Audit Sampling, Techniques & Procedures

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What is Auditing

- **Auditing** - Expression of an opinion

- Systematic & independent examination of books, accounts, documents & vouchers of an organization

- Ascertain that the financial statements present a true & fair view of the concern.

- Ensure that the books of accounts are maintained as required by law.

Types of audit

- Statutory Audit
- Internal Audit
- Concurrent Audit
- Tax Audit
- Stock Audit
- RBI Inspections
- Special Audit
- Special Assignment
- Due diligence Reporting

Audit Sampling

- Applying audit procedure to < 100% of the population

- Based on objective of the Audit

  - sufficient understanding of internal control structure to plan the audit & determine nature, timing & extent of tests to be performed

  - Standards on Auditing 530 applies when auditor decides to use audit sampling in performing audit procedures

  - Deals with auditor's use of statistical & non statistical sampling in designing & selecting the audit sample.

Selection of audit sample

- Consider the objectives of the audit procedure.

- Characteristics of the population.

- Assist in effective & efficient design of sample, stratification maybe appropriate.
  - Stratification - Process of dividing a population into sub-populations

Key points - Audit Sampling

When determining sample size, auditor should consider-

Sampling risk	Tolerable error	Expected error
• Risk is an uncertainty, threat or vulnerability derailing the achievement of an objective • Risk is a function of probability & demand	• Tolerable Error is the maximum error in the population that the auditor would be willing to accept.	• Determining expected error consider matters as- • the size & frequency of errors identified in previous audit, • changes in Entity's procedures & evidence available from other procedures.

If error is expected to be present in the population, a larger sample need to be examined.

Auditor should select sample items in such a way that the sample can be expected to be representative of the population.

Risk that the results from the sample selected may not be representative of the entire population.

Analysing Audit Sample

- Investigate nature & cause of any deviation or misstatements identified & their possible effects.

- To conclude that a misstatement or deviation is an anomaly.

- Auditor to obtain a high level of certainty that misstatement or deviation is not representative of the population.

Methods of Audit Sampling

Non-Random Sampling

- Systematic Sampling
- Selected/ Targeted Sampling
- Haphazard Sampling

Random Sampling

- Simple Random Sampling
- Adaptive Sampling
- Stratified Random Sampling
- Cluster Sampling
- Restricted Random Sampling
- Two-Stage Sampling
- Unequal Probability Sampling
- Double Sampling
- Spatially-balanced Sampling

Statistical Sampling

- **Random Sampling** - selecting items from the population so that each item has an equal chance of being selected.

- **Systematic Sampling** - selecting every nth item from the population after a random start.

Non-Statistical Sampling

- **Haphazard Sampling -** selecting items from the population without consideration to known characteristics of the items in the population (i.e. any conscious bias in the selection of population items).

- **Block Sampling** - selecting items from the population in contiguous groups (or blocks).

- **Directed Sampling** - selecting items from the population using some pre specified criteria (i.e., selecting accounts receivable for confirmation based on amount of outstanding)

Disadvantages of sampling

- Sample transactions could be proper accounting methods, but other transactions not included in the sample could show evidence of fraud.

- Auditors may find few incriminating sample data points & extrapolate a deeper level of fraud from these when one does not necessarily exist.
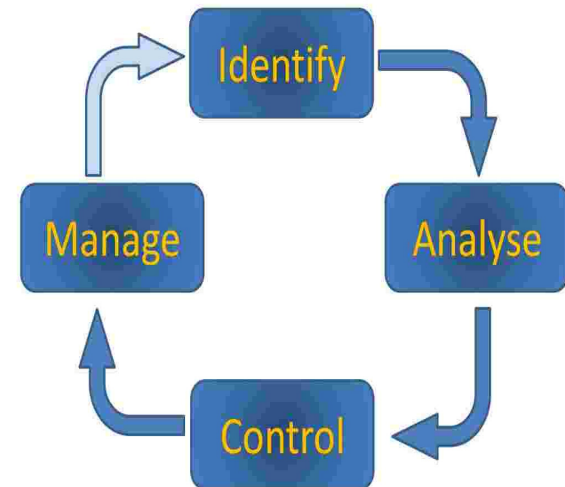
The risk of incorrect acceptance-
Recorded account balance is not materially misstated when it is materially misstated.

The risk of incorrect rejection-
Recorded account balance is materially misstated when it is not materially misstated.

The Cache Risk Model

Identify

Analyse

Control

Manage

Sampling Advantage & Disadvantage

Advantage	Samples	Disadvantage
• Suitable for small populations	Simple Random	• Not practical for large populations
• Quick • Easy to check for errors	Systematic Random	• There may exist periodic cycles within the frame, which makes the data inaccurate
• Good for populations with distinguishable layers	Stratified Random	
• Convenient, no need to have a complete sampling frame • Less costly	Clusters	• Non-random • May not give a precise picture of the population
• Quick • Has minimum complications	Quota	• Non-random • There's a possibility of bias • Difficult for those who refuse to take the survey. If replaced by someone else, the data might be inaccurate

Audit Techniques & Procedures

Audit techniques	Audit procedures
• Tools, methods or processes by means of which an auditor collects necessary evidence to support his opinion in respect of the propositions & assertions submitted by the client to him for his examination.	• Ways of applying techniques to particular phase of an audit

Audit Techniques

1) Posting Verification

2) Vouching

3) Confirmation

4) Physical Examination

5) Reconciliation

6) Testing

7) Analyses of Financial Statements

8) Inspection

9) Observation

A. Planning the Sample

Step 1	State the objectives of the audit test.
Step 2	Decide whether audit sampling applies.
Step 3	Define attributes and exception conditions.
Step 4	Define the population.
Step 5	Define the sampling unit.

Audit Techniques

10) Documentary examination

11) Scanning

12) Electronic Data processing

13) Enquiry

14) Computation

15) Analytical Review

16) Compliance test

17) Substantive test

18) Use of computer Assisted audit techniques

| Total (Sampled)	Audited	Under Observation	Need Clarification
92 (11)		1	2
40	3	2	5
26		2	2
9	2	1	1
12	1		1

Allowable Audit Risk

$$AR = IR \times CR \times DR$$

- **AR - Allowable audit risk** that a material misstatement remains undetected
- **IR - Inherent risk** of a material misstatement assuming there were no related controls.
- **CR - Control risk** that a material misstatement could occur & will not be prevented or detected on a timely basis by internal control.
- **DR - Detection risk** that the auditors' procedures will fail to detect a material misstatement if it exists.

Risk based Audit

- Resources to be diverted based on level of risks (H / M / L)

- Design of Control – Control Effectiveness

- Dip sticks / Walk through

- Transaction audit is passé – Process based risk audits.

- Easy to give a negative opinion

| Identification | → | Assessment | → | Evaluation | → | Management | → | Response | → | Monitoring |
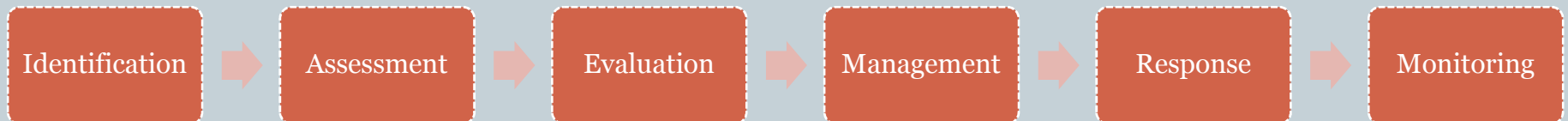
Continuous Control Monitoring

- Set of technologies to reduce business losses through continuous monitoring.

- Reducing the cost of audits through continuous auditing of the controls in financial & other transactional applications.

- 100% real time monitoring.

- Deviations / Exceptions highlighted.

- Entry not allowed to be processed.

Continuous Audit

- **"Continuous"** aspect refers to the -real-time or near real-time capability for financial information to be checked & shared.

- Indicates integrity of information to be evaluated at any given point of time.

- Information verified constantly for errors, fraud & inefficiency.

- Automatic method used to perform auditing activities- control & risk assessments on a more frequent basis.

- Technology - key role helping automate identification of exceptions or anomalies.

- Analyze patterns within the digits of key numeric fields, review trends & test controls.

- Most detailed audit

Advantages of Continuous Audit

- Detailed analyses of data

- Minimal Audit risk

- No sampling risk

- Detection of errors & frauds at an early stage

Challenges in Continuous audit

- Accessing complex, diverse system environment

- Reluctance to expand the use of technology

- Overwhelming results

- Training

Documentation

- Work papers

- Records of planning & performance of work

- Demonstrates that the work was actually performed

- Evidential support for conclusions reached

- Assessment of quality & compliance

Perfection is not attainable ,but if we chase perfection we can catch excellence

THANK YOU