IPPF

International Professional
Practices Framework

Integrated Approaches to Internal Auditing

Supplemental Guidance | **Practice Guide**

The Institute of
Internal Auditors

About the IPPF

The International Professional Practices Framework® (IPPF®) is the conceptual framework that organizes authoritative guidance promulgated by The IIA for internal audit professionals worldwide.

Mandatory Guidance is developed following an established due diligence process, which includes a period of public exposure for stakeholder input. The mandatory elements of the IPPF are:

- Core Principles for the Professional Practice of Internal Auditing.

- Definition of Internal Auditing.

- Code of Ethics.

- International Standards for the Professional Practice of Internal Auditing.

Recommended Guidance includes Implementation and Supplemental Guidance. Implementation Guidance is designed to help internal auditors understand how to apply and conform with the requirements of Mandatory Guidance.

IPPF | **International Professional Practices Framework**
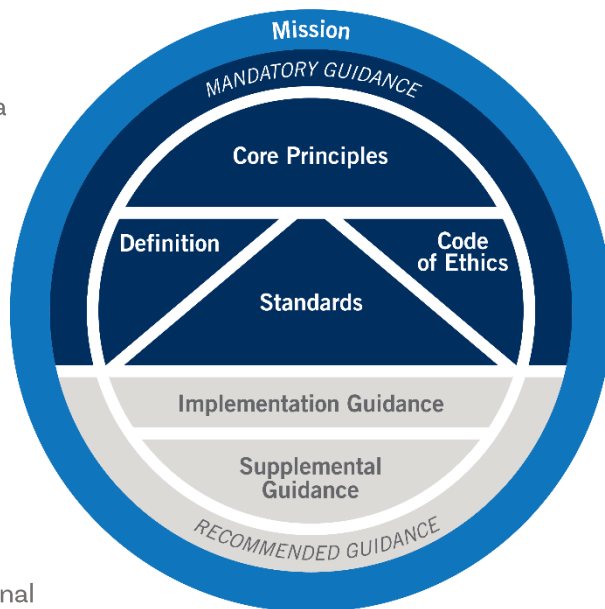
About Supplemental Guidance

Supplemental Guidance provides additional information, advice, and best practices for providing internal audit services. It supports the *Standards* by addressing topical areas and sector-specific issues in more detail than Implementation Guidance and is endorsed by The IIA through formal review and approval processes.

Practice Guides

Practice Guides, a type of Supplemental Guidance, provide detailed approaches, step-by-step processes, and examples intended to support all internal auditors. Select Practice Guides focus on:

- Financial Services.

- Public Sector.

- Information Technology (GTAG®).

For an overview of authoritative guidance materials provided by The IIA, please visit www.theiia.org.

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Executive Summary

Today's internal audit leaders are facing not only rapid shifts in the risk landscape but changing expectations from stakeholders to provide more value-driven outcomes from their audit work. New and innovative ways of delivering value demand more flexible thinking and choices in how internal auditing is performed and more basically approached.

This guide focuses on developing integrated approaches to internal auditing that can be varied to maximize benefits. It presents practice options that consider these driving goals:

- *Flexibility* – Utilizing different options to build engagement approaches that allow varied deliverables.

- *Value-creation* – Enhancing or improving deliverables while considering culture, organization maturity, and stakeholder needs.

- *Innovation* – Considering new and different ways of delivering audit efficiency, risk coverage, and overall value.

- *Systematic approach* – Considering options and making decisions in an orderly way.

A key point is that integration considerations should cross all elements of the audit process that may provide beneficial results. Integration options can be broadly considered over four stages of the internal auditing process:

- Audit objectives and scope.

- Audit techniques and execution.

- Resource management and knowledge sharing.

- Reporting and issues/solutions management.

These broader stages are intended to help auditors more systematically consider their integration options and may stimulate more innovative thinking and actions.

This guidance discusses these stages and related integration goals and provides some detailed practice options to be considered at both the audit plan and the audit engagement level. These options are organized by internally and externally driven needs to ensure more comprehensive integration considerations. A detailed list of integration options is presented in Appendix C.

Although references are made to integrated assurance and combined assurance, these topics are not delved into deeply as they are covered within IIA Practice Guide "Coordination and Reliance: Developing an Assurance Map." This guide focuses on helping internal auditors develop integrated approaches more broadly and flexibly using a systematic method for considering integration options.

This practice guide replaces IIA Practice Guide "Integrated Auditing" released in 2012.

Introduction

The complexities that chief audit executives (CAEs) face in delivering assurance, advice, and insight must be addressed against a backdrop of the organization's culture, operational maturity, budgets, and enterprise goals and priorities. Key stakeholders, including regulators, **boards**, and executive management, frequently require new or additional internal audit deliverables that can help enhance and protect organizational value.

Note

Appendix A lists IIA resources relevant to this guidance. Terms in bold are defined in the glossary in Appendix B.

Internal audit leaders need flexibility in their planning to **add value** and deal with increasingly complex business and industry environments. New ways of driving value and innovation demand more flexible thinking and choices in how internal auditing can be approached and performed, and its main deliverables.

Internal audit engagements are increasingly nonfinancial in nature (for example, addressing environmental, social, and **governance** concerns), providing new assurance and advisory deliverables for management, regulators, and the board. In larger organizations, assurance is often provided by numerous bodies, including second-line management functions.

Integrated approaches to internal auditing result in more varied and value-driven outcomes and allow more agile development of objectives, scope, resourcing options, knowledge transfer, audit techniques, issue perspectives, and solutions.

Practical and insightful examples of integration options are detailed in Appendix C.

Advantages of Integrated Approaches

There are numerous advantages to developing integrated approaches to internal auditing, both at the audit activity and the audit **engagement** level. An integrated approach may:

- Increase efficiency and improve operations.
- Promote more holistic views of **risks**, in alignment with business objectives.
- Improve assurance on the alignment of organizational strategies.
- Create opportunities to develop more strategic, cost-effective, and sustainable solutions to address issues or risks.
- Provide a better focus on business and value creation.

- Improve understanding of the organization and the opportunity to increase skill levels across the **internal audit activity**.

- Enhance credibility and relevance for the internal audit activity.

- Reduce audit fatigue for the business.

- Leverage tools and analytics to produce meaningful insights.

Considering Integration Options Systematically

There are numerous integration options when planning an audit engagement. A challenge to internal audit leadership is finding a systematic way to build an integrated approach from often complex options.

Audit process elements that lend themselves to an integrated approach include:

- Objective setting.

- Scope development.

- Audit execution, including techniques and tools.

- Resource management.

- Knowledge sharing.

- Reporting and issues/solutions management.

- Strategic solution management and corrective actions.

The internal audit activity typically addresses these elements when developing either the internal audit plan or the engagement plan. These elements have been consolidated into four stages to help consider integration options more systematically.

Figure 1: Example of Integration Options in Four Stages

Integration options may be considered over four stages of the internal auditing process. When considering options, the initial focus might be practices within internal audit, as shown in the center of **Figure 1**. These options should align with strategies and objectives driven from within internal auditing, such as improving the efficiency of an engagement or providing training or tools that advance the value of internal audit, such as better use of data analytics.

However, many integration options are driven by enterprise governance needs or models and stakeholders outside the internal audit activity. Collaborating with other assurance providers is particularly important. This is represented in the middle ring of **Figure 1**. Additionally, Standard 2050 – Coordination and Reliance reads, "The chief audit executive should share information, coordinate activities, and consider relying upon the work of other internal and external assurance and consulting service providers to ensure proper coverage and minimize duplication of efforts."

Though external drivers may differ from those that are internally driven, the initial four stages are still applicable and present a framework for conceptualizing integration. The audit activity should consider both perspectives.

Limitations of This Guidance

This guide does not define integrated audits because the term may have different meanings to different organizations, even on a case-by-case basis. Rather, it focuses on building approaches that integrate opportunities to create value and help the internal audit activity meet key stakeholder needs.

This guide also purposefully avoids defining or referencing the "integrated auditor" in subsequent sections, since that may complicate the focus on building integrated approaches to internal auditing.

As stated, this guide does not cover detailed practices, models, and challenges related to "integrated assurance" or "combined assurance," because these topics require more specific guidance and are covered elsewhere. Instead, the guide discusses considerations of an integrated approach, such as coordination and collaboration with internal assurance providers.

Four Integration Stages in Detail

This section discusses each integration stage and examples of options to consider. It provides detailed considerations for internally and externally driven needs for both the audit plan and the engagement levels.

Stage 1: Audit Objectives and Scope

According to Standard 2210 – **Engagement Objectives**, each engagement must have established objectives that take into consideration the preliminary risk assessment and the probability of significant errors, **fraud**, noncompliance, and other exposures. In addition, adequate criteria are needed to evaluate governance, **risk management**, and **controls**, and will be used to determine whether objectives and goals have been accomplished (Standard 2210.A3).

Objective-related Considerations – There are many elements of assurance that could be approached in an integrated manner based on the objectives of the engagement. For example, it is common for assurance engagements to determine the effectiveness of selected risk/control models as established by the enterprise. Ultimately, the audit activity is responsible for determining which objectives, components, or principles on which the engagement should focus.

For examples of objectives, internal auditors might look to The Committee of Sponsoring Organizations of the Treadway Commission's (COSO's) *Internal Control–Integrated Framework* (2013). This model contains three overriding internal control objectives related to operations, reporting, and **compliance**. Auditors might consider whether the engagement approach integrates all three objectives or focuses on just one or two.

Another possibility is that the specific review covers all components of the COSO framework (for example, **control environment**, risk assessment, control activities, information and communication, and monitoring activities) or covers only some components with the others being covered in a separate, cross-entity level reviews, such as the overall control environment and its related principles.

It is also necessary for internal auditors to assess governance processes and strategic alignment throughout the enterprise. This might include strategy-setting activities or specific strategies, including supporting activities, projects, and program change initiatives.

Auditors should determine whether the specific internal audit engagement addresses and integrates these needs, or whether they may be addressed in separate reviews.

It benefits internal audit leadership to have flexible integration options when setting objectives and evaluating alternatives.

Scope-related Considerations – Once the audit objectives are set, the internal audit activity should decide how to scope the audit engagement given the available resources. Standard 2220 – Engagement Scope states "The established scope must be sufficient to achieve the objectives of the engagement." However, internal audit activities may need to be creative when developing audit engagements with broad scopes. Several issues should be considered during this process:

- The scope may aim at a singular process, a broader business function, or an end-to-end activity that includes some or all supporting systems or technologies.

- The scope might consider specific geographic locations, branches, business units, divisions, countries, or horizontal/enterprisewide coverage.

- Coverage might be defined by specific risk (for example, one risk covered and integrated across all entity operations). The scope could also include coverage of culture, sustainability, or environmental considerations, which could be assessed across the organization under a singular engagement or assessed cumulatively through multiple engagements.

Stage 2: Audit Techniques and Execution

While intuitively, an integrated approach to an engagement begins with setting objectives and scope, the execution of the engagement will likely require integrating audit techniques and optimizing tools, resources, and knowledge sharing. Internal auditors should use all available tools to improve the efficiency and effectiveness of their engagements. These tools may be as simple as spreadsheet-based workpapers that include helpful macros or other data analysis tools or as complex as "Agile" techniques that speed up the audit process and reduce documentation.

Tools and techniques that could be incorporated into engagements include but are not limited to continuous auditing, enhanced sampling methods (such as testing entire populations), surveys, data analytics, Agile auditing, process excellence techniques (such as Six Sigma), and active project management participation. Additional examples of techniques internal audit activities (even those with limited resources) could explore include:

- Advanced analytics activities, such as data mining (which can be as simple as looking for patterns in datasets), correlation analytics, and data visualization involving areas such as forecasting and budgeting. The power of advanced analytics lies in the ability to analyze large amounts of data and to provide a meaningful, comprehensive visual context.

- Robotic process automation (bots), best used for repetitive, highly manual tasks such as selecting and analyzing invoice samples for accounts payable audits, loan file reviews, or exception reporting. It is good for validating information, but not for analyzing information

for decision-making because bots are not yet able to learn and adapt to system upgrades, process changes, or other factors that may impact the data.

- Improved reliance on and coordination with other assurance functions using common integrated risk management systems. This option largely depends on the risk/control maturity level of the entity and second-line management roles.

Internal auditors should identify whether these types of tools and capabilities exist in their organizations, likely within the business lines or in second line functions, such as compliance. In addition, internal auditors may be able to cooperate and learn from the analytical techniques used elsewhere in the organization to analyze data. This might also include improved reliance on and coordination with other assurance functions.

Deciding when and how to integrate these techniques and tools to build capabilities and approaches can be a challenge for internal audit leadership. Funding, culture, and organizational maturity must be considered, but the tools and techniques listed above can help promote innovation, add value, and improve the planning and execution of engagements.

Stage 3: Resource Management and Knowledge Sharing

According to Standard – 1210 Proficiency, "Internal auditors must possess the knowledge, skills, and other competencies needed to perform their individual responsibilities. The internal audit activity collectively must possess or obtain the knowledge, skills, and other competencies needed to perform its responsibilities." Further, Standard 2230 – Engagement Resource Allocation notes: "Internal auditors must determine appropriate and sufficient resources to achieve engagement objectives based on an evaluation of the nature and complexity of each engagement, time constraints, and available resources." To achieve these, internal audit may need to explore different methods of resource management and knowledge sharing. This is when an integrated approach can help.

Resource Management – Traditionally, integrated audits focused specifically on technology and IT audit skills being incorporated into the engagement, as opposed to performing separate audits of supporting technology. Today, there are many additional specialty areas to consider and possibly integrate into reviews. These areas of specialty skills may include actuarial, regulatory, health and safety, environmental, and/or social responsibility considerations, to name a few.

In addition to incorporating specialty skills and competencies, internal audit leadership may promote and invest in the mastery of skills deemed important, innovative, or necessary to increase audit efficiency and effectiveness. If any of these additional skill sets are considered viable to integrate and increase value in the performance of the engagement, internal audit leadership should decide how to manage these additional resources and needed competencies. This may require the increased use of external resources and expertise or finding ways to increase staff expertise internally. Often, external expertise is cosourced as a way to build staff knowledge for the future, but this requires internal and external teams working together with explicit goals in this direction.

Internal audit leadership may also need to consider changes in their staffing model so teams perform less isolated and more cross-functionally to build a broader range of capabilities and experience for their audit staff.

Knowledge Sharing – Although the goal of knowledge sharing is related to resource management, integration efforts may not be maximized if auditors with expertise work in isolation and do not share information or work with other team members to build new skills, awareness, and deeper capabilities. Internal audit activities not only need specialized knowledge skills such as actuarial, regulatory, workplace safety, and others as noted, but also functional skills such as process engineering, enterprise risk management, and project and program change management.

Building and sharing enterprise data management knowledge is equally important, as data management tools are increasingly used and analytics improve. Internal audit leadership should develop explicit goals and measurements to help champion knowledge-sharing progress and professional development, based on team staffing needs.

Stage 4: Reporting and Issues/Solutions Management

Characteristically, integration tends to transition from narrow viewpoints, objectives, and results to broader ones with increased value. This also applies to audit reporting and issue management activities, including solution management. Typical considerations related to reporting might include:

- To whom, when, and how broadly should internal audit reports be distributed.
- What types of ratings or scales will be used.
- Whether the process or risk ownership is clear.
- Whether other related stakeholders should be considered as recipients.

These considerations may not seem directly related to integration, but how internal audit communicates results and who addresses issues can make a significant difference in practice. Broadening distribution perspectives and reporting criteria can add strategic value.

For example, integration considerations may emerge when reports are issued locally, because actions are required by local risk and control owners. However, if the local internal audit engagement is an element of a larger review (part of a global audit, for example), then broader risks or issues may be identified that are common across other locations or even business lines.

Another example of a real value-added result is when a solution or corrective action can be implemented across functions or business units, or more effectively optimize operations, reduce risks, or exploit opportunities. However, engagements that cross locations or functions may increase complexity and duration. In addition, time pressures to report results or issues may lead to local reports being issued while the overall review is still underway. In these cases, an overriding report, integrating all the reviews, can lead to more strategic insights and solutions.

Internal audit may need to integrate disparate scales or ratings used by other assurance providers across the organization so that risk profiles, assessments, or priorities can be more holistically understood by the audit committee or other governing bodies. Issues may be

prioritized by risk and narrowly aimed at risk owners, or issues may be more business objective-oriented and corrective actions prioritized by the importance of related objectives or strategies.

Another approach might be reporting on performance, capability, or maturity assessments, in addition to binary or graded control effectiveness ratings.

Several integration options should be considered in the reporting phase of the review, at both the engagement and overall internal audit activity level.

Four Integration Stages Summary

Significant judgment and experience are necessary to determine the best and most optimal approach regarding an integrated approach to internal auditing. This may be accomplished by weighing key stakeholder and governance needs, management's style and culture, and risk and control maturity goals. Flexibility in designing reviews and audit planning deliverables is imperative but should be systematically approached to optimize results and other value propositions.

Appendix C provides additional detailed examples of options to consider for each stage, first by internal and then external drivers.

Success Factors and Other Considerations

Critical Success Factors for Integrated Approaches at the Audit Activity Level

Selling the Benefits

Internal audit may have to convince stakeholders of the benefits of an integrated approach and should clearly note the value creation opportunities. However, this may be more easily said than done. Integration may add cost and complexity, require significant judgment, and still not guarantee expected outcomes and benefits. Thus, key stakeholder buy-in is critical and education is often needed. Incorporating integrated approaches can be a long journey, depending on the culture, maturity of the organization, and board support, but building a strategy and articulating the benefits can help build this support.

Realizing the benefits requires investment in skills, tools, and techniques around data analytics, IT, technology disruption, and changing business models. Maintaining a list of wins where integration efforts resulted in efficiencies, insights, and value creation is beneficial.

Intuitively, an integrated approach to an engagement or internal audit plan begins with setting clear objectives and scope. However, the execution of the internal audit engagement requires integrating audit techniques, optimizing allocated resources, and achieving knowledge-sharing goals.

Resource and Competency Challenges

Acquiring and maintaining expertise is not only a resource challenge but also a training challenge. Integrated approaches to internal audit planning at the activity and engagement levels require team knowledge and operational commitment. While additional training can add time and cost, leveraging online training or cosourcing with outside providers may help.

Another option is joint training with other assurance providers based on common requirements, systems, or tools used to deliver assurance. Tapping subject matter experts and resources from other departments is an effective way to add expertise without increasing costs. This can be facilitated by maintaining an inventory of personnel with specialized knowledge.

Ensuring the proper level of expertise may require additional internal audit staff, including hiring for specific skills. The willingness to obtain and manage skilled resources is critical to ensure successful outcomes.

Increased Complexity in Executing Reviews and in Planning

Decisions and commitments are needed at the internal audit planning and strategy levels. The internal audit function may aim for increasing levels of integration over time, focusing on certain functions or internal audit services. Flexible and reasonable targets should be set, which depend on maturity levels of the entity's risk control culture and integration efforts already undertaken. The timeline to fully establish the benefits of integration can be a multiyear effort.

Special Considerations for Smaller Internal Audit Activities

Smaller internal audit activities may derive significant benefits through an integrated approach to internal auditing. Operating with limited staff and resources, these departments are challenged to provide adequate risk coverage to their organizations. Maximizing integrated approaches as detailed in this guide can leverage and optimize a smaller internal audit group, increasing efficiencies and effectiveness of risk coverage.

An additional challenge for smaller internal audit activities may be audit presence. Achieving an effective audit presence is especially strategic for the smaller internal audit department in need of maximizing its limited resources. By using integrated approaches in all four stages, a smaller internal audit team can significantly expand and reinforce its presence.

Adopting an integrated approach to internal auditing, however, can also bring specialized risks to the smaller internal audit department. Because integration can result in broader, more complex audit projects, smaller internal audit activities should balance their commitments with the larger, strategic goals of risk coverage for their organization.

While integration can yield significant gains in coverage, a smaller internal audit activity will also need to balance the availability of their limited resources with the impact on their long-term strategy. Smaller internal audit activities should also be cognizant of ensuring **independence** and **objectivity** are maintained for future efforts. As integrated approaches tend to expand coverage, limitations in resources may reduce the ability for smaller internal audit activities to rotate assigned auditors effectively.

Appendix A. Relevant IIA Standards and Guidance

The following IIA resources were referenced throughout this practice guide. For more information about applying the *International Standards for the Professional Practice of Internal Auditing*, please refer to The IIA's Implementation Guides.

Standards
Standard 1210 – Proficiency
Standard 1220 – Due Professional Care
Standard 2050 – Coordination and Reliance
Standard 2200 – Engagement Planning
Standard 2210 – Engagement Objectives
Standard 2220 – Engagement Scope
Standard 2230 – Engagement Resource Allocation
Standard 2450 – Overall Opinions
Guidance
Practice Guide "Coordination and Reliance: Developing an Assurance Map," 2018.
Practice Guide "Engagement Planning: Establishing Objectives and Scope," 2017.

Appendix B. Glossary

All terms identified here are taken from the "Glossary" contained in The IIA's publication, "International Professional Practices Framework®, 2017 Edition" (also known as the Red Book), published by the Internal Audit Foundation.

add value – The internal audit activity adds values to the organization (and its stakeholders) when it provides objective and relevant assurance, and contributes to the effectiveness and efficiency of governance, risk management, and control processes.

board – The highest-level governing body (e.g., a board of directors, a supervisory board, or a board of governors or trustees) charged with the responsibility to direct and/or oversee the organization's activities and hold senior management accountable. Although governance arrangements vary among jurisdictions and sectors, typically the board includes members who are not part of management. If a board does not exist, the word "board" in the *Standards* refers to a group or person charged with governance of the organization. Furthermore, "board" in the *Standards* may refer to a committee or another body to which the governing body has delegated certain functions (e.g., an audit committee).

chief audit executive – Describes the role of a person in a senior position responsible for effectively managing the internal audit activity in accordance with the internal audit charter and the mandatory elements of the International Professional Practices Framework. The chief audit executive or others reporting to the chief audit executive will have appropriate professional certifications and qualifications. The specific job title and/or responsibilities of the chief audit executive may vary across organizations.

compliance – Adherence to policies, procedures, laws, regulations, contracts, or other requirements.

control – Any action taken by management, the board, and other parties to manage risk and increase the likelihood that established objectives and goals will be achieved. Management plans, organizes, and directs the performance of sufficient actions to provide reasonable assurance that objectives and goals will be achieved.

control environment – The attitude and actions of the board and management regarding the importance of controls within the organization. The control environment provides the discipline and structure for the achievement of the primary objectives of the system of internal control. The control environment includes the following elements:

- o   Integrity and ethical values.
- o   Management's philosophy and operating style.

o   Organizational structure.

o   Assignment of authority and responsibility.

o   Human resources policies and practices.

o   Competence of personnel.

engagement – A specific internal audit assignment, task, or review activity, such as an internal audit, control self-assessment review, fraud examination, or consultancy. An engagement may include multiple tasks or activities designed to accomplish a specific set of related objectives.

engagement objectives – Broad statements developed by internal auditors that define intended engagement accomplishments.

fraud – Any illegal act characterized by deceit, concealment, or violation of trust. These acts are not dependent upon the threat of violence or physical force. Frauds are perpetuated by parties and organizations to obtain money, property, or services; to avoid payment or loss of services; or to secure personal or business advantage.

governance – The combination of processes and structures implemented by the board to inform, direct, manage, and monitor the activities of the organization toward the achievement of its objectives.

independence – The freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities.

internal audit activity – A department, division, team of consultants, or other practitioner(s) that provides independent, objective assurance and consulting services designed to add value and improve an organization's operations. The internal audit activity helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of governance, risk management, and control processes.

objectivity – An unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they believe in their work product and that no quality compromises are made. Objectivity requires that internal auditors do not subordinate their judgment on audit matters to others.

overall opinion – The rating, conclusion, and/or other description of results provided by the chief executive addressing at a broad level, governance, risk management, and/or control processes of the organization. An overall opinion is the professional judgment of the chief executive based on the results of a number of individual engagements and other activities for a specific time interval.

risk – The possibility of an event occurring that will have an impact on the achievement of objectives. Risk is measured in terms of impact and likelihood.

risk management – A process to identify, assess, manage, and control potential events or situations to provide reasonable assurance regarding the achievement of the organization's objectives.

Appendix C. Detailed Examples of Integration Options

These tables provide detailed examples of integration considerations, categorized according to each dimension.

Integration Considerations: Audit Objectives and Scope
Internally Driven
Risk, control, and governance objectives
Auditors should consider whether to address risk and control model objectives, and whether the goal of the engagement is to provide assurance or advice (consulting). Governance is integrated within certain models or can be assessed against benchmarks or frameworks.
Risk/control model components and principles
Reviewing specific risk/control model components and principles across an entity might enhance assurance and audit efficiencies. In addition, reviewing these elements within each process, location, or activity, enables internal auditors to evaluate operational details at a more detailed level, leading to more effective and tailored recommendations.
Culture, ethics, and sustainability
Internal auditors should review the control environment and governance processes, including culture, ethics programs, or sustainability goals. These reviews can be done separately or as part of every engagement. If integrated into each engagement, internal auditors may need to be flexible and exercise judgment when evaluating lower operational levels of the organization, as these may be less relevant overall.
Scope of coverage
Scope may vary between stand-alone entities, subsidiaries, business divisions, and industries. The objectives of the review, related risk drivers, and highest-valued potential outcomes should help shape the extent of coverage needed. Scope is also determined at more detailed levels of an entity, such as by specific areas, processes, or activities, to best support objectives.
Process considerations
Auditors may consider whether the engagement should address: • Similar processes across a regional entity or enterprisewide, to provide risk and control benchmarking across similar units. • A singular process versus a broader function. • Full end-to-end review of an activity and all supporting systems.
Risk-defined objectives
How to integrate risk coverage into an audit plan or engagement is a fundamental decision. Audit leadership should decide whether audit planning will be based on a risk universe or a process-based audit universe. Traditional risk-based reviews assess all key risks within an area, process, or activity, as aligned to the audit universe. Some approaches focus on a risk or specific risk type across business units, processes, or geographies and may define a review as all key processes or areas contributing to that risk or subset of risks. An example might be cyber risk types across many platforms and processes.

Externally Driven
Collaboration with other internal assurance providers
Integrated risk management models require the collaboration of internal audit, risk management, compliance, and quality assurance. There should be an agreement on common risk categories/types and their impact, priority, definitions, and measures, along with control and risk mitigation treatments, common ways to frame issues, validation methods, resolution activities, and monitoring activities. An integrated framework helps establish common objectives and determine the primary party responsible to deliver and share results (combined or integrated assurance goals).
Assurance needs from clients, partners, or regulators
If the risk/control model selected by the entity does not align to what is required by customers, partners, or even regulators, inefficiencies in providing assurance to these parties may result. The broad needs of the entity and key stakeholders should be integrated into considerations.
External audit assurance coordination
The need for independent assurance by external parties may require coordinated coverage, and collaboration between internal and external audit can often optimize results. Some coverage may be more effectively performed by internal audit and should be integrated into internal audit planning.
Assurance or consultative reviews
Assurance reviews and consultative engagements can be performed together or separately. In some instances, this may be influenced by the maturity of the risk/control environment and to the stakeholder expectations.
Strategy alignment and development
A valued service that internal audit can provide is the evaluation and assessment of strategies and priorities throughout and across an entity. This can include whether local/regional priorities and strategies are reasonably aligned to the entity's overriding strategies and goals. This assurance can be integrated into each engagement or performed more centrally but should be based on a proactive decision to satisfy key stakeholder expectations. In some control models, strategy development is considered outside the scope of internal controls. However, integrating strategy evaluation into the internal audit planning process can be valuable, influencing strategy development and the use of information. The legitimacy of business cases supporting strategies selected can be critical for an organization's achievement of goals. Note: The strategy chosen can be a board decision, but the decision-making process and information used may benefit by being independently reviewed.
Types of assurance reporting in setting objectives
Internal audit assesses governance, risk, and control processes. This is often delivered as an effectiveness rating for each engagement. Some stakeholders find maturity or capability ratings valuable, which could be integrated in assurance objectives and reported on. In some instances, maturity assessments could be the primary method of reporting assurance.
Mandated audit coverage
Specific internal audit coverage may be mandated by laws and regulations. Alternately, industry practice or the audit committee may mandate certain work to be done. In these cases, efforts to integrate these coverages via a risk-based approach and within normal audit planning can be effective and mitigate risks.

Integration Considerations: Audit Techniques and Execution

Internally Driven

Continuous auditing

Many assessments are more adaptable to continuous auditing (as opposed to monitoring, which is led by management). In this case, an audit engagement can be triggered by certain events or risk drivers and allow for specific procedures to be performed on an ongoing basis, rather than occurring within an established audit cycle. This integration option is most appropriate for areas of low risk levels, but certain infrequent events could occur that would require audit's focus and involvement.

Data analytics and data-driven approaches

Internal audit teams should look to grow their capabilities to harness tools and technologies that help manage vast amounts of data in their organizations. According to Standard 1220.A2, "In exercising due professional care, internal auditors must consider the use of technology-based audit and other data analysis techniques." This will also help provide appropriate levels of assurance, value-added services, and audit efficiencies.

However, the extent of the use of data tools and analytics should be appropriate for the data maturity level of the organization (for example, leading or partnering with the organization to increase data management and analytical capabilities). Further, the use of more advanced data analytic tools can be beneficial for modeling, transforming, inspecting, sampling, testing full populations, or monitoring data and the effectiveness of data governance.

Agile audit techniques

The internal audit team may consider adopting certain Agile audit techniques to create improved collaboration and transparency and shorten turnaround time for reviews. This can be implemented in different ways, such as one-off situations, specific types of engagements, on all engagements, or if there are team members with Agile expertise.

Survey technology

Integrating surveys via various tools and approaches to assess or evaluate qualitative information, such as an assessment of culture, can lead to additional findings and recommendations in important but nontraditional areas and provide better insights and promote additional recommendations.

Automated risk/control technology

A particular strategy involves shifting from traditional governance, risk, and control tools to fully integrated risk management solutions that enable automation and integration. These automated technologies promote flexibility, cross-departmental collaboration, and goal alignment of strategic, operational, and IT risks.

Remote audit and working remote capabilities

The use of technology to increase overall collaboration and communication between teams and individuals can be considered and integrated into all audit phases. For instance, internal auditors could conduct remote interviews or meet remotely to discuss risks, issues, corrective actions, and conclusions.

Externally Driven

Process excellence techniques

Process excellence and quality functions may focus on improving and standardizing processes within an organization. This often includes gaining a better understanding of process objectives, risks, controls, and monitoring activities. Collaboration with internal audit on designing processes that will promote process efficiency, while taking into consideration the needs of risk and control management, can have significant value in an organization. If, for example, an organization adopts Six Sigma, internal audit could integrate or leverage related feedback to improve the overall program value.

Artificial intelligence (AI)
While traditional internal audit methodologies use structured datasets, AI tools enable organizations to work with large volumes of unstructured data that may be classified and used for full population testing, earlier detection and correction of errors, and predictability based on analysis of trends. Note: Prior to adoption, the risks and opportunities of any AI tool should be assessed, and the tool should be aligned to the entity's data management and governance practices.
Common integrated risk management (IRM) systems
Collaboration with other internal assurance providers can be enhanced by using common IRM technologies and tools. These tool sets can lead to audit efficiencies and coordination between assurance providers and help build a better combined assurance road map. Common IRM tool sets may be integrated partially or fully, depending on entity maturity levels and stakeholder expectations.
Project management techniques
Many organizations use system development life cycle (SDLC) methods to manage their IT projects, particularly software and system development projects. If organizations are using newer SDLC techniques, such as Agile, internal audit should adapt or adjust its process for auditing these projects accordingly.
Use of robotic process automation (RPA)
RPA may automate labor-intensive and repetitive audit tasks, allowing internal audit to expand its coverage and analyze larger sets of data. RPA may also help internal audit address the needs of external parties, for example, by pulling information and gathering samples. It can automate reporting and monitoring elements thereby reducing labor time and costs. Internal audit can coordinate with technology professionals in setting up proper governance structures and running robotic processes to support integrated audits.

Integration Considerations: **Resource and Knowledge Management**
Internally Driven
Specialty technical and audit skills
Increasing integration of audit capabilities should not be limited to information technology and related IT audit skills. Additional specialty areas of expertise (and skills) can be integrated into audit engagements including actuarial, regulatory, health, safety, environmental, or social responsibility expertise, as well as other specific risk knowledge. The use of specialty technical and audit skills is usually driven by the need to support broader objectives and scopes and can lead to efficiencies and more value-added engagements.
Specialty-management knowledge
The integration of skills should not be limited to technical, industry, or business and regulatory areas but should also include management skills such as process engineering, enterprise risk management, culture, governance, corporate strategy, and project and change management. Data analytic capabilities and skills and an understanding of enterprise data management are increasingly becoming baseline expectations for internal audit departments. Knowing how to integrate data analytic skills will help drive successful engagements but also must be managed. Every engagement should consider how to better approach and source data analytics and data management expertise.

Sourcing of specialty skills
Skills may be sourced internally, externally, or with a hybrid strategy, generally referred to as cosourcing. Skills sourced internally require either having that skill on the team or providing training to build that skill. Training can also be internally or externally sourced or as part of a formal cosourcing arrangement with knowledge transfer as a goal.
Knowledge sharing
Sourcing can be more beneficial and sustainable if there is an expectation to transfer knowledge to the existing internal audit team, which can aid in meeting target competencies. One benefit of cosourcing versus outsourcing is the degree and level of collaboration and the emphasis on knowledge transfer. This should be an explicitly expressed goal for any internal audit team and part of the staffing strategy for the internal audit function.
Monitoring knowledge transfer
Defining the targets and specific benefits, including improvements and efficiencies, is needed to monitor the execution of knowledge transfer to ensure that the benefits will be attained. This will help support new business cases in the sourcing and knowledge transfer realms.

Externally Driven
Sourcing of specialty skills – outsourcing (external)
If external sourcing (partially or fully) is determined to be the most prudent and effective option, then managing the arrangement, execution, and performance of the engagement is imperative. Integrating these resources into specific engagements or within the overall audit planning process requires specific direction, support, clear expectations, and ongoing review.
Outsource vs. insource considerations
Outsourcing of certain specialty skills may be cost effective, depending on budget constraints and other potential benefits, such as combining and integrating different sources of skills on an engagement.
Independent assurance demands from partners or customers
Independent assurance reports are often required from business partners and service providers in relation to the industry, the specific controls, or the risk framework in place. Internal auditors can obtain information about the organization's partners and customers through system and organization control (SOC) reports.

Integration Considerations: Reporting and Issues Solutions Management
Internally Driven
Common report definitions within the internal audit activity
Maintaining clear, consistent definitions, criteria, and ratings across reports enables senior management, the audit committee, and any other relevant parties to quickly establish what observations require the most immediate attention. This includes root causes, which may not align to risks directly.
Theme identification
Regional or business unit findings or recurring issues can be consolidated into high-level insights or themes that allow internal audit to report on trends and systemic issues. Common themes can be also identified in complex audits that cover several business units, territories, or countries.

Further, considering the integration of results from regional or non-entity level reviews may help prioritize themes that are valid across the organization. It may also help build more strategic solutions or pinpoint more meaningful root causes or trends across an area of focus.

Data visualization

Data visualization can be used as a method of communicating audit results via a graphical representation of data patterns, trends, and correlations. Interpreting the data through good, comprehensive design methods allows audiences to better understand the risks and make informed decisions. Integrating available visualization tools and practices and adapting to the organization and its culture can add value.

Linking issues to key strategies or business objectives

Depending on the management style and the culture of the organization, internal audit may choose to report issues based on linkages to risks or strategic objectives.

Solution management

Reporting strategic solutions to solve multiple enterprise issues, risks, root causes, or themes can be a benefit of taking an integrated approach across similar engagements. For example, an integrated view of the entity and its major gaps, issues, deficiencies, or challenges can lead to the consideration of more holistic and effective solutions.

Externally Driven

Report distribution and use

The basis and target audience for distribution should be discussed and agreed upon prior to execution of the engagement, and an analysis should be performed to identify users of the reports. It is also important to assess whether the report's use should be limited. For example, if it is determined that use of the report should be limited and restricted but distribution is not, an explanatory paragraph in the audit report to this effect could be added for clarification.

Broadening distribution recipients and reporting thresholds may have strategic value-added results as well, expanding the potential amount of information available and used. Regardless, consideration should be given to the distribution list to ensure that all key stakeholders are included.

Integrated risk and control model reporting

Integrating reporting of issues, risks, controls, risk mitigation gaps, or even **overall opinions** is a goal of many organizations. This requires an advanced level of collaboration and agreement of approaches and coverage with other assurance providers.

Common definitions, scales, criteria, and taxonomies

A comprehensive, common, and stable set of definitions, scales, criteria, and taxonomies is imperative to appropriately articulate reporting issues and risks across the organization. This alignment is also the aim of reporting objectives within a combined assurance process or an integrated risk management model.

Reporting overall opinions

Standard 2450 – Overall Opinions states "When an overall opinion is issued, it must take into account the strategies, objectives, and risks of the organization; and the expectations of senior management, the board, and other stakeholders. The overall opinion must be supported by sufficient, reliable, relevant, and useful information." An overall opinion can integrate the conclusions of numerous engagements at geographical or business unit levels, along with reported results from other internal or external assurance providers or outside parties, such as external auditors or regulators.

In these scenarios, results or aggregated conclusions support the overall opinion but may have scope limitations, may be subject to defined time periods, or may be based on specific benchmarks or frameworks (government, risk, control, or a combination). In addition, integration considerations can facilitate the aggregation of conclusions in a systematic manner but may also lead to additional integration needs in a future engagement or combinations of engagements to support specifically defined requirements.

Appendix D. Additional Reading

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Acknowledgements