

# Relevance in Internal Audit Tools and Techniques for Achieving Organizational Objectives in Private Limited IT Company

Maksuda Sultana<sup>1</sup>, Juancho D. Espineli<sup>2</sup>

<sup>1</sup>Assistant Professor- College of Computer Study, DIT Student in AMA University, Philippines

<sup>2</sup>College of Graduate Department, AMA University, Philippines

<sup>1</sup>[mak.sultana@gmail.com](mailto:mak.sultana@gmail.com), <sup>2</sup>[jcespineli@gmail.com](mailto:jcespineli@gmail.com)

**Abstract** — Internal audit is emphasized too much in Public Ltd. IT companies. Research on internal audit and its success factors, effects & effectiveness has mainly focused on public limited IT company. It is also relevant for private limited IT company. This article is a case study conducted on ARENA IT Company, a private limited companies in the country to see the relevance and effectiveness of internal audit for private limited IT Company. The study systematically examined the effectiveness of internal audit in ARENA IT Company. The findings indicate that internal audit, is important and contributing for private limited IT company also. The paper additionally discovered that internal auditors more often than not use audit tools and strategies, inclusive of danger primarily based planning digital, communicate, analytical evaluations and operating papers. The paper concludes that, whilst different audit tools and techniques are essential to have, the most favored enhances the first-rate of the audit method.

**Keywords** — Audit, Internal Audit, Case study, Audit technique, Audit Engagements, Information System Audit

## I. INTRODUCTION

The use of audit Tools and Techniques are vital to any Internal Audit Function, as it is able to help internal auditors attain their engagement targets. The audit equipment and technique discussed on this paper encompass, Control Self-evaluation, electronic operating papers, statistical sampling, analytical evaluations, Computer Assisted Audit Techniques, electronic communication and different computer audit gear. The significance of those audit tools and technique and method has been discussed exclusively, from diverse sources of literature. Thus, the audit tools and technique approach [17] are evolving aids, which support internal auditors in appearing powerful audit engagements [18]

As an example, the International Organization for Standardization (ISO) guidelines on auditing use the term audit to mean a “systematic, independent and documented process for obtaining audit evidence and

evaluating it objectively to determine the extent to which the audit criteria are fulfilled” [1] and the Information Technology Infrastructure Library (ITIL) glossary defines audit as “formal inspection and verification to check whether a standard or set of guidelines is being followed, that records are accurate, or that efficiency and effectiveness targets are being met [2].” Such type of general interpretations are well suited to IT auditing, which constitute a huge variety of requirements, standards and different audit criteria corresponding to processes, systems, technologies, or entire organizations concern to IT audits.

The authors got the possibility to intimately contain with internal audit & inspection branch of ARENA Group and got the threat to see the inner audit process of the employer. Based on that realistic reviews and interviews from ARENA Group's personnel, a case examine studies has been evolved to look relevance of internal audit in a non-public constrained enterprise. The article is a case look at as well as qualitative studies indicate that during spite of having much less regulatory requirements for compliance, internal audit is important for a private limited organization for fraud detection, threat management, organizational overall performance appreciation. These findings will create price for upcoming & present enterprise and could help them figuring out to what quantity they'll make stronger their internal audit system.

The rest of this paper is organized as follows: Section 2 literature reviews the existing internal audit. Section 3 discusses methodological aspects. Section 4 presents the results of the study. Section 5 present the concluding remark.

## II. LITERATURE REVIEW

Based on the achievement of company's mission and business objectives, all organizations use IT to support their operation. This gives every corporation has interest in making sure that they are using their IT in an effective way and their system and every process operate as

intendent. This makes that other resources are appropriately protected and also allocated.

IT auditing allows agencies recognize, investigate, measure and accurate the performance and achieve objectives and meant results. The use of formal audit methodologies also included in Internal IT audit to observe IT-unique methods, abilities, company assets and their role in permitting an enterprise's strategies. Internal IT auditing additionally addresses IT additives or abilities that guide different domain names difficulty to auditing, which include accounting and management monetary, fine warranty, different performance such as operational, physical, administrative, technical, threat control, and governance and compliance.

As technology becomes more efficient and integral to the operations and activities of the organization's, a major challenge for internal auditors is how to best approach a companywide assessment of IT risks and controls within the scope of their overall policies, procedure, assurance and consulting services.

The completion an inventory of IT infrastructure is very important in IT internal audit because this component will provide auditors with information regarding the infrastructure's vulnerabilities. The complete inventory of the organization's IT hardware, software, network, and data components forms the foundation for assessing the vulnerabilities within the IT infrastructures that may impact internal controls.

### III. METHODOLOGY

#### A: Audit Components:

Different IT component and the controls associated with an organization are always examine and analyze by IT audit these are two common attribute of IT audit. Technical and nontechnical components are also includes in the scope of IT audit where different auditor skill sets are also necessitate sets and also involve different audit procedure, standard for addressing the administrative and also technical controls. IT audit covers a wide range of technology, procedure, organizational assets, operational capability and different quality management function as illustrated in figure 1.1.

Regardless of what type of IT audit is being performed, they all have one common attribute. All IT auditors need to address both physical, administrative and technical controls.

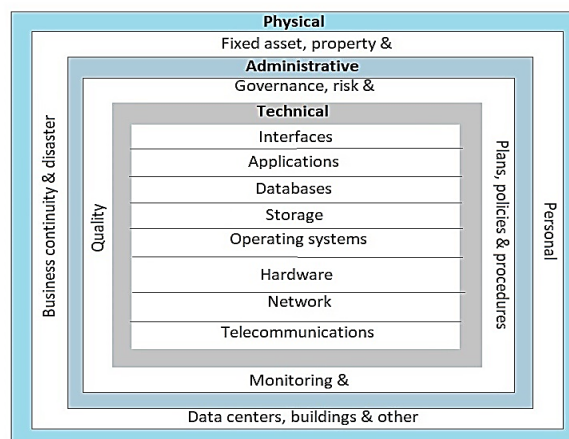


FIGURE 1.1

Figure 1.1 describe the internal physical, administrative and technical control structure of an organizations and specified the important level of every structure which mention the range of any potential IT audit purpose. What type of audit is important or needed for any organization, this is the key function for any organizational audit program is to determine and also have to identify what could be audited? They need to develop an audit universe which we call the inventory of potential audit subjects. For example, we can say the management of asset, enterprise architecture, the frameworks of governance, business process decomposition or any other related approach that may help the identification of the constituent elements of an organization. After then the organization need to conduct risk assessments one each item which is to inform the prioritization of audit subjects and audit universe is also included. Audit prioritization is important to an organization because by using audit prioritization the practical reality is reflects that the availability of the resources of any organization to support the activities of the audit and it also mention the most notable and significant auditable features are properly addressed in the organization. Actually every small or large organizations have to take this challenges as long as they established the formal governance risk management functions. Asset identification are emphasized by both IT audit and audit prioritization and valuation as a foundation for structuring control turns on such as allocating the resources of organization. However, the Institute of internal auditors have different alternative approach. They state that it is much better to begin identification and analysis of enterprise risk on organizational areas since it threatens the development of an organization the most.

#### B: Organizational controls

To accomplish as organization's goals, the process of assigning, regulating and also evaluating on every

ongoing process we can call it organizational control. For profitable and controlling an organization successfully, every manager not only have to know what their performance standards. They must need to figure out how all of these information will share with the employees and also figure out their attention or attitude. To accomplish an organization’s goals organizational controls are very much important because organizational controls is the ongoing basis processing structure of evaluating, assigning, and also regulating their assets or resources for finalize an organizational goal’s. So for internal and external audits entry-level controls are also very much important because they are one who provide the foundation for hoe any organization can manage control-supported functions. They also incorporated into different types of audit which performed by different level of the organizations such as different technologies, projects, business unit and different assets all leverage different types of entry levels controls. Different major categories of entry level are describing in the table 1.1 and also point the different controls within each category, try to figure out the core IT process and supporting function.

Policies and procedure	IT Governance	Common controls	Personal Oversight
*Control policies	* Organization structure	* Environment	* Human resources
*Guidelines	* Strategy	* Physical Security	* Awareness and training
*Standards	* Risk management	* Data stewardship	* background check
*Complainants	* Performance	* Security and Privacy	* skill assessment
	* Certification	* Remote access	
	* Quality assurance	* Building access	
Core IT Process and Supporting Functions			
* Procurement	* Software development	* Incident response	
* Asset management	* Data and system backup	* Business continuity	
* Change management	* Patch management	* Disaster recovery	
* Configuration management	* System administration	* Monitoring	
* Capacity planning	* User management	* reporting	

Table : 1.1

Methods	Applicability
Examination	<ul style="list-style-type: none"> <li>System specifications, documentation, diagrams</li> <li>System plans, policies, procedures, instructions, guidelines</li> <li>System standards, frameworks, methodologies</li> <li>Employees with operational responsibility for audit subjects</li> </ul>
Interviewing	<ul style="list-style-type: none"> <li>Managers responsible for governance, risk, and compliance</li> <li>Customers, support personnel, system end users</li> <li>Software or hardware functionality</li> <li>Operational activities, processes, practices, exercises</li> </ul>
Observation	<ul style="list-style-type: none"> <li>Personnel behavior</li> <li>Technology components</li> <li>Hardware device</li> </ul>
Testing	<ul style="list-style-type: none"> <li>Application software and systems</li> <li>Procedural controls and technical capabilities</li> </ul>

Table : 1.2 - Applicability of Audit for Different Types of Evidence

Table 1.2 shows the list of different categories method and their applicability based of the sources of evidence. Terminologies are varies because of different standards, instructions and sources of guidance. Actually all

described method are included the interviews, documentations which reviewed by evidence, observation of organizational policies, practices; and implemented by testing controls such as technology components, hardware and software system and technical capabilities. [7,8].

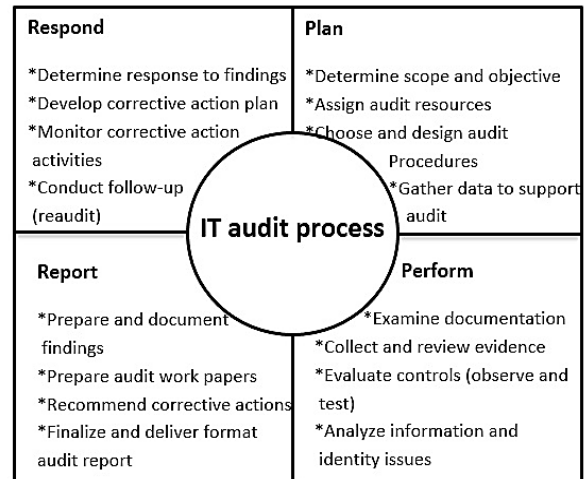


Figure 1.2: Conceptual structure of Internal IT audit approaches and all activities are included in here.

Depending on large volume of organizational commitments and the existence of supporting structural and procedural audit activities, IT audit process are successfully implementing. Basically for internal audit, every internal audit programs for any organizations highlights basic organizational structure, to provide self-assurance of an management organizational risk, government laws, and internal controlling process those are operate effectively. So every organization’s audit strategy should be formulated by internal audit program and develop audit plans for each and every type of IT audit to be performed by internal auditor Internal auditor also work out about the company's risk and what is their efficiency of that risk management efforts. They make sure that the company always complying with relevant laws and regulation. Sometime they recommended or specify some audit protocol that can help the organizations to evaluate the internal control easily and to improve their controlling structure easily.

**C: Performing a Risk Assessment**

In risk management processes here are four major objectives identified by author:

- From current business strategies and technique, different types of risk will be arose which should be identified in priority basis and different activities needed to take.

- The organization should determine the highest acceptance level of risk which they can accept and design the process to accomplish the organization's strategic plans.
- The management of organization need to design the activities of risk alleviation and implement the mechanism
- to reduce it. Otherwise it's very difficult to design to accomplish the organizational strategic plan to overcome to highest acceptance risk level and effectiveness to control risk.
- The management and board members need to monitor the ongoing risk and need to check the reports of periodic risk. The organization should follow the process of periodic communication risk strategies and controls of stakeholders.

**IV: RESEARCH FINDING**

Research finding are presented in this section. The interviewees are provided all additional answers and reasons. The potential feasibility is also discussed and summarized.

S L	Processing Area	Total Questions	Codification & Guidance		Review of documentation		Interviews	
			Yes	No	Yes	No	Yes	No
1	Audit in Compliance	5	✓		5			
2	Audit in Performance	5		✓	5			
3	Advisory services	7	✓		3	2		3
4	Governance assurance, risk and control management	5	✓		3			3
5	Key agent for change	8		✓			3	3
<b>Total</b>		30			16	2	3	9

**1. Internal audit in service and role**

The above results in table:1 indicate 62% of the processing area are covered by codification and guidance, 40.8% of processing area was covered by the document reviewing, whereas additional 7.5% was covered through interviews. Aspects that could not be confirmed (52.7%) included performing advisory services, expressing an overall opinion on governance, risk management and control as well as the internal audit function being a key agent of change.

**2. People management**

The processing area of this model on the people management of internal audit function in private sector are summarized in table 2:

The following results indicate that 40% of the processing area covered by codification and guidance,

32.6% of processing area was covered through the document reviewing, while 89.8% was covered through interviews. Aspects that could not be confirmed (40.5%) included recruiting skilled worker, professionally qualified, and developing team building activities.

S L	Processing area	Total questions	Codification & Guidance		Review of documentation		Interviews	
			Yes	No	Yes	No	Yes	No
1	Retained and recruited Skilled worker	7	✓		3		2	1
2	Professionally development by Individual	5	✓		3			
3	Coordination of Workload	2	✓				1	
4	Professionally qualified staff	5	✓		2		1	2
5	Team Proficiency	4		✓	1		1	2
6	Scheduling of Workload	3		✓			4	
7	Prediction of workload	2		✓				2
8	Professional people with leadership attitude	2		✓				2
<b>Total</b>		30			12	0	9	9

Table: 2 (People Management)

**3. Professional practices**

The processing area of this model on the professional practices of private sector are summarized in table3:

S L	Processing area	Total questions	Codification & Guidance		Review of documentation		Interviews	
			Yes	No	Yes	No	Yes	No
1	Management Audit plan	9	✓		6			3
2	framework based on Quality Control	4	✓					4
3	Risk-based audit plans & Professional practices	4	✓		3			
4	Quality management framework	5	✓		1		3	2
5	Audit strategy & management risk	2	✓		2		2	
6	Internal Strategic/management planning	3	✓					3
7	professional practices Continuous improve	3		✓				1
<b>Total</b>		30			12	0	5	13

The results in Table 3 indicate that 89.7% of the processing area codification and guidance, 54.9% of



processing area confirmed through the review the documentation whereas 22% was confirmed through interviews. Aspects that could not be confirmed (43.2%) related priorities to the audit strategy and audit plan on management, developing and implement a quality control framework based on professional practices, implementing a framework based on quality management and process, internal strategic and management audit planning and continuously improving in professional practices.

**4. Governance structures**

The processing area of this model on the governance structure of private sector are summarized in table 4:

SL	Processing area	Total questions	Codification & Guidance		Review of documentation		Interviews	
			Yes	No	Yes	No	Yes	No
1	Reporting of relationships establishment	5	✓		4		1	1
2	Permission to access info, assets and peoples	4	✓		1			3
3	Mechanisms or planning of Funding	4		✓				3
3	Surveillance of management for Internal Audit Function	4	✓					2
4	Reports investigation on top-level authority	2	✓		2			1
4	Oversight report for independtly of Internal Audit Function	7	✓		5			3
5	Report of power and authority of the Internal Audit Function	3	✓		1			2
<b>Total</b>		29			13	0	12	4

Table: 4 (Governance structures)

The above results indicate that 87.6% of the processing area are covered by codification and guidance, 42.5% of processing area was confirmed through the review of documentation, whereas further 4334% was confirmed through interviews. Aspects that could not be confirmed (16.3%) related to establishing reporting relationships, mechanisms of funding, report for top level authority as

well as surveillance of management of internal audit function.

**IV: CONCLUDING REMARKS**

The case study based on Bangladeshi private limited company names AREANA phone finds internal audit is relevant and contributing for private limited company also and finding suggest that the internal audit compares to an explicitly define set of criteria what the organization does, whether those criteria define and represent internal audit policies and procedures and also try to define standards or certification requirements and regulations. From this case study the findings have research and policy implications and lacks of some contextual factor, internal audit may fail to provide appropriate services. We can may also contribute to make the internal audit relevant by implore two factor, successful and to attain audit objectives. These two factors are i) top management should provide internal auditors as more supports as possible to keep auditors independent and ii) increase the number of professional qualified staff in audit department to employ qualifies audit personal. So if it's possible to apply this suggestion appropriately then it will have made internal audit trustworthily and contributing.

This case study is based on only one company which may be considered to be its limitation so these result cannot be generalized for other big companies. Further research can be applying on solely considering internal audit influence on internal control system in private limited company.

**REFERENCES**

- [1] ISO 19011:2011. Guidelines for auditing management systems.
- [2] ITIL glossary and abbreviations. London (UK): Cabinet Office; 2011.
- [3] Sarbanes–Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745.
- [4] Committee of Sponsoring Organizations of the Treadway Commission. Internal control—Integrated framework. New York (NY): Committee of Sponsoring Organizations of the Treadway Commission; 2013.
- [5] Committee of Sponsoring Organizations of the Treadway Commission Enterprise risk management—Integrated framework. New York, NY: Committee of Sponsoring Organizations of the Treadway Commission; 2017.
- [6] Committee of Sponsoring Organizations of the Treadway Commission Internal control—Integrated framework. New York, NY: Committee

- of Sponsoring Organizations of the Treadway Commission; 2013.
- [7] Institute of Internal Auditors International standards for the professional practice of internal auditing. Altamonte Springs (FL): Institute of Internal Auditors; 2012 October.
- [8] National Institute of Standards and Technology Guide for assessing the security controls in federal information systems and organizations. Gaithersburg (MD): National Institute of Standards and Technology, Computer Security Division; 2010 June. [special publication 800-53A revision 1].
- [9] American Institute of Certified Public Accountants Reporting on controls at a service organization. Durham (NC): American Institute of Certified Public Accountants; 2011. [Statement on Standards for Attestation Engagements No. 16]. February 2013].
- [10] Presidency, The. 2013. MPAT management performance assessment tool: National Departments score cards. [Online] Available from: file:///C:/Users/user/Downloads/National%20Score%20Cards%202013.pdf. [Accessed: 31 January 2014].PSC: See Public Service Commission.
- [11] Public Service Commission. 2010. State of the public service report. [Online] Available from: <http://www.info.gov.za/view/DownloadFileAction?id=134177>. [Accessed: 26 October 2011].
- [12] Public Service Commission. 2011. Fact sheet on the state of the public service. [Online] Available from: [http://www.psc.gov.za/documents/2013/FACT%20SHEET%20ON%20THE-%20STATE%20OF%20THE%20PUBLIC%20SERVICE%20-%20FINAL\(2\).pdf](http://www.psc.gov.za/documents/2013/FACT%20SHEET%20ON%20THE-%20STATE%20OF%20THE%20PUBLIC%20SERVICE%20-%20FINAL(2).pdf). [Accessed: 13 March 2017].
- [13] Guidance on Exhibit 300—Planning, budgeting, acquisition, and management of IT capital assets. Washington, DC: Office of Management and Budget; 2011 August.
- [14] ISO/IEC TR 24748-1:2010. Systems and software engineering—Life cycle management. [24] ISO/IEC 15288:2008. Systems and software engineering—System life cycle processes.
- [15] Kissel R, Stine K, Scholl M, Rossman H, Fahlsing J, Gulick J. Security considerations in the system development life cycle. Gaithersburg, MD: National Institute of Standards and Technology, Computer Security Division; 2008 October. Special Publication 800-64 revision 2.
- [16] The Basics of IT Audit: Purposes, Processes, and Practical ...lily.staff.gunadarma.ac.id › Downloads › files › The-Basics-of-IT-Audit-Pur...
- [17] (Abou-El-Sood et al. 2015; Kutum et al. 2015; Christensen E t al. 2015; Jacobus 2015).
- [18] (Dittenhofer 1994; Liebowitz et al. 2000; Burnaby and Hass 2009; Bailey 2010).