Session 7.0 Developing Audit Design Matrix

Overview

In previous sessions we have already learnt on how auditors prioritize audit topics and sub topics, develop audit objective, and select methods in gathering and analyzing audit evidence.

In this session we will learn how to prepare the audit design matrix (ADM). Information from the previous sessions is the inputs for the ADM.

Learning Objectives

Given the brainstorming, lecture, exercise and group discussion, participants will be able to develop an ADM to the extent that it gives a clear linkage and consistency between audit objectives, audit criteria, audit evidence, methodology, limitation and the result.

The Definition

ADM is the culmination of the planning phase of the audit. It works as a tool that consolidates the information collected from the audit planning phase and serves as a base in developing audit program *vis-a-vis* a guidance for the auditor in conducting the field audit.

The Importance of an Audit Design Matrix

ADM gives the auditors the big picture of what the auditors want to proof and how to do it. It guides auditors to conduct field audit and arrive on the audit conclusion based on a systematic and logical steps. Ultimately it helps the auditors to conduct audit in a more efficient and effective manner. The ADM can also serve as a communication and monitoring tool among the audit supervisor, team leader and team members.

The Elements of Audit Design Matrix

Audit Objective

Audit objectives related to the reason for conducting the audit and should be established early in the execution process to assist in identifying the matters to be audited and reported on. Auditors must take into account the roles and responsibility of the SAI and expected net impact of the audit in determining audit objectives.

Researchable Question(s)

The mechanism of common social research can be used in designing ADM. This means, research question(s) is developed to answer the audit objective. Good research question(s) will provide clear direction in response to the audit objectives.

Sub Researchable Question(s)

Research question can be splitted into several sub research questions. Sub research questions aim to facilitate the auditors in answering research question. Research question that is too broad in coverage would complicate the auditors in preparing audit criteria and audit methods. So, by breaking it down into more specific questions the

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auditors will be able to answer research question gradually. In the end the answers from sub research questions will be used to answer research question. However, if the research question can be answered without having to split it into sub research questions, then the auditors are allowed to stop there.

Audit Criteria

Audit criteria are reasonable and attainable standards of performance against which the economy, efficiency, and effectiveness of activities can be assessed. They reflect a normative (i.e. ideal) model for the subject matter under review. They represent best or good practice, and a reasonable and informed person's expectation of "what should be." When criteria are compared with what actually exists, audit findings are generated. Meeting or exceeding the criteria might indicate "best practise," but failing to meet criteria would indicate that improvements could be made. Every research (or sub) question(s) must have audit criteria. It is allowed if a criterion needs to be used in several research questions.

Audit Evidence

Audit evidence forms the basis of expressing an audit opinion, or an audit conclusion in performance audit. To give an opinion the auditors will test the audit evidence by comparing it with the audit criteria. That means the examination phase should be planned from the perspective of acquiring evidence to support observations, findings, conclusions and the opinions that will appear in the final report. To be useful in reaching audit conclusions, the evidence must be competent, relevant and sufficient.

When planning an audit, the auditors should identify the probable nature, sources, and availability of audit evidence required. The auditors should consider factors like the availability of other audit reports or studies, and the cost of obtaining the audit evidence.

There are several types of audit evidence, some of it include physical evidence, oral evidence, documentary evidence, and analytical evidence. To gain an efficient audit, we must first determine the kind of information we need to answer in the research question. After that we need to determine the source of audit evidence.

Audit Methodology

After knowing what kind of evidence needed and where to collect it, the next step is to define how to collect it. The method to collect audit evidence is related to what kind of evidence that we need, and of course related to the research question. In doing research, there are several types of strategy, they are: descriptive, normative, and cause-and-effect. Meanwhile, in gathering data there are several techniques that can be used: collecting document, data analysis, interviews/questionnaires, physical observations, and confirmation.

After gaining the data, the next step is analysing them. This step is important to answer the research question. Some techniques that can be performed by the auditors are: program logic models, interpreting data, regression analysis, benefit cost analysis, simulation and modeling, content analysis of qualitative data, work flow and communications flow analysis. All materials related to this topic have already been explained in previous sessions.

Limitation

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Each audit method tends to have limitations. These limitations can be caused by both external and internal factors. External factors may include missing documents, personnel changes in the entity, and organizational change. Internal factors may include the limited ability of the auditor, the audit time constraints, and limitations in the audit authority.

What This Analysis Will Likely Allow Auditors to Say

The last step to build an ADM is to determine the auditors' assumption regarding the obtained information. Information obtained through conducting the audit method and question that need to be answered are the elements that highly considered in this step.

How to Construct an Audit Design Matrix

In previous sessions the auditors have developed and formulated audit objective from selected topic and researchable/sub-researchable questions. The auditors are then required to determine some actions to gather and analyze data and information that can be used as evidence to the information provided in the report.

The auditor has to determine the type of evidence and its sources, data gathering technique and analysis, the potential limitation that can decrease the quality of implemented methodology, and the expected information that can inform the user of the report. All of this information needs to be arranged systematically and logically in order to make the audit program efficient and effective.

After all the building blocks of the ADM is obtained, it is time for the auditors to develop the ADM. Each of those elements mentioned previously are put into the matrix. This step will give us the big picture of the audit program, so that we can:

1. recognize the flow of the audit program;
2. identify the repetitive procedure, so that improvement can be done to make it more efficient;
3. identify the missing link;
4. identify incompleteness; and
5. set the procedure(s) to run the program.

Table 7.1 Audit Design Matrix

Audit Objective	Researchable Question (s) (RQ)	Sub Researchable Question (s) (SRQ)	Audit Criteria	Audit Evidence	Audit Methodology	Limitation	What This Analysis Will Likely Allow Auditors to Say
A.O.1.	A.O.1.RQ.1.	---	A.O.1.RQ1.AC	• Information required • Source Of Evidence	• Data Gathering Technique • Data Analisis	A.O.1.L.1 A.O.1.L.2	A.O.1.
	A.O.1.RQ2.	A.O.1.RQ2.SRQ1	A.O.1.RQ2.SRQ1.AC	• Information required • Source Of Evidence	• Data Gathering Technique • Data Analisis		
		A.O.1.RQ2.SRQ2	A.O.1.RQ2.SRQ2.AC	• Information required • Source Of Evidence	• Data Gathering Technique • Data Analisis		
A.O.2.	A.O.2.RQ.1	A.O.2.RQ.1.SRQ1	A.O.2.RQ1.SRQ1.AC	• Information required • Source Of Evidence	• Data Gathering Technique • Data Analisis	A.O.2.L.2	A.O.2.

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Summary

The ADM is a powerful tool for auditors to ensure that the audit is conducted in an efficient and effective manner. Moreover, the ADM facilitates good communication among related parties involved in audit activities.

References

1. INTOSAI, *ISSAI 3000E - Standard and Guidelines for Performance Auditing*.
2. INTOSAI, 2010, *The Guidance Material on Auditing the Forest*, Working Group on Environmental Auditing, June 2010.

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