Summary Ch-6 Notes ISCA by CA Amruta Shevde

Auditing of Information Systems

Introduction to IS Audit

Factors influencing org^n towards controls & Audit of computers
C-PEDD CV

- Computer error costs
- Privacy
- Evolution of computer use
- Data loss - Org^n costs
- Decision incorrect costs
- Computer Abuse Costs
- Value of comp Hardware, Software & Personnel

Impact of IS Audit function on organisat^n
Enables Better achieve foll. 4 objectives
DASS

- Data Integrity Objective
- Asset Safeguarding Objective
- Sys effectiveness Obj
- Sys Efficiency Obj

Effects of computers on audit

- Changes to Evidence Collection
  - Data Retention & storage
  - Printed output not available
  - Audit evidence
  - Input docs absent
  - Legal Issues
  - Audit trail non available
- Changes to Evidence Evaluation
  - System generated transactions
  - Systemic Error
  - Automated transact^n processing sys.

D-PAILA

ASS

Definition

IS Audit of IS environment may include 1 or both of following:

1) Assessment of internal controls within IS environment to assure validity, reliability & security of information & information systems.

2) Assessment of the efficiency & effectiveness of IS environment

IS Auditor

Skills generally expected
PK'S - IISB - BP

- Professional technical qualifications & certifications
- Knowledge of business operat^n, practices & compliance req
- IT strategies knowledge
- Understanding of Info Risks & control's
- Knowledge of Professional Standards
- Knowledge of Best Practices of IT control & sec
- BCP control's understng
- Policy & Procedural control's knowledge

Fauditors review risks relating to IT sys & processes. Some of them are:
FC - GPRS

- IT related frauds
- Security controls inadequate
- Governance poor
- Policies & practices ineffective
- Resources use ineffluent
- Strategies ineffective

IS Audit

Types
MISS T

- Management of IT and Enterprise Architecture
- Info Processing Facilities
- Systems & App^n
- Systems Dvpt
- Telecomm^n, Intranet & Extranets

Steps in IS Audit
P-SPF-ARC

- Pre audit survey
- Scoping
- Planning
- Fieldwork (gather evidence)
- Analysis (sort, Review & make sense of evidence coll^n)
- Reporting to Management
- Closure

Inherent Limitations of IS Audit (in general)
C-GF PORTL

- Legal Noncompliance
- Time reasonable
- Related Party Transf^n
- Cost reasonable
- Going concern ceased due to future events
- Fraud (particularly Senior Mgt / collusion)
- Persuasive Audit Evidence
- Omission of Audit Procedure Not possible

Performing IS Audit PTO#

IS Audit Info given by org^n

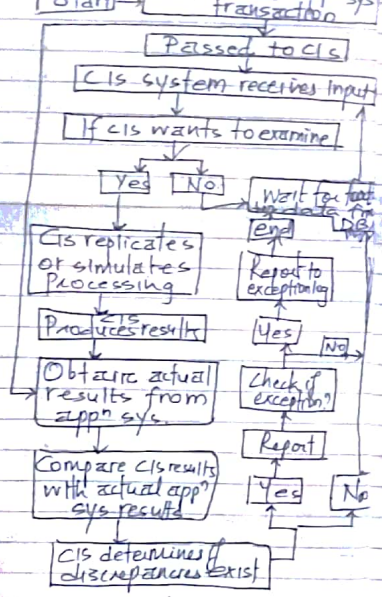
- ISACA (IS Audit & Control Asso)
  - IS Aud Stds
  - IS Aud Guidelines
  - IS Aud Procedures
  - COBIT
- ISO 27001
- Internal Audit Standards by Institute of Internal Auditors
- Stds on Internal Audit by ICAI
- ITIL (IT Infra Library)

Performing IS Audit

Types of Audit Tools & Types of CATs - Continuous Audit Techniques

HIS-CS

- Audit Hooks (Flag suspicious trn°)
- Integrated Test Facility
  - Create Dummy
    - Ledger
    - Company
  - Live data/ Actual data
    - Never touch
    - How to enter
      - Tag Data
      - Pass Normal entry
    - How to remove after checking
      - Ignore tag data !!
      - Pass reverse entry
  - Test data
- Snapshots (Use images to assess authenticity, accuracy & completeness of processing carried out on trans°)
- SCARF (System Control Audit Review File)
  SCARF used to collect following types of info
  - Variances - Policy & Procedures
  - Exceptions in Systems
  - Profiling Data
  - Records extension
  - Errors in App° System
  - Statistical Sample
  - Snapshots
- Continuous & Intermittent Simulation (CIS)



PTO

Advantages of CATs / DT-CIT's

- Detailed Auditing Evidence
- Timely Auditing Evidence
- Comprehensive Auditing Evidence.
- Info to staff on meeting Objectives
- Surprise test capability
- Training new users

Disadvantages/Limitations of use of Continuous Audit Techniques (5)

- 5 Ways of validation
- Key audit concern is that ~~sensitive~~ data to reveal sensitive data

(Ctp continued) Concepts under Performance Audit

Materiality & Significance

- Includes both quantitative & quantity factors
- It is used by IS Auditor
  - Materiality (Financial Audits)
  - Significance (Performance Audits)
- Used to plan both effective & efficient audit procedures.
- Used to determine the planned nature, timing & extent of audit procedures
- On basis of M&S, some areas may be very imp. not material. Hence, some may warrant less time.
- It is iterative

Audit Testing

- Auditor determines nature, timing & extent of testing
- Auditor to devise audit testing plan & methodology to determine controls effectiveness
- CATs can be used to audit
- Test with both valid & invalid data to check ability to detect error
- Check extent of error det°/corrd°/prev

Auditing of IS

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Refer PM

Risk based approach to Make Audit Plan

- Inventory Sys in use • Categorise em
- Determine sys impacting critical functions or assets.
- How close to real time do sys operate
- What risks affect? Severity of impact
- Decide priority, resources, schedule, etc

Basic Plan

- Extent of planning varies according to size, complexity, experience & knowledge of b.
- Knowledge of business.
- Discussion of elements of Audit Plan with Audit Committee/Mngt/staff to improve eff. of A plan.
- Auditor's responsibility: develop & doc. the Plan.
- Vary as per specific Methodology & tech. used by auditor.
- Iterative.
- Plan → Underlying A. Program & A. Methodology

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Preliminary Review

- Risk Assessment }
- Materiality }
- Technology understand [7]
- ICS understand.
- Legal considerations }
- Audit standards }
- Knowledge of business [6]

Audit Risks — Inherent, Control & Detection