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Executive summary

Understanding internal controls over financial reporting (ICOFR) trends, challenges, and strategies can help your organization self-reflect on your program and identify opportunities for improvement. This survey captures organizations’ strategic considerations, as well as more tactical information such as extent of control automation by process.

In areas where your organization differs from the other respondents, it can drive insightful questions as to what drives that difference and whether it is a strength or potential weakness in your program. In areas where your response is similar to other respondents, it may let you know that you are on the right track or allow you to commiserate related to a shared challenge.

KPMG LLP (KPMG) surveyed the individuals at 100 organizations with responsibility for the ICOFR/Sarbanes-Oxley (SOX) program. The findings offer useful direction and provide a basis for comparison and further analysis.

“Organizations have a variety of levers they can pull to optimize their ICOFR programs. These results highlight some of those - focusing on identifying the right controls, improving control automation, better utilizing technology throughout the program, etc.”

- Sue King, KPMG’s SOX Solution Lead
Key takeaways

1. Organizations continue to focus on controls rationalization and minimizing testing costs.
   - The focus on both of these areas increased from 2017 to 2018, with 60% or more of surveyed organizations including these in their 2018 ICOFR program strategy. Rather than primarily focusing on rationalizing the number of controls, organizations should also focus on identifying the right key controls and documenting them with the appropriate precision, detail and depth.

2. The largest improvement area cited is related to technology and control automation.
   - 71% of organizations are looking to increase control automation, including increasing the use of data and analytics and robotic process automation within control performance. Increased control automation appears to be a significant opportunity for helping organizations to optimize their control portfolios.

3. More than half of organizations are leveraging a specific technology solution to support the ICOFR program documentation and testing.
   - Of those organizations using a specific technology (rather than desktop software), 52% implemented the technology solution within the past two years.

4. Organizations may not be fully leveraging the flexibility available under the Securities and Exchange Commission’s (SEC’s) interpretive guidance.
   - More than 40% of organizations do not modify their testing approach based on their external auditor’s reliance model. These organizations appear to be following the same guidance that the Public Company Accounting Oversight Board (PCAOB) provides to define the procedures required of external auditors. Instead, they may be able to further use the SEC’s interpretive guidance to focus more on their own objectives through the flexibility on documentation and control testing requirements.
Detailed findings

Strategies
Strategy for 2018 ICOFR program:

Top 5 Overall, organizations continued to focus on the same five strategies in 2018 as in 2017.

62% Controls rationalization to reassess and potentially reduce key controls

60% Minimize the cost to test controls

51% Ensure maximum reliance by the external auditor

35% Focus efforts on the entity-level and most critical controls

34% Change business processes so that the controls are embedded in the process, are not performed just for ICOFR, and are valuable to the business

If organizations considered these three elements together, organizations may find more impactful controls optimization results, impacting both control selection and the testing strategy.
Areas of improvement

Top five areas that are “fine as is” or need only minor tweaks:

- Improve communication with audit committee: 87%
- Improve communication with external auditors: 80%
- Take control of the ICOFR program overall: 76%
- Improve system scoping to align with key business processes: 75%
- Increase external auditor reliance: 66%

*Respondents ranked multiple statements.

Top five areas with improvement or significant improvement needed:

- Increase control automation: 71%
- Reduce control performer cost/effort: 44%
- Reduce control testing cost/effort: 42%
- Improve quality of control evidence: 41%
- Reduce key control count: 37%

The top area for improvement continues to be increasing control automation. This was an area of improvement for 51% of organizations in 2017 and rose to 71% in 2018. This may be due to the increasing focus on and availability of robotic process automation and related technologies.

*Respondents ranked multiple statements.
State of the ICOFR program

ICOFR program maturity level:

- **Developing**: Controls identification and stabilization
- **Evolving**: Improved risk assessment and scoping, and rationalized controls (optimization of current control environment)
- **Maturing**: Improved business processes that have reduced the cost of control performance, reduced risk, and added value to the business

<table>
<thead>
<tr>
<th>State of ICOFR program</th>
<th>Less than 3 years</th>
<th>3-5 years</th>
<th>More than 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing</td>
<td>36%</td>
<td>88%</td>
<td>8%</td>
</tr>
<tr>
<td>Evolving</td>
<td></td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Maturing</td>
<td></td>
<td>13%</td>
<td>34%</td>
</tr>
</tbody>
</table>

As expected, organizations that have been SOX 404 compliant longer tended to describe their ICOFR program as more mature.

Frequency with which issues identified through ICOFR testing are used to make changes to the process:

- **To enhance the control environment and reduce risk**
- **To change the process so controls are more meaningful to the business (not just performed for SOX)**
- **To make a process more efficient regarding control performance (i.e., increase automated controls)**

Organizations are not consistently using the ICOFR testing results to reflect on the process and then change the processes in order to reduce risk, improve controls, or improve efficiency.
Responses for these statements in 2018 were largely consistent with the 2017 responses. The largest change was a decrease in the organizations that agreed that the new revenue recognition and/or lease accounting standards would increase their control performance efforts. The average response of 3.8 in 2017 decreased to 3.5 in 2018, potentially due to organizations being further along in the process to implement such standards and revised controls.

For the statements outlined in purple, agreement with the statement increased as the size of the organization (based on annual revenue) increased.
Detailed findings

ICOFR documentation
Forms of documentation regularly maintained for the ICOFR program:

- Risk and control matrix: 94%
- Process narratives: 72%
- Process flowcharts: 60%
- None of the above: 2%

*Respondents could select multiple responses

- 76% of those with a reliance strategy vs. 67% of those without a reliance strategy maintained narratives.
- 69% of those with a reliance strategy vs. 51% of those without a reliance strategy maintained flowcharts.

- 10% of organizations regularly maintain only the risk and control matrix.
- 44% of organizations maintain both process narratives and flowcharts.
- 61% of organizations maintain / include both key and non-key controls in their risk and control matrix.
Average number of key ICOFR controls by process:

- Entity-Level Controls: 29 (2 manual, 27 automated)
- Financial Reporting: 44 (5 manual, 39 automated)
- Fixed Assets: 9 (2 manual, 7 automated)
- IT General Controls: 36 (2 manual, 34 automated)
- HR & Payroll: 16 (2 manual, 14 automated)
- Inventory Management: 12 (4 manual, 8 automated)
- Order-to-Cash: 24 (12 manual, 12 automated)
- Procure-to-Pay: 12 (7 manual, 5 automated)
- Tax: 12 (1 manual, 11 automated)
- Treasury: 13 (2 manual, 11 automated)

Processes with the highest percentage of automated controls were: IT general controls (39%), procure-to-pay (37%) and order-to-cash (33%).

*Respondents selected the most closely related process names

Number of systems and applications (including the Enterprise Resource Planning system) that are in scope for ICOFR testing:

- 39% 1-10
- 39% 11-25
- 12% 26-50
- 11% More than 50

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Average number of key ICOFR controls and automation percentages:

- The average total key control count across all industries was 334.
- The Financial Services industry had the highest average total key control count at 485.
- The average number of key controls increases as the company size (based on annual revenue) increases.
- The average percentage of automated controls was 21%.
- The lowest level of automated controls were the Energy, Natural Resources & Chemicals (12%) and Financial Services (15%) industries.
- The industries with the highest average automated controls were Healthcare & Life Sciences (35%), Technology (32%) and Media (31%).

Nearly all processes had relatively high percentages of standalone controls — controls that are unique to a specific business unit, location, etc., and therefore receive their own stand-alone samples for testing. This indicates that organizations have limited standardization across locations which contributes to a more expensive and higher risk control environment. This also generally leads to more testing.
Detailed findings

Technology supporting the ICOFR program

Whether a specific technology solution, excluding Word, Excel, SharePoint, etc., was used to support ICOFR program documentation and testing:

- **54%** Yes
- **46%** No

How long the technology solution has been in use:

- **65%** Larger organizations ($10 billion or more in annual revenue) were most likely to use a specific technology solution (65%).
- **1-2 years**
- **3-5 years**
- **More than 5 years**

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**ICOFR testing**

Who performs ICOFR testing:*  

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Audit</td>
<td>81%</td>
</tr>
<tr>
<td>Internal ICOFR Team</td>
<td>22%</td>
</tr>
<tr>
<td>External provider</td>
<td>21%</td>
</tr>
</tbody>
</table>

*Respondents could select multiple responses

For organizations where ICOFR testing is performed by Internal Audit, the proportion of total Internal Audit hours related to ICOFR:

- 1-25%
- 26-50%
- 51-75%
- 76-100%

How use of an external provider for support with ICOFR program changed from 2017 to 2018:

- Using external providers more in 2018
- Using external providers less in 2018
- Using external providers about the same

41% of organizations spend more than 50% of their total Internal Audit hours on ICOFR. For larger organizations (greater than $10 billion in revenue), only 14% spent more than 50% of their total Internal Audit hours on ICOFR.
Detailed findings

**ICOFR program costs**
Cost changes from 2017 to 2018 in regards to:

- ICOFR compliance activities
  - 24% Costs decreased
  - 42% Costs stayed the same
  - 28% Costs increased
  - 6% Don’t know

- Cost and effort for management to perform the control activities
  - 20% Costs decreased
  - 54% Costs stayed the same
  - 19% Costs increased
  - 7% Don’t know

**External auditor coordination**
Differences in controls in scope for ICOFR testing in comparison to the external auditor:

- More than 50% of organizations reported having more controls in scope for testing than their external auditor. Such organizations may have opportunities to rationalize and optimize their control portfolio.

- Interestingly, these organizations were also more likely to agree with the statement “We often add key controls based on external auditor requests.” This may indicate that new controls are added based on external auditor requests and then are not properly reassessed for ongoing significance and materiality.

- Our organization has more controls in scope for testing than our external auditor
  - 52%

- Our organization and our external auditor have the same number of controls in scope for testing and the controls are the same
  - 23%

- Our organization and our external auditor have approximately the same number of controls in scope for testing; however, the controls vary
  - 14%

- Our external auditor has more controls in scope for testing than our organization
  - 6%
External auditor coordination
Extent to which the external auditor relies on ICOFR activities:

Test of design (i.e., a walkthrough)
- 33% No reliance
- 21% Minimal
- 24% Moderate
- 21% Fully, to the extent possible

Test of effectiveness (i.e., control testing)
- 11% No reliance
- 19% Minimal
- 34% Moderate
- 34% Fully, to the extent possible

Able to quantify savings achieved as a result of external auditor reliance, if applicable:
- 31% Yes
- 69% No

Most common metrics used to quantify and/or monitor savings from external auditor reliance:

1st
- Total fees saved

2nd
- Total hours saved

3rd
- Percent reduction in fees

4th
- Percent reduction in hours

5th
- Other

*Respondents could select multiple responses

The percentage increased from 23% in 2017 to 31% in 2018. Other impacts from reliance, such as minimizing requests to control owners, may be more difficult to quantify.
Approach modifications based on external auditor’s reliance model:*

- 27% We modify sample sizes
- 26% We use templates (or nearly similar formats) from external audit in areas of reliance
- 22% We modify our rollforward approach
- 16% We decrease the level of documentation in areas of non-reliance
- 13% We self-assess in areas of non-reliance
- 5% Other
- 41% We do not change our approach based on our external auditor’s reliance model

*Respondents could select multiple responses

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Technology use in controls
Whether key controls include continuous monitoring controls:

- 35% Yes
- 53% No
- 12% Don’t know

Whether key controls include continuous auditing controls:

- 15% Yes
- 68% No
- 17% Don’t know

Use of data and analytics (D&A) within ICOFR program:

- 45% D&A is not used within our ICOFR program
- 35% Sample selections
- 32% ICOFR risk assessment
- 27% As part of a control activity performed by management
- 2% Within control testing

Within the testing activities, D&A is primarily used in selecting samples for testing. 37% of organizations had plans to increase the use of D&A to assist with compliance activities (testing or reporting on controls).

Organizations are increasing their use of D&A within the performance of control activities (up from 22% in 2017). 33% of organizations had plans to increase the use of D&A to perform control activities.

*Respondents could select multiple responses
Current use of robotic process automation (RPA) or other intelligent automation:

<table>
<thead>
<tr>
<th></th>
<th>To perform a control activity</th>
<th>To assist with compliance activities (testing or reporting on controls)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>85%</td>
<td>91%</td>
</tr>
<tr>
<td>No</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Plans to increase the use of RPA or other intelligent automation:

<table>
<thead>
<tr>
<th></th>
<th>To perform a control activity</th>
<th>To assist with compliance activities (testing or reporting on controls)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>No</td>
<td>57%</td>
<td>61%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>19%</td>
<td>19%</td>
</tr>
</tbody>
</table>
Survey demographics

Number of years organizations are SOX 404 compliant:

- 2% Less than 1 year
- 11% 1-2 years
- 10% 3-5 years
- 77% More than 5 years
Organization’s total annual revenue for the most recent fiscal year:

- Less than $100 million: 14%
- $100 – $499 million: 23%
- $500 million – $1.4 billion: 40%
- $1.5 – $9.9 billion: 20%
- $10 billion or more: 2%
- Don’t know: 2%

Organization’s total assets for the most recent fiscal year:

- Less than $100 million: 9%
- $100 – $499 million: 12%
- $500 million – $1.4 billion: 32%
- $1.5 – $9.9 billion: 41%
- $10 billion or more: 4%
- Don’t know: 3%

Primary industry:

- Technology: 15%
- Energy, Natural Resources & Chemicals: 13%
- Consumer Goods: 11%
- Industrial Manufacturing: 11%
- Banking & Capital Markets: 7%
- Financial Services: 7%
- Insurance: 7%
- Healthcare: 6%
- Media & Telecommunications: 6%
- Building, Construction & Real Estate: 4%
- Retail: 2%
- Alternative Investments: 1%
- Asset Management: 1%
- Life Sciences: 1%
- Other: 8%
About KPMG LLP

Our Risk Assurance Services are designed to enhance the efficiency and effectiveness of internal audit functions, enterprise risk management programs, reviews of third party relationships and risk and controls management. Our professionals can augment and enhance an organization’s existing risk management capabilities through the use of experienced risk and controls professionals, supplemented by multidisciplinary skills from each of our Advisory service lines.

KPMG’s Advisory professionals combine technical, market and business skills that allow them to deliver objective advice and guidance that helps Advisory’s clients grow their businesses, improve their performance, and manage risk more effectively.

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