The use of CAATS in Auditing Application Controls
Agenda

• IT Influence on audit
• Auditing Around the Computer
• CAATS
• Questions
IT Influence on Business

- Imagine auditing one of the banks in 1930 compared to 2014

- Clearly the level of technology has changed

- Significant reliance on IT by businesses

- Wide spread use of computer systems has resulted in many controls becoming automated or imbedded in computers

- IT systems that significantly automate the process of initiating, recording, processing or reporting financial information, such as integrated enterprise resource planning systems
IT Influence on Business

- Electronic data interchange and payment transfer systems that electronically transmit (paperless) orders and payments from one computer system to another

- Systems that provide electronic services to customers. In these situations, the IT system automatically initiates bills for the services rendered and processes the billing transactions

- Automated reasoning systems (ARS) (e.g., artificial intelligence systems) that employ complex if/then rules to make decisions (for instance, dynamic tariffing system that automatically changes the tariff based on time of day and level of congestion)

- Computer programs containing algorithms or formulas that make complex calculations, such as automatically computing commissions, allowance for doubtful accounts, reorder points, loan reserves and pension funding calculations
Implications

- Loss of visibility of records
- Possibility of systematic error
- Controls have changed in two ways:
  - manual controls and unsophisticated computer-based controls being imbedded
  - new control techniques dependent purely on computers
IT Influence on Audit Approach

- Controls that are operating over millions of transactions
- An increase in computerisation, which is wiping out the physical paper trail that Auditors rely on
- Much greater regulatory focus on fraud and controls
- Huge pressure on costs and getting more out of current resources
- The need to manage increasing risk effectively
- Pressure on Internal audit to justify and demonstrate the value they deliver to the organisation
- Auditing standards that advocate or require the use of data analysis
- Traditional approaches to auditing no longer adequate
What Are CAATS?

- **Definition**

  ✓ All the techniques and aids which allow an auditor to access and view system data or the operation of software using the computer itself

  ✓ CAATS include continuous monitoring tools

**Interrogation Software**
- ACL
- IDEA
- SAS
- Cognos
- Excel

**Utility Software**
- Sekchek
- Dumpacl
- Microsoft Baseline Analyser
- ACTT
- EQSmart

**Test Data**
CAATS Uses

CAATs may be used in performing various audit procedures including:

- Tests of details of transactions and balances
- Analytical review procedures
- Compliance tests of IS general controls
- Compliance tests of IS application controls
- Penetration testing
Why Apply CAATs?

- Perform audit test over 100% of population
- Save significant amount of time
- Perform tests that are impossible to do manually
- Views of data that the client can’t produce
- Fraud and error detection
CAATS Functions (Basic) – Data Analysis

- Count
- Total
- Statistics
- Filters
- Extract
- Export
- Classify
- Stratify
- Age
- Summarise
- Filters
Examples Of CAATS Applications

- Recomputation of interest receivable/payable (Banks) – Includes completeness tests
- Recomputation of billed calls (Fixed & Mobile Networks) – includes tests for completeness of billing
- Recomputation of bills (Utility)
- Reconciliation between Subledgers and General ledger postings
Examples Of CAATS Applications

- Verification of the accuracy or system generated reports
- Tests of controls within debtors, creditors, inventory, payroll, fixed assets applications
- Data integrity tests
- Segregation of Duties tests
Examples Of CAATS Applications - Sales

- The debtors module is configured to reject sales orders if the credit limit will be exceeded as a result of the order. The auditor should test if this rule was applied on all sales orders.

- Obtain
  - debtors master file
  - debtors opening balance file
  - sales transactions file
  - Sort transactions by date and time
  - Calculate the balance after each transaction

- Relate the transaction file to the master file

- Compare the balances against the credit limit

- Extract balances in excess of credit limit
**Examples Of CAATS Procurement**

1. Users are granted privileges to originate and approve purchase orders. No person should originate and approve an order.
   - Obtain the Purchase order file
   - Filter all orders where the originator = the approver

2. If goods delivered exceed goods ordered by more than 5%, the system should reject the receipt of the goods into stores.
   - Obtain
     - Purchase order file
     - Purchase receipt file
   - Calculate the total quantity received for each order
   - Relate the two files
   - Extract orders where the qty received > qty ordered
Using Test Data

- Auditor processes transactions either the live system or a testing platform to test the functionality of the application.

- Where a testing platform is used, the auditor should check that the system configuration is the same as on the live platform.

- Auditor should be aware that:
  - test data only point out the potential for erroneous processing;
  - this technique does not evaluate actual production data.
  - test data analysis can be extremely complex and time consuming, depending on the number of transactions processed, the number of programs tested, and the complexity of the programs/system.

- Before using test data on the live platform, the auditor should verify that the test data will not permanently affect the live system.
Demystifying CAATs

• You do not need to be a computer specialist to run most CAATS applications

• Tests performed using CAATS are subject to the ISACA and IIA planning and documentation standards

• Knowledge of the business processes is important

• Personal initiative and drive is key
Questions & Comments