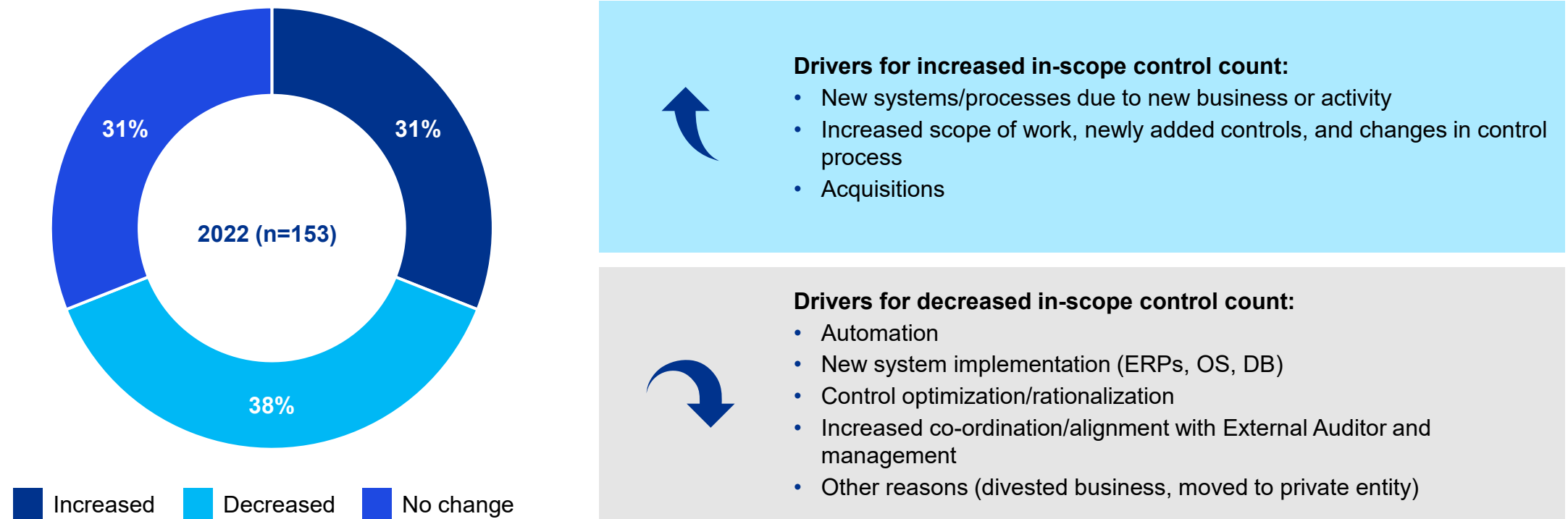
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# 38% of companies reported reduction in their program's in-scope control count. Tech enablement and controls optimization noted as key drivers for the decrease

Q. Has your in-scope control count increased/decreased year over year (2022 compared to 2021)? What was the driver of the change?



Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

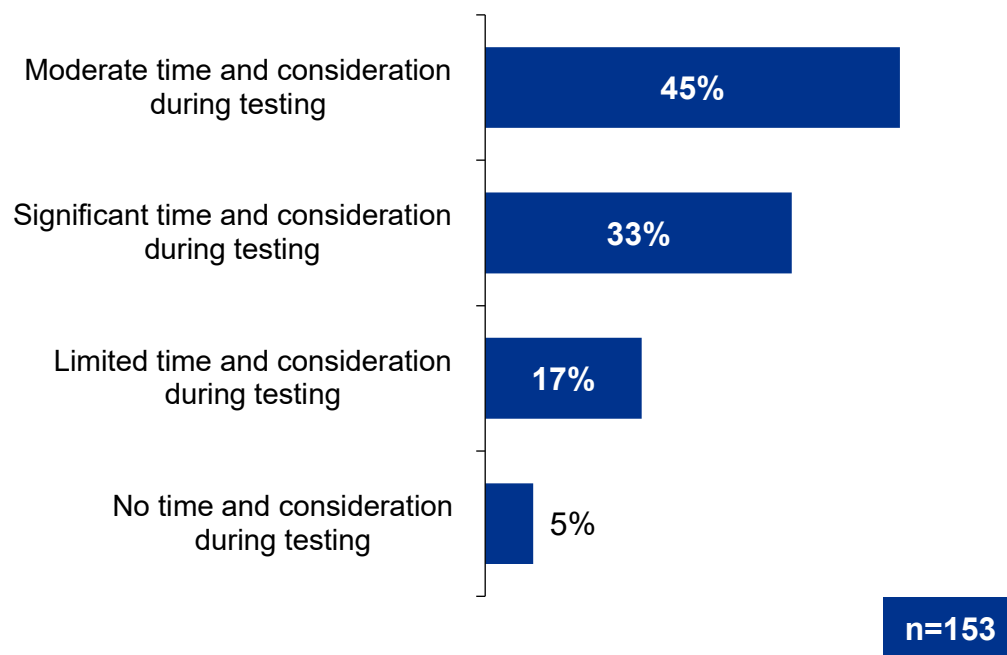


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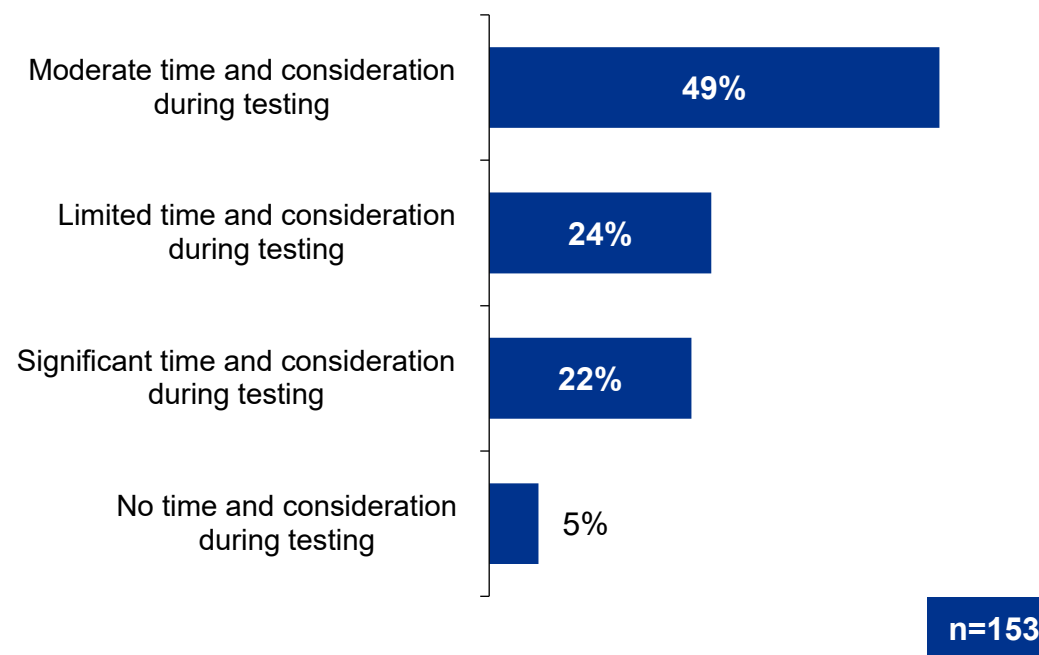


# >70% of participants reported a significant or moderate level of focus on testing related to Information Provided by Entity (IPE) and Management Review Controls (MRC)

Q. During control testing in 2022, what was the extent of effort related to IPE (Information Provided by Entity)/Completeness and Accuracy (C&A) testing?



Q. During control testing in 2022, what was the extent of effort related to MRC (Management Review Controls)?



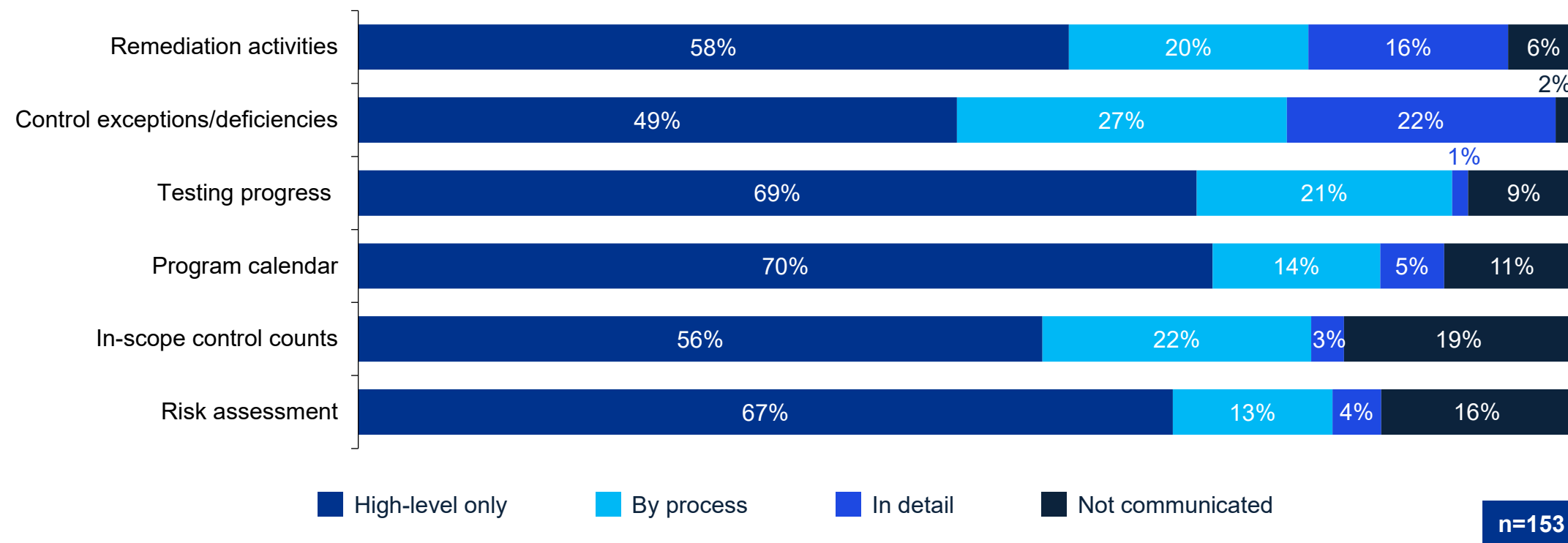
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# Control exceptions and remediation activities were reported as most likely SOX elements to be communicated to audit committees at a detailed level

Q. Which of the following elements are included in your Audit Committee communications and reporting?



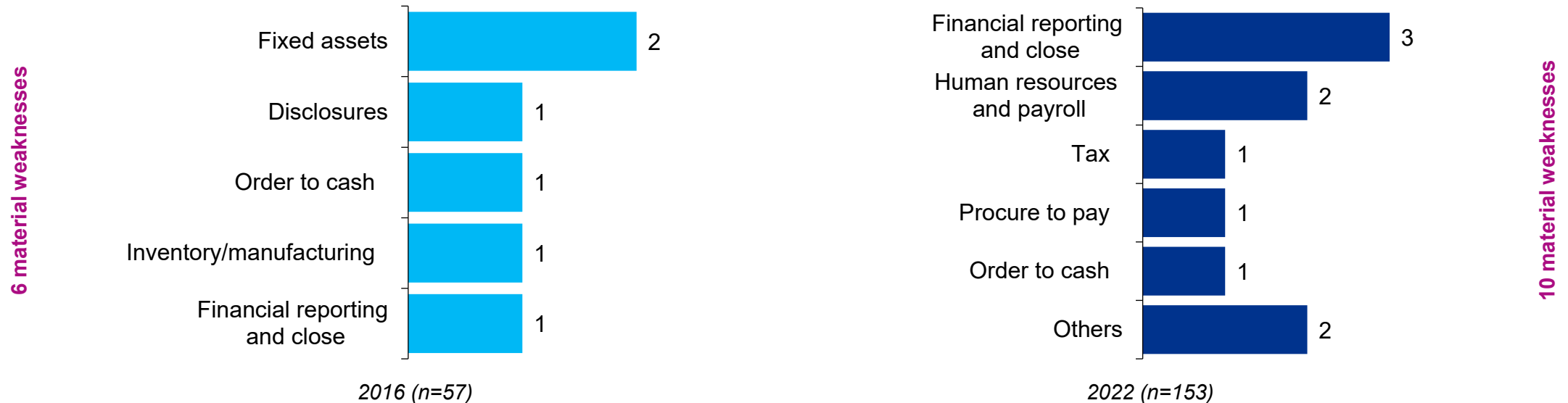
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# 5% of companies surveyed in 2022 reported Material Weaknesses (MWs). In 2016, 7% of companies surveyed reported MWs

Q. How many material weakness' by process did you have in your SOX program? (2016 Vs 2022)



4

Companies, out of the 57 surveyed in 2016, reported six MWs. The above graph is a representation of these MWs, by business process

8

Companies, out of the 153 surveyed in 2022, reported 10 MWs. The above graph is a representation of these MWs, by business process

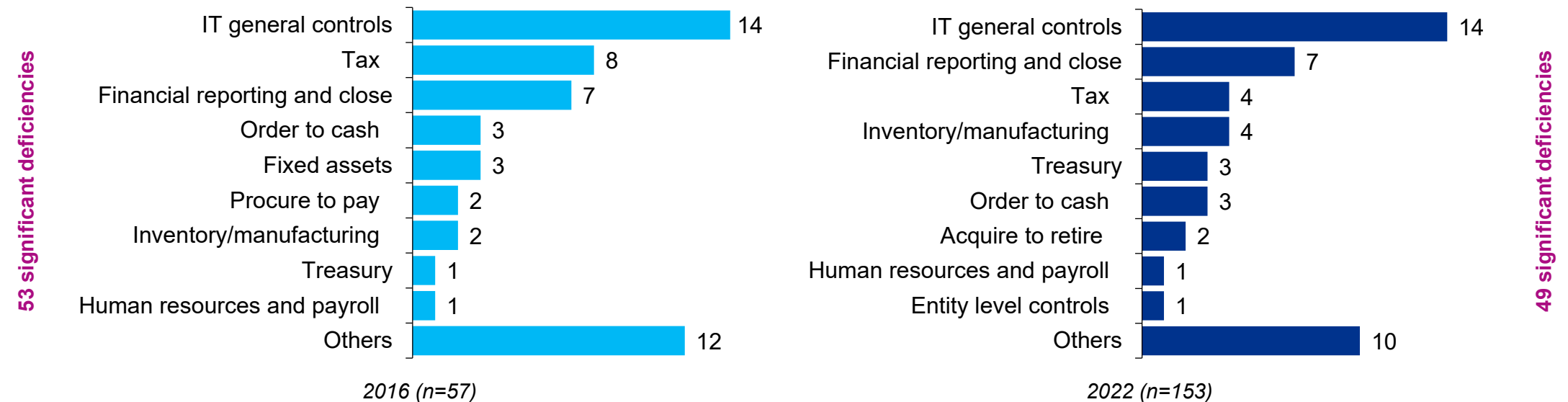
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# 18% of companies surveyed in 2022 reported Significant Deficiencies (SDs) in 2022. In 2016, 40% of companies surveyed reported SDs

Q. How many significant deficiencies, by process, did you have in your SOX program? (2016 Vs 2022)



**23** Companies, out of the 57 surveyed in 2016, reported 53 SDs. The above graph is a representation of these SDs, by business process

**28** Companies, out of the 153 surveyed in 2022, reported 49 SDs. The above graph is a representation of these SDs, by business process

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

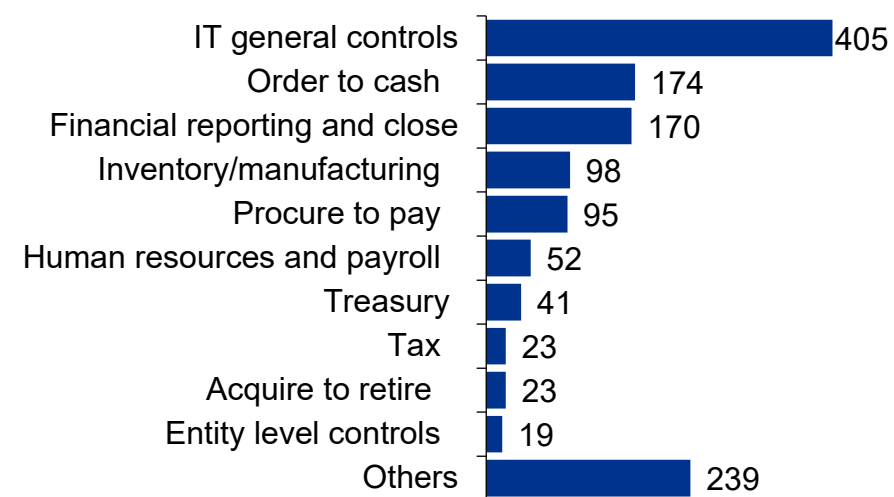


# Average number of Control Deficiencies (CDs) per company decreased by 10% in 2022 Maximum CDs were reported in the IT General Controls (ITGCs)

Q. How many Control Deficiencies by process did you have in your SOX program? (2016 Vs 2022)



2016 (n=57)



2022 (n=153)

10

Average control deficiencies per company in 2016

9

Average control deficiencies per company in 2022

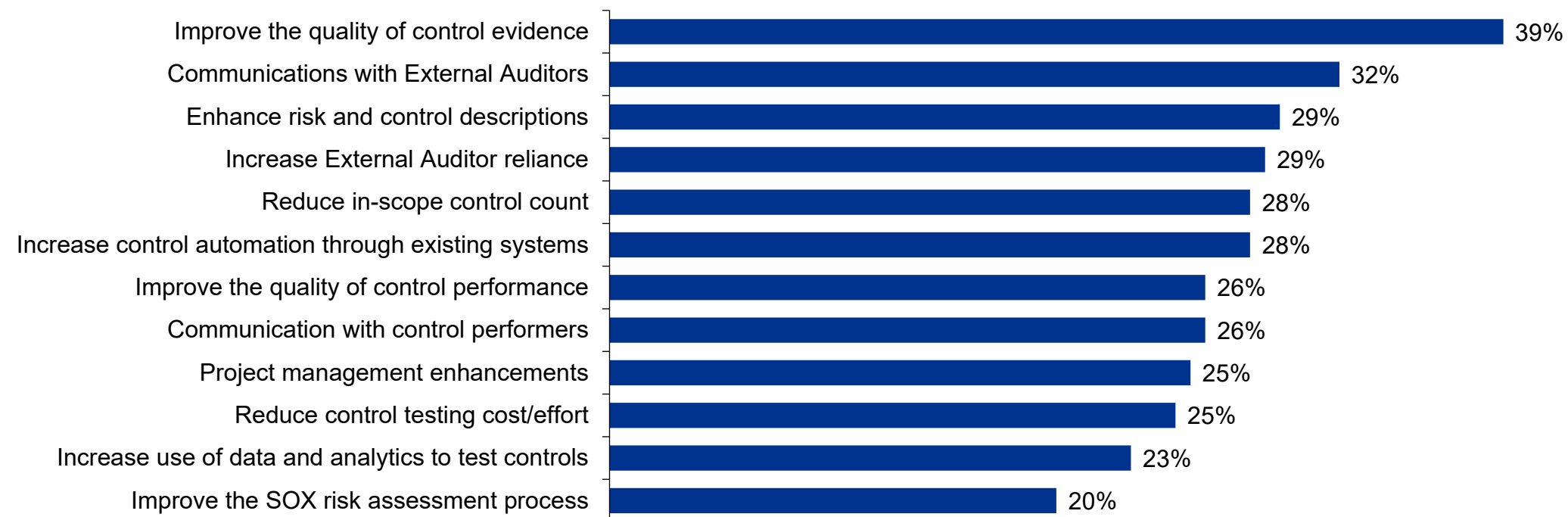
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# 'Improvement in the quality of control evidence' was reported as the greatest focus area

Q. What were the areas of the SOX program with the greatest focus for improvement in 2022? (n=153)



**Note:**

- Participants could select more than one option.
- Included responses only that are more than equal to 20% in the above chart. Other SOX program focus areas that are mentioned in the survey responses are Communication with audit committee, senior management, control owners, etc (17%), Communication with management (16%), Communication with senior leadership (14%), Reduce control performer efforts (14%), Increase the use of data and analytics to perform controls (14%), Increase use of RPA to perform controls (8%), Other (5%), and Increase use of RPA to test controls (3%)

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



**07**

# **Technologies and Tools**

# Key observations: Technologies and tools



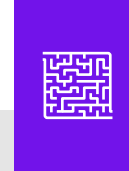
- 69% of companies utilized a GRC technology for their SOX program
- AuditBoard and Workiva's Wdesk were the most utilized technologies amongst the participants using GRC technology



- Companies have also started incorporating other technologies such as Archer and TeamMate in their SOX programs



- Participants reported use of a GRC tool primarily for tasks related to control testing, workflow management and status reporting



- 50% of participants reported the External Auditor had access to their GRC technology



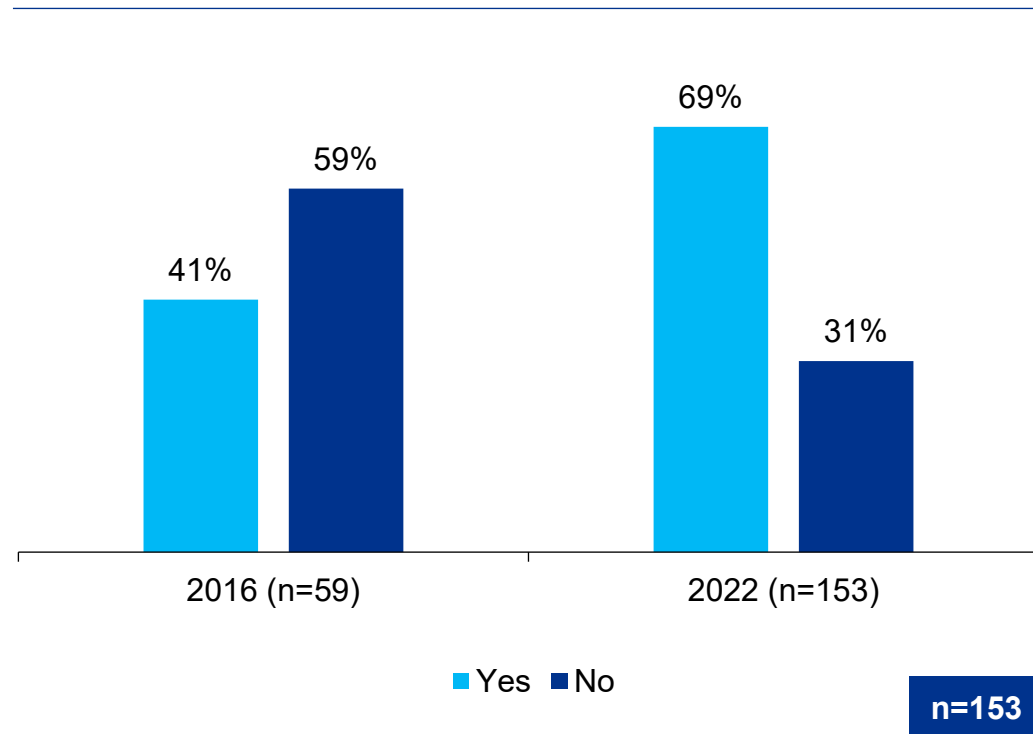
- >90% of companies surveyed were either fully or somewhat satisfied with their current GRC technology
- Ability to customize and simplified user interface were reported as required enhancements in GRC technologies

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



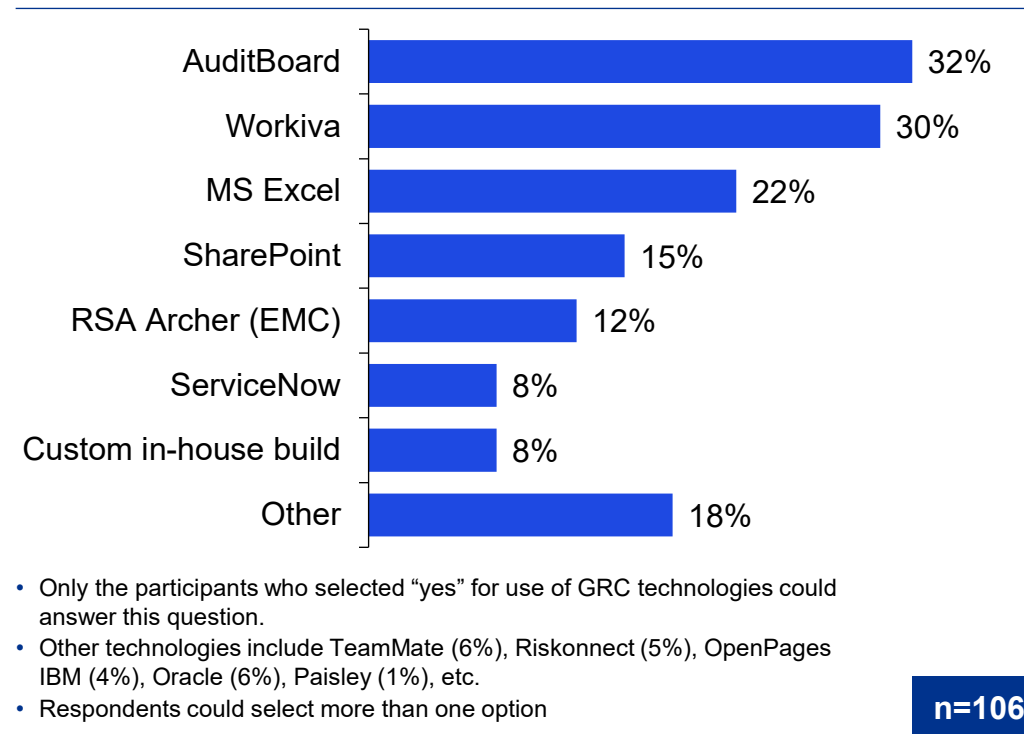
# Compared to 41% in 2016, 69% of the companies surveyed in 2022 reported use of a GRC tool for their SOX program. AuditBoard and Workiva's Wdesk were the most used tools

Q. Did the organization use a GRC technology for its SOX program (2016 Vs 2022)



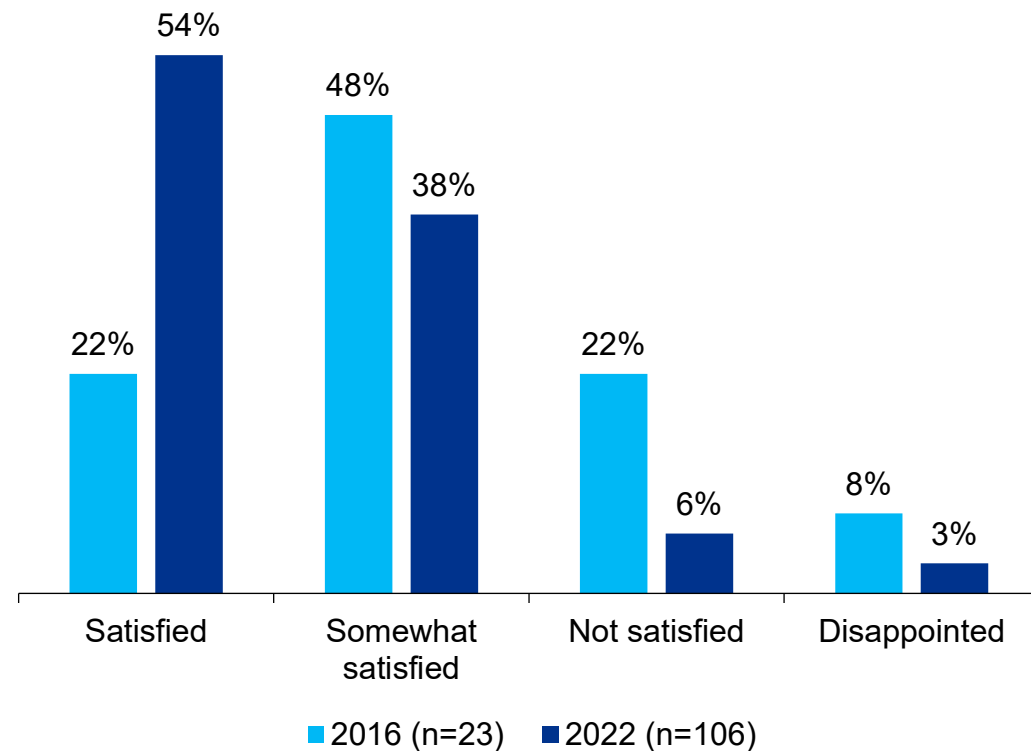
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.

Q. What technologies were utilized in the SOX program (2022)?



# Compared with 2016, satisfaction level with GRC technologies increased from 22% to 54%

Q. Based on your experience, what is the organization's satisfaction level with the current technology?



Reasons indicated for 'not satisfied' and 'disappointed' responses(n=9)

- 1 Limited scope for customization
- 2 Lack of control testing documentation functionalities such as enabling mark-ups and addition of review comments within the GRC tool
- 3 Need a more user-friendly interface that simplifies sharing of documentation with External Auditor/other stakeholders

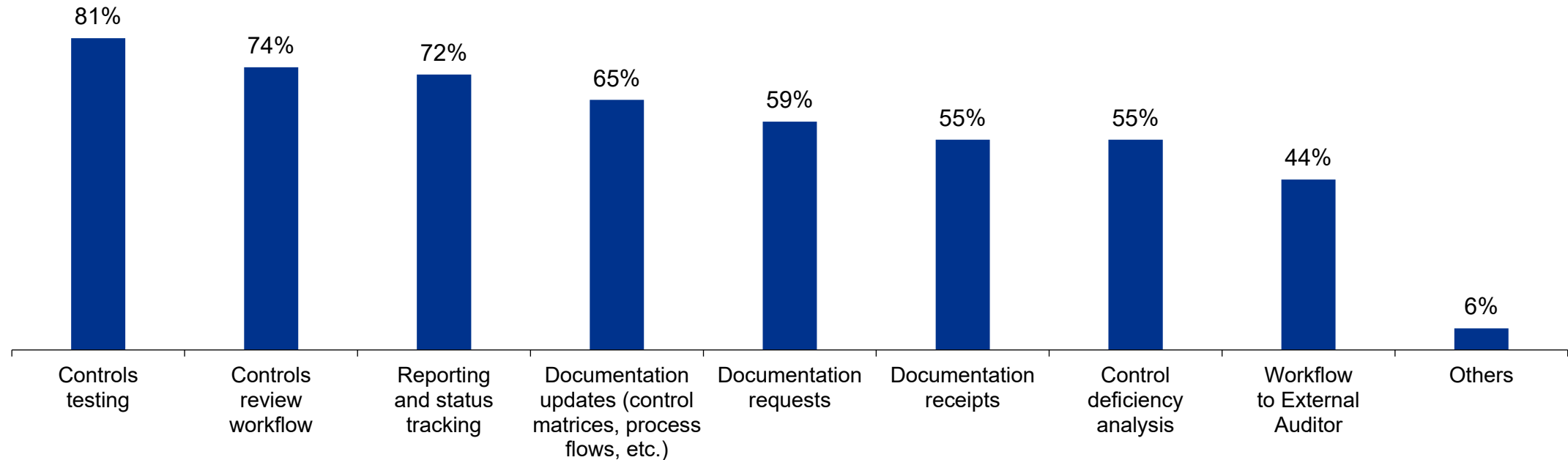
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# Of the companies that use GRC technologies, >70% reported usage in control testing, controls review workflow, and reporting and status tracking

Q. Which SOX program tasks did you utilize technologies for?



Only those participants who confirmed use of a GRC technology for their SOX program could answer this question. Participants could select more than one option.

n=106

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



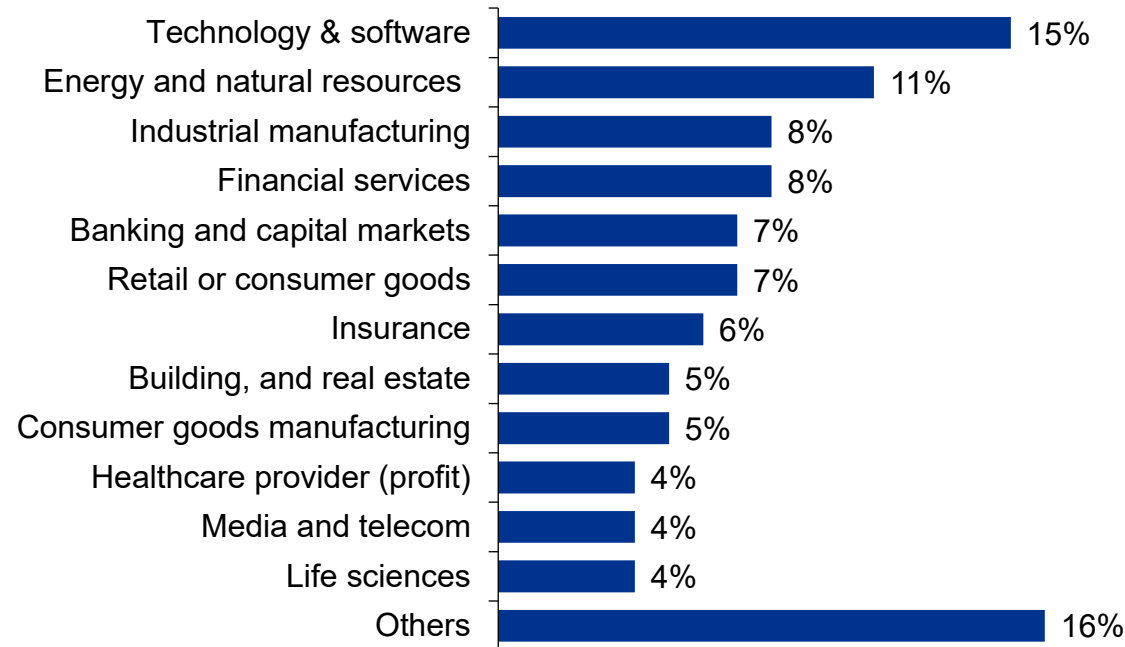
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**08**

# **Survey demographics**

# The survey registered maximum responses from the technology, energy, and manufacturing industries. 77% of the participants were from publicly listed companies

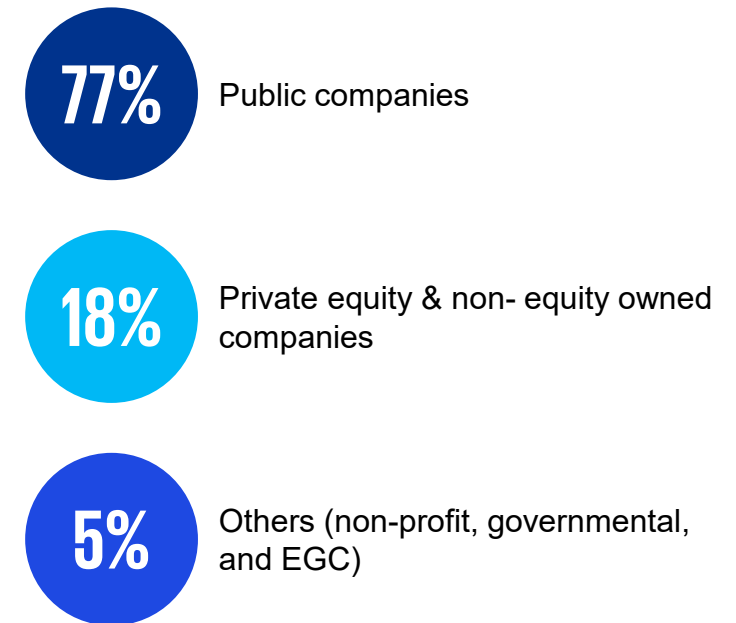
Q. What is your primary industry?



Other industries - Asset Management, Alternative Investments, Automotive, Agriculture, Human Capital, Healthcare Provider Non-Profit, Engineering, Public Investment Management, Federal, State and Local, Semiconductor, Higher Education, Research and Other Not-for-Profits, Medical Devices, Mining, InsurTech, Data/Information, Power and Utilities, Waste management, EdTech, and Logistics

n=153

Q. Select your organization structure?



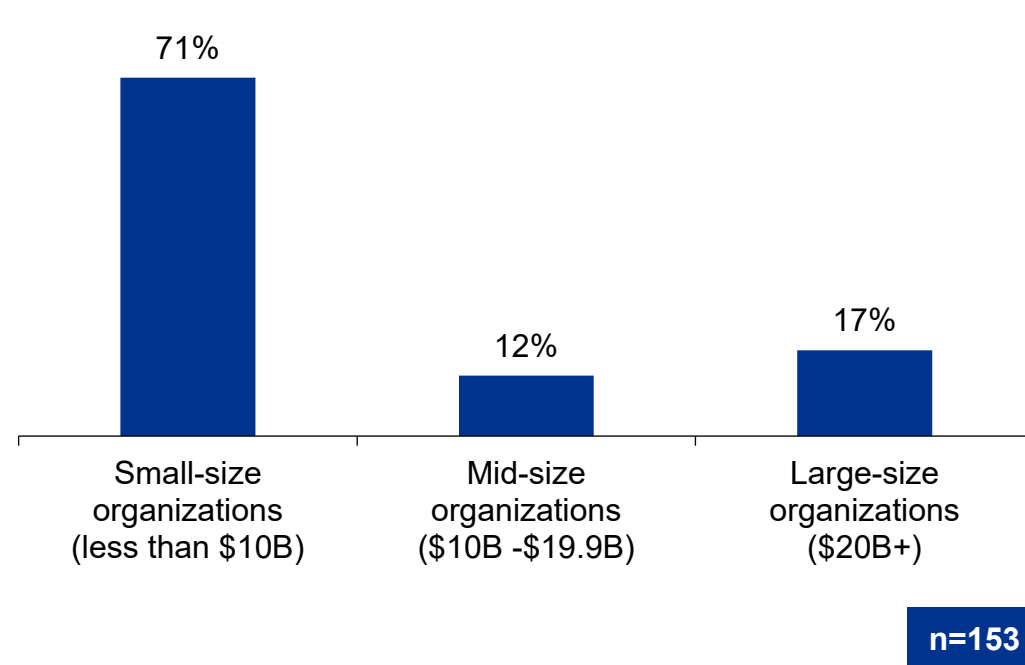
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



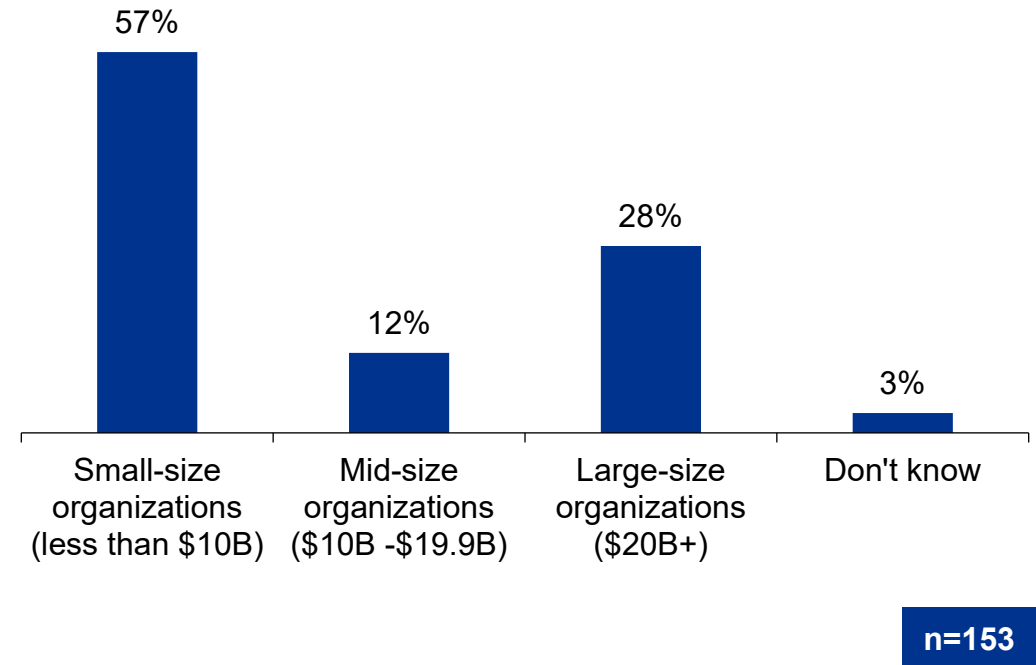
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# Participation across varying company sizes, by revenue and assets' worth. Majority of the participants were from companies with revenue/assets' worth below \$10B

Q. What was your organization's total revenue for the most recent fiscal year-end?



Q. What were your organization's total assets worth for the most recent fiscal year-end?



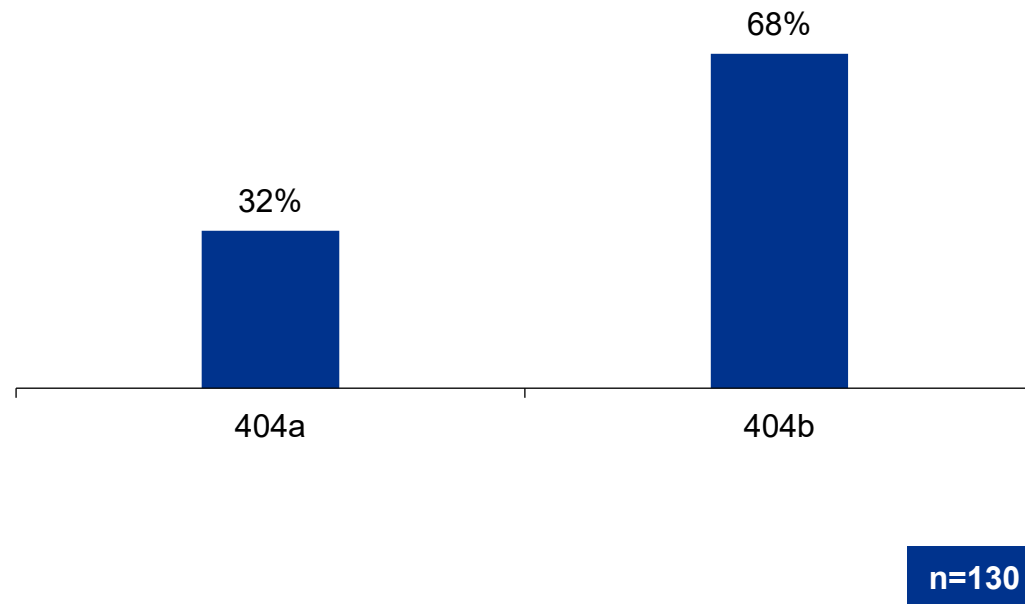
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



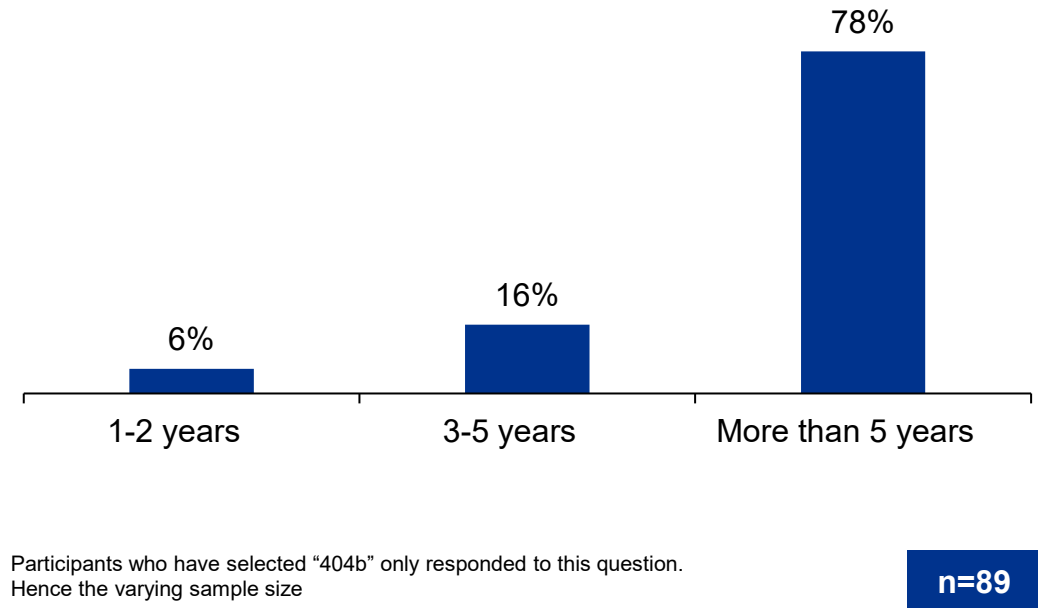
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# 68% of participants reported that their company required to be SOX 404b compliant. ~80% of these companies have had the requirements for >5 years

Q. Was your organization required to be SOX 404a or 404b compliant in 2022?



Q. How many years has your organization been required to be SOX 404b compliant?



Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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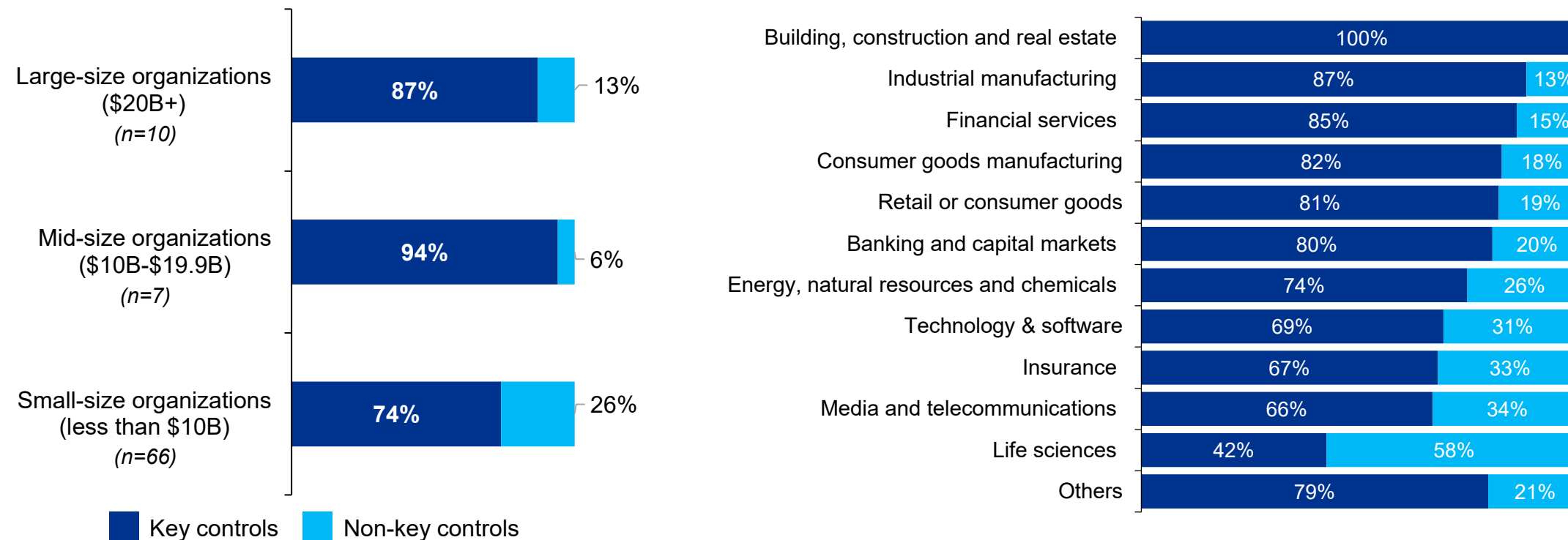
**09**

# **Appendix**



# Percentage split of key and non-key controls across company sizes and industries

Q. What was the total number of SOX key and non-key controls (business process and IT) in 2022? (By revenue size and industry)



Other industries - Asset Management, Alternative Investments, Automotive, Agriculture, Human Capital, Healthcare Provider Non-Profit, Engineering, Public Investment Management, Federal, State and Local, Semiconductor, Higher Education, Research and Other Not-for-Profits, Medical Devices, Mining, InsurTech, Data/Information, Power and Utilities, Waste management, EdTech, and Logistics

**n=83**

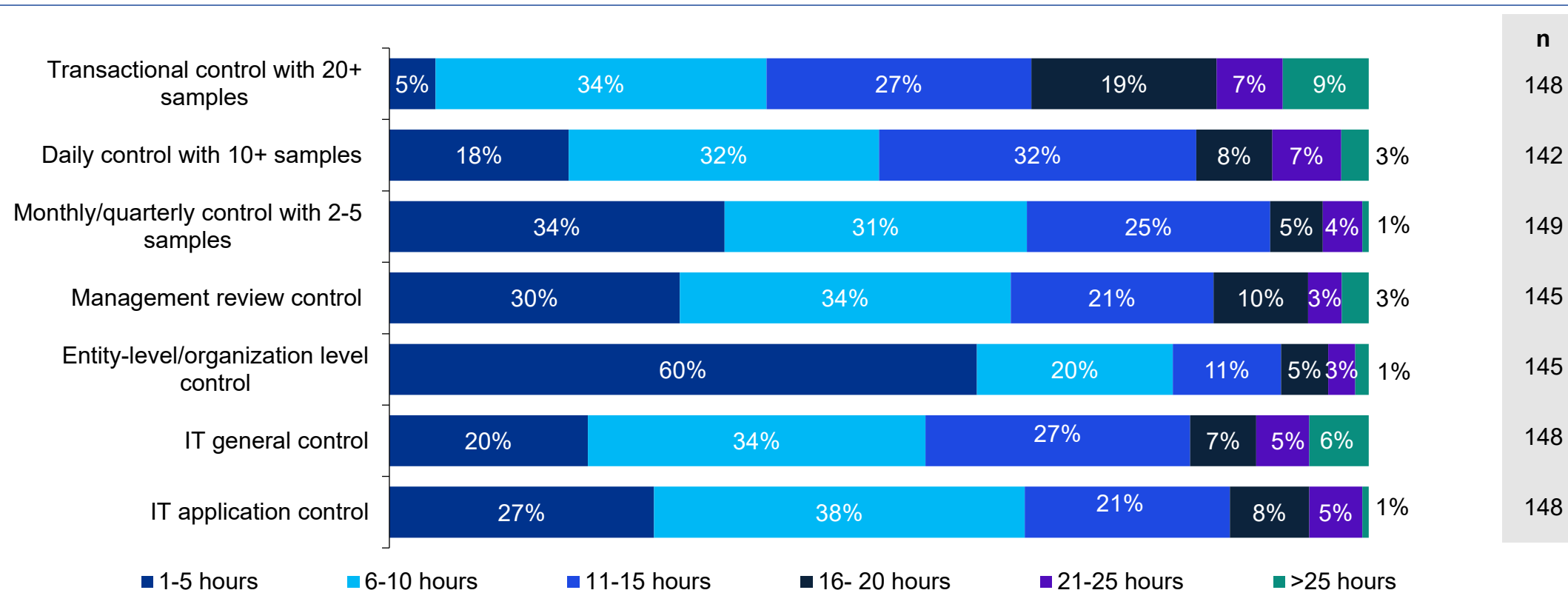
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# Average hours spent, by control type, to test the operating effectiveness of the control

Q. How many hours did you spend per control, on average, testing the operating effectiveness for the following control types for the fiscal year?



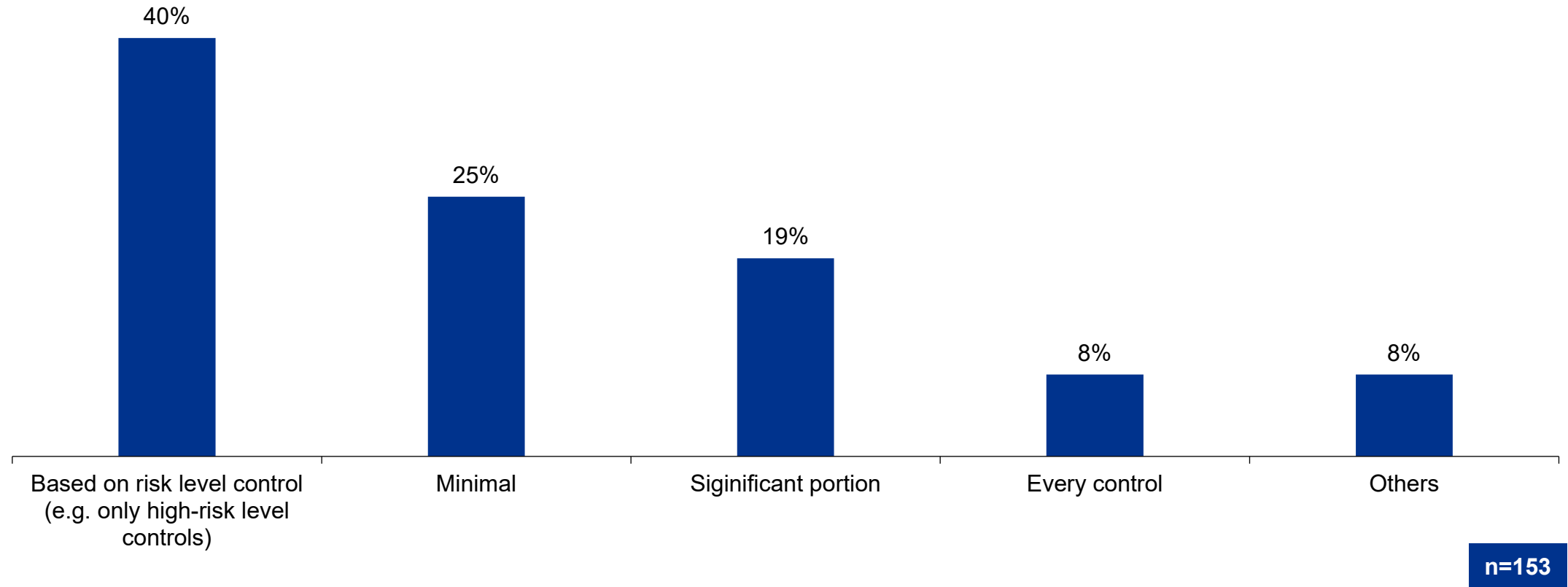
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# 40% of participants reported testing of Q4 samples for high-risk controls

Q. To what extent did you perform controls testing over Q4 samples?



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# Controls testing over Q4 samples – By Industry

Industry	Based on risk level of control (e.g., only high-risk level controls)	Minimal	Significant portion	Every control	Others
Banking and capital markets	46%	36%	9%	9%	0%
Building, construction and real estate	25%	37%	13%	0%	25%
Consumer goods manufacturing	29%	43%	14%	0%	14%
Energy, natural resources and chemicals	35%	35%	24%	6%	0%
Financial services	34%	25%	25%	8%	8%
Industrial manufacturing	62%	15%	15%	8%	0%
Insurance	22%	22%	22%	12%	22%
Life sciences	17%	17%	32%	17%	17%
Retail or consumer goods	50%	30%	10%	0%	10%
Technology & software	35%	17%	26%	13%	9%
Others	51%	19%	16%	8%	6%

Highlighted cells represents the highest share in the respective industry

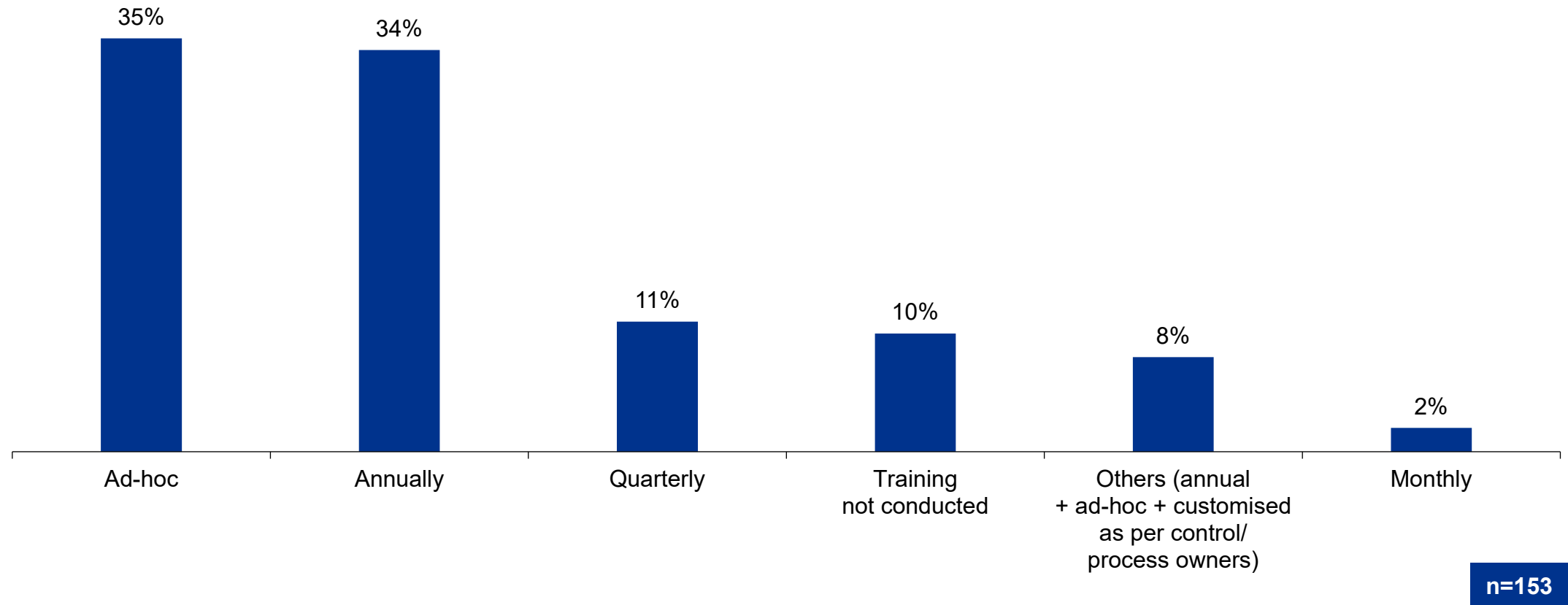
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# 45% of the companies reported lack of appropriate trainings for control/process owners (or control performers)

Q. How frequently were trainings for control/process owners (or control performers) conducted?



Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



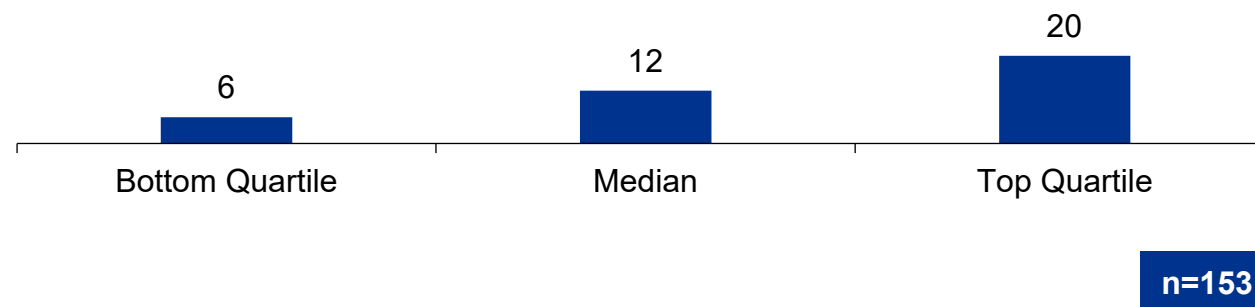
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# Average number of SOC1 and SOC2 reports, across companies, in scope were 14 and 7 respectively

Q. What was the total number of SOC1 reports your organization received as part of the in-scope processes for 2022?

14

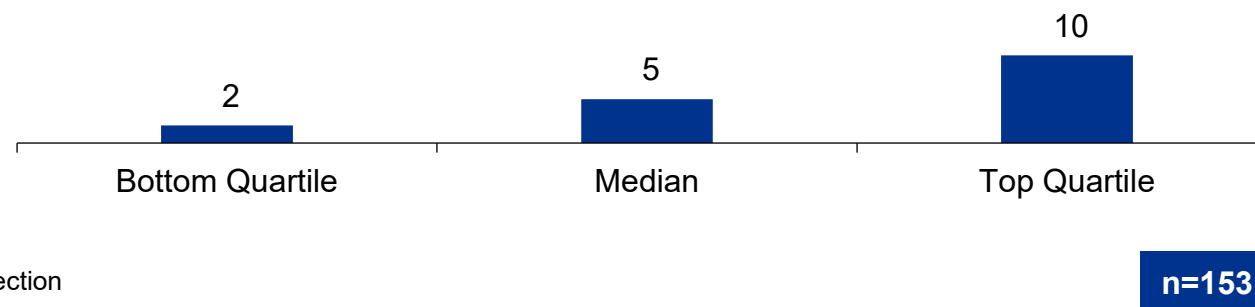
Average number of SOC1 reports organization received as part of the in-scope processes



Q. What was the total number of SOC2 reports your organization received as part of the in-scope processes for 2022?

7

Average number of SOC2 reports organization received as part of the in-scope processes



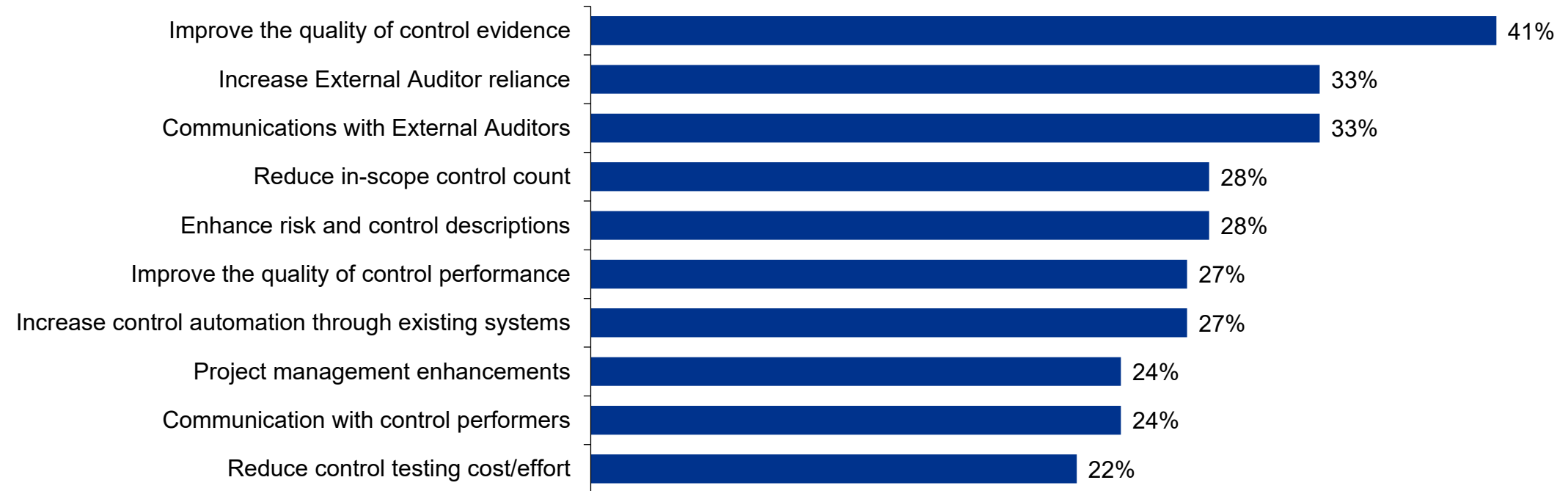
Excluded survey responses (66) that are marked as "0" in SOC report 2 section

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



# Key focus areas for companies with <\$10B revenue

Q. What were the areas of the SOX program with the greatest focus for improvement in 2022– By revenue size (n=109)



**Note:**

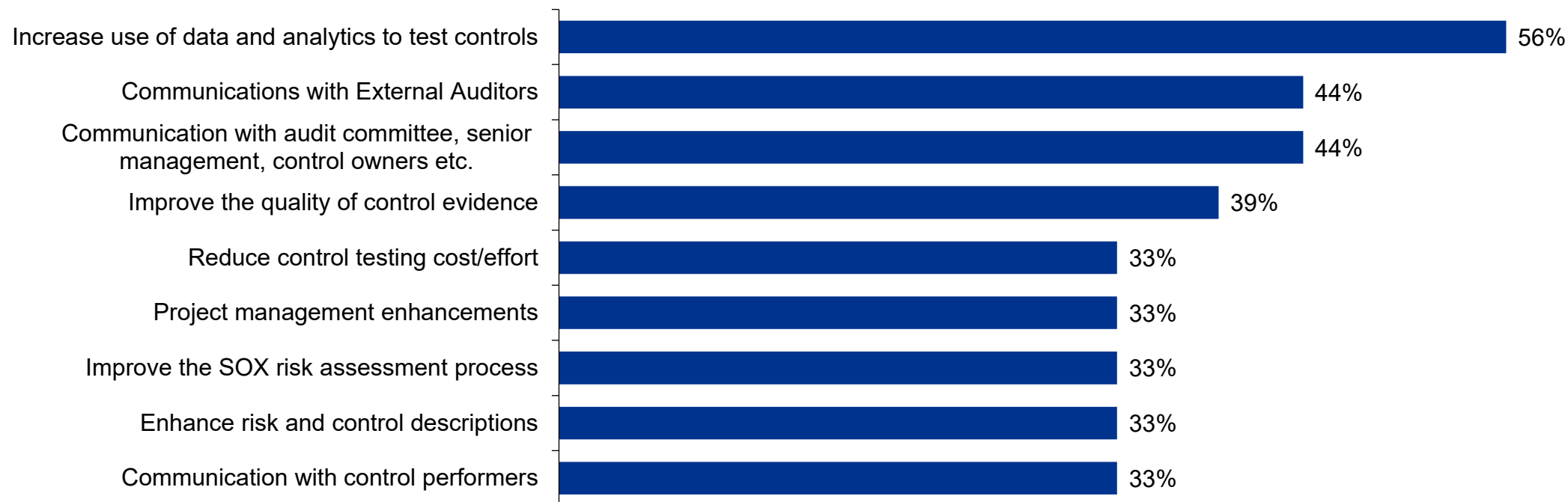
1. Participants could select more than one option. Hence the total will not add up to 100%
2. Other SOX program focus areas that are mentioned in the survey responses are increased use of data and analytics to test controls (17%), Communication with audit committee, senior management, control owners etc. (15%), Improve the SOX risk assessment process (15%), Communication with senior leadership (14%), Increase the use of data and analytics to perform controls (12%), Reduce control performer efforts (12%), Communication w/management (11%), Increase use of RPA to perform controls (9%), Increase use of RPA to test controls (5%), and others(5%)

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



# Key focus areas for companies with revenue between \$10B to \$19.9B

Q. What were the areas of the SOX program with the greatest focus for improvement in 2022 – By revenue size (n=18)



**Note:**

1. Participants could select more than one option. Hence the total will not add up to 100%
2. Other SOX program focus areas that are mentioned in the survey responses are Communication with senior leadership (28%), Increase control automation through existing systems (28%), Increase the use of data and analytics to perform controls (28%), Improve the quality of control performance (28%), Reduce control performer efforts (28%), Increase External Auditor reliance (22%), Communication with management (17%), Reduce in-scope control count (17%), and Increase use of RPA to perform controls (6%)

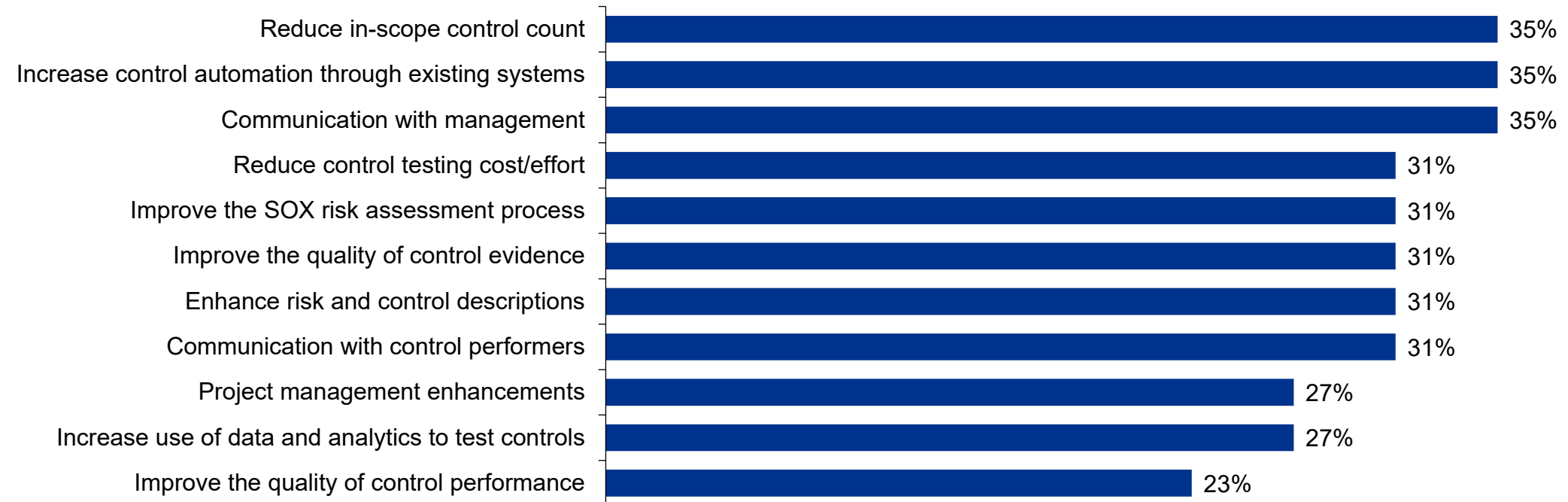
Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.





# Key focus areas for companies with >\$20B revenue

## Q. What were the areas of the SOX program with the greatest focus for improvement in 2022 – By revenue size (n=26)



**Note:**

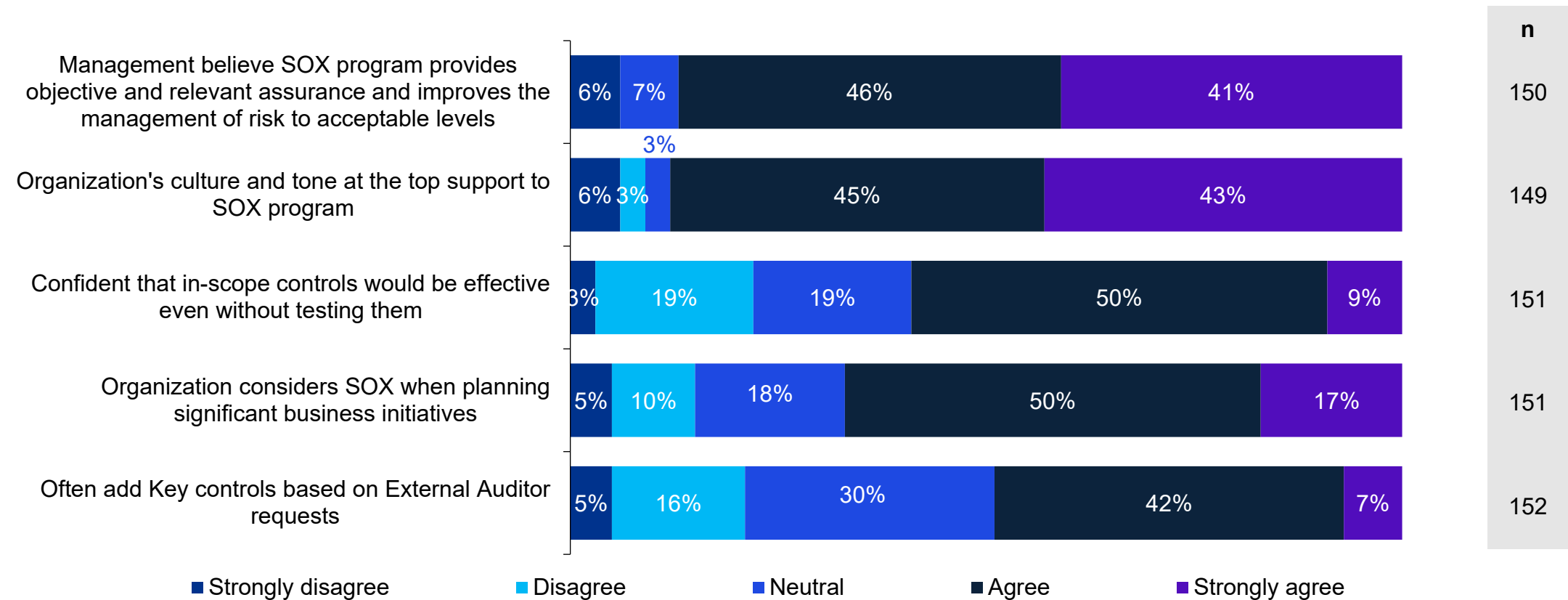
1. Participants could select more than one option. Hence the total will not add up to 100%
2. Other SOX program focus areas that are mentioned in the survey responses are Communications with External Auditor (19%), Increase External Auditor reliance (15%), Reduce control performer efforts (15%), Increase the use of data and analytics to perform controls (12%), Other (12%), Communication with audit committee, senior management, control owners etc. (8%), Communication with senior leadership (8%), and Increase use of RPA to perform controls (8%)

Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



# 88% of participants believed that their company's culture and leadership support the SOX Program

Q. Please indicate your level of agreement with the following statements?



Source – '2022 SOX Survey Analysis', KPMG LLP (US), 2022.



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# Glossary

01	C&A	<b>Completeness and Accuracy</b>
02	CD	<b>Control Deficiencies</b>
03	EA	<b>External Auditor</b>
04	ELC	<b>Entity Level Controls</b>
05	GRC	<b>Governance, Risk, and Compliance</b>
06	HIPAA	<b>Health Insurance Portability and Accountability Act</b>
07	IA	<b>Internal Audit</b>
08	ICOFR	<b>Internal control over financial reporting</b>
09	IPE	<b>Information Provided by Entity</b>
10	ITGC	<b>Information Technology General Control</b>
11	MRC	<b>Management Review Controls</b>
12	MW	<b>Material Weakness</b>
13	PCAOB	<b>Public Company Accounting Oversight Board</b>
14	RACM	<b>Risk and Control Matrix</b>
15	RPA	<b>Robotic Process Automation</b>
16	SD	<b>Significant Deficiencies</b>
17	SOC	<b>Service Organizational Control</b>
18	ToD	<b>Test of Design</b>
19	ToE	<b>Test of Effectiveness</b>



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