Chapter No. 5 Information System Audit Management and ISA Professionalism

- Introduction
- Managing the Information System Audit Function
 - o Planning Function
 - o Organizing Function
 - Staffing Function
 - o Leading Function
 - Control Function
- Information System Audit Professionalism
- Future of Information System Auditing

4 Introduction:

The common element between any manual audit and IS audit is data integrity. All types of audits (information audits) have to evaluate the data integrity. Since IS audit involves efficiency and effectiveness, it includes some elements of management and proprietary audit too.

IS audit evaluates the IS management function. According to COBIT, there are five IS resources. People, application systems, technology, data, and facilities. The IS management function can be divided into four phases, like any other management function.

- ✓ Management (which is equivalent for planning and organization)
- ✓ Implementation and deployment
- ✓ Directing and controls
- ✓ Audit and monitoring.

Managing the Information System Audit Function: Chasing best practices is not enough to ensure a highly successful audit organization. To add value to the company and excel in the audit world, internal auditors must be agile in anticipating change, using resources, and partnering with management to address risks and improve operations.

Planning Function:

Audit planning is a vital area of the audit primarily conducted at the beginning of audit process to ensure that appropriate attention is devoted to important areas, potential problems are promptly identified, work is completed expeditiously and work is properly coordinated. "Audit planning" means developing a general strategy and a detailed approach for the expected nature, timing and extent of the audit. The auditor plans to perform the audit in an efficient and timely manner

An **audit plan** is the specific guideline to be followed when conducting an audit. It helps the auditor obtain sufficient appropriate evidence for the circumstances, helps keep audit costs at a reasonable level, and helps avoid misunderstandings with the client. It addresses the specifics of what, where, who, when and how:

- What are the audit objectives?
- Where will the audit be done? (i.e., scope)
- When will the audit occur? (How long?)

- Who are the auditors?
- How will the audit be done?

Benefits of audit plan

- It helps the auditor obtain sufficient appropriate evidence for the circumstances.
- It helps to keep audit costs at a reasonable level.
- It helps to avoid misunderstandings with the client.
- It helps to ensure that potential problems are promptly identified.
- It helps to know the scope of audit program by an auditor.
- It helps to carry out the audit work smoothly and in a well-defined manner.

Process of audit planning - It includes following procedures

- Knowledge of client's business, which includes financing, legal framework, government norms, investments, accounting policies, business risk and financial risk
- Development of audit strategies or overall plan (who, when and how)
- Preparation of audit programme.
- ➤ <u>Organizing Function</u>: Organizing is nothing but gathering, allocating and coordinating the resources needed to accomplish the IS audit goal. The planning function establishes goals and objectives for IS within an organization.

In organizing function, the manager needs to synchronize and have to make sure everything is going according to the plan. Everything should work as per the plan, and if not then the manager needs to look into the issue and make it work as planned. **Example** – A software tester is required, so organize the venue, date and time to interview those eligible for the post.

It is the process of bringing together physical, financial and human resources and developing productive relationship amongst them for achievement of organizational goals. According to Henry Fayol, "To organize a business is to provide it with everything useful or its functioning i.e. hardware, software, personnel, finances and facilities". Top management must ensure that sufficient resources are available to the IS function for it to be able to fulfil its role. To organize a business involves determining & providing human and non-human resources to the organizational structure. Organizing as a process involves:

- Identification of activities.
- Classification of grouping of activities.
- Assignment of duties.
- Delegation of authority and creation of responsibility.
- Coordinating authority and responsibility relationships.
- **Staffing Function:** In simple words, staffing means grouping of people into different teams and allotting different tasks to them. If the team members have some disputes then the team member needs to report to the team leader who will forward it to the manager and the issue will be taken care of. **Example** Assembling a new team for a new project. It involves three major activities:

- Acquisition of information system personnel.
- Development of information system personnel.
- Termination of information system personnel.

It is the function of manning the organization structure and keeping it manned. Staffing has assumed greater importance in the recent years due to advancement of technology, increase in size of business, complexity of human behavior etc. The main purpose of staffing is to put right man on right job i.e. square pegs in square holes and round pegs in round holes. According to Kootz & O'Donell, "Managerial function of staffing involves manning the organization structure through proper and effective selection, appraisal & development of personnel to fill the roles designed un the structure". Staffing involves:

- Manpower Planning (estimating man power in terms of searching, choose the person and giving the right place).
- Recruitment, Selection & Placement.
- Training & Development.
- Remuneration.
- Performance Appraisal.
- Promotions & Transfer.
- **Leading Function:** Motivating, Guiding and Communicating with personnel is the job of leading function.
 - Motivating IS personnel: Auditors can examine variables that often indicate when motivation problems exists. For instance, staff turnover statistics, frequent failure of projects to meet their budget.
 - Matching leadership styles with IS personnel and their jobs: Managers who adopt an effective leadership style exhibit certain characteristics like awareness, empathy, objectivity and self-knowledge.
 - Leadership styles must vary depending upon personalities and task.
 - Effectively communicating with IS personnel: Effective communications are essential to conduct of high-quality planning, organizing, and controlling. Effective communications are also essential to promoting good relationship and sense of trust among work colleagues.
 - Auditors can use both formal and informal sources of evidence to evaluate how well top managers communicate with their staff.
 - The formal sources include IS plan, documented standards and policies, the minutes of meetings, and memoranda distributes to information system staff. We can evaluate this evidence to determine how clearly it communicates top management intentions.
 - The informal sources of evidence include interviews with IS staff about their level of satisfaction with the ways top managers communicate their wishes, observations of whether a sense of purpose seems to exist among members of a project group, and assessments of the general awareness that staff possess of activities being carried out within the IS function.

Hence, auditors must try to assess both the short-run and long-run consequences of poor communications, motivation skills and the leadership styles within the information system function and to assess the implications for asset safeguarding, data integrity, system effectiveness, and system efficiency.

- **Control Function:** Comparing actual performance with planned performance and taking corrective actions that are needed.
 - The level of control exercised over the information systems function needs to vary depending upon whether top management wish to encourage diffusion of new technologies or constrain use of existing technologies.
 - Policies and standards are an important means of exercising control over the IS function.

Control is one of the managerial functions just like planning, organizing, staffing and directing. It is an important function because:

- It helps to check the errors,
- Helps in taking the correct actions so that there is a minimum deviation from standards and,
- In achieving the stated goals of the organization in the desired manner. According to modern concepts, control is a foreseeing action. Whereas the earlier concept of control was used only when errors were detected.

Controlling can be defined as that function of management which helps to seek planned results from the subordinates, managers and at all levels of an organization. The controlling function helps in measuring the progress towards the organizational goals & brings any deviations & indicates corrective action. Thus, an overall sense, the controlling function helps and guides the organizational goals for achieving long-term goals in future.

Controlling is one of the important functions of a manager. In order to seek planned results from the subordinates, a manager needs to exercise effective control over the activities of the subordinates. In other words, the meaning of controlling function can be defined as ensuring that activities in an organization are performed as per the plans. Controlling also ensures that an organization's resources are being used effectively & efficiently for the achievement of predetermined goals.

- ✓ Controlling is a goal-oriented function.
- ✓ It is a primary function of every manager.
- ✓ Controlling the function of a manager is a pervasive function

Information System Audit Professionalism:

Since it was becoming essential to audit Information System of the organization, one more avenue of career is opened, i.e. "Information System Auditor". It is interesting to pursue a **career as an auditor**. Auditors are the professionals that prepare and examine records. They ensure that the records of a company are accurate and maintaining integrity. They also assess procedures or operations and work to help ensure that companies run efficiently. Auditors have to look after multiple roles from examining financial statements to

comply with laws and regulations. These are just a few tasks that you, as an auditor would have to take care of. It is an intensively complex career path and involves multiple job responsibilities. Sometimes the specialization of an auditor totally depends upon the type of organization they work for. Some of the auditors specialize in assurance services, risk management, while, others specialize in more specific industries like education, healthcare.

Eligibility to become Auditor

Becoming an auditor is a step-by-step process and candidates are required to follow the given steps to make a career in the same.

Step 1:

- ✓ To become an auditor, the candidate must have a bachelor's degree, generally in Accounting. However, some employers prefer candidates with a relevant master's degree in accounting or an MBA.
- ✓ Knowledge of Computer and its technologies would be added advantage.

Step 2:

- ✓ Obtain relevant certifications. Most of the companies have made it mandatory for auditors to have certifications such as CA, ICWA, CS.
- There are certain auditor certifications provided by international audit associations such as the Institute of Internal Auditors (IIA), Information Systems Audit and Control Association (ISACA) etc which are globally accepted.
- ✓ Also, CISA qualified Auditors have been recognized as qualified to conduct Systems Audit by Reserve Bank of India (RBI), Ministry of Information Technology (MIT), National Stock Exchange, Comptroller and Auditor General of India (C&AG).

Knowledge, Skills, Abilities:

- ightarrow Current knowledge of information systems trends and developments.
- → Ability to review and evaluate PC, production, information security, and applications systems.
- → Ability to review and evaluate disaster recovery and system backup plans.
- → Effective written and oral communication skills.
- → Effective analytical skills in gathering data, interpreting information, and reporting results.
- → Ability to exercise professional judgment in evaluating information and making recommendations.
- → Requires moderate travel.

Career Opportunities for an Auditor: Auditors are required in all the major sectors Both government and private firms require an auditor to manage their finances. Let's look at some of the employment opportunities available for an auditor:

- ✓ Government
- ✓ Finance and Insurance
- ✓ Public Sector Undertaking (PSUs)

- ✓ Accounting, Tax Preparation, Bookkeeping and Payroll Services
- ✓ Management Consultancy

Pros of becoming a Auditor

- 1) If your an auditor, it gives you a much clearer career path as compared to others.
- 2) The job prospects for an auditor are to expand in the coming years.
- 3) Once an auditor has adequate experience and is a part of companies decision making they will get very high salary packages and other perks.
- 4) You get an opportunity to move from client to client and from office to office applying your skills and knowledge to a new set of circumstances which helps you build experience and expertise.

Cons of becoming a Auditor:

- 1) Unlike other industries, the learning doesn't stop for an auditor. To progress in their career, the auditor will require to upgrade skills and certifications from time to time.
- 2) When you are responsible for an organization's information system, there is bound to be some pressure which can lead to stress.

♣ Future of Information System Auditing:

The survey results show that auditors are increasingly becoming an integral part of or strong partners to an organization's technology team. Most of the auditors are moderately or significantly involved in technology projects within their organizations. Auditors expect their level of involvement to improve in the next three to five years. The survey results also show an increased demand for technical skills and the impact new technologies may have on the IT audit profession. Despite the advancement of automation and artificial intelligence (AI), most predict an increase in the number of IT audit professionals needed to meet the challenges of these new technologies. There is, however, widespread belief that the role of the auditor will change in the future, affording the audit professional an opportunity to bring increased value to the enterprise.

The role of the IT auditor is changing, and auditors need to adapt to both the technology changes and the cultural and organizational expectations required of them. It is incumbent that, to remain relevant, an IT auditor needs to seek the necessary technical training he or she needs, particularly on AI, predictive analytics, machine learning and other emerging technologies planned for use in the auditor's enterprise. Additionally, the IT auditor must actively participate in technology projects and become a trusted advisor to business stakeholders. This is crucial, as the auditor is expected to point out both the pitfalls and the opportunities of new technologies to add value to the enterprise.