

Auditing Using Technology

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Audit - Method.....

Examination or Inspection of Evidence Re-Observation performance Inquiry **CAAT** Method of Audit **Identification of Control** Manual Control System Control CA Amit Kumar Heda

Method of Audit.....

<u>Inquiry:</u> Simply, the auditor asks appropriate management and staff about the controls in place at the service organization to determine some relevant information. Such as, an auditor may inquire of management if visitors to the data center are escorted at all times if the auditor is not able to observe this activity while on site. No control objective or criteria should ever be supported by controls only tested through inquiry procedures.



<u>Observation</u>: Activities and operations are tested using observation. This method is useful when there is no documentation of the operation of a control, such as observing that a security camera is in place or observing that a fire suppression system is installed.



<u>Examination or Inspection of Evidence:</u> This method is used to determine whether or not manual controls are being performed. Such as, are backups scheduled to run on a regular basis? Are forms being filled out appropriately? This method often includes reviewing written documentation and records such as employee manuals, visitor logs, and system databases.

Method of Audit.....

<u>Re-performance</u>: This method is used when the above three methods combined fail to provide sufficient assurance that a control is operating effectively or this method can be used to prove by itself to demonstrate that controls are operating effectively. This method of testing (as well as a CAAT) is the strongest type of testing to show the operating effectiveness of a control. Re-performance requires the auditor to manually execute the control, such as re-performing a calculation that a system automatically calculates.



<u>CAAT</u>: This method can be used to analyze large volumes of data, or just be able to analyze every transaction rather than just a sample of all transactions. Software is generally used to perform a CAAT, which can range from using a spreadsheet to using specialized databases or software designed specifically for data analytics -EXCEL/MS ACCESS/ACL/IDEA/SAS/R/Python

Data Analytics/Data Mining Tools & Technology

























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About Tool - ACL

ACL Analytics is now called ACL Robotics. ACL has also rebranded, they are now called Galvanise. All their software are now on High bond, an end-to-end platform, designed by industry experts, to create stronger security, risk and assurance. ACL continues to be one of the most highly rated CAATs (Computer Assisted Audit Tool) because of its valuable contribution in;

Data mining,
Data analysis and visualization,
Predictive analytics,
Fraud investigation,
Internal and external audit,
Operational analysis,
Revenue Assurance,
etc..

Some of the recent great developments in ACL is its integration with Machine Learning Languages such as Python and R, thereby making it possible to predict or to forecast trends. However it is not open-source and being an expensive option.

About Tool SAS - R - Python

<u>SAS</u>: SAS has been proved as one of the unchallenged leaders in the field of data science. It is known for its huge variety of statistical functions, good GUI and great technical support experience. It is also easy to learn, However it is not open-source and being an expensive option.

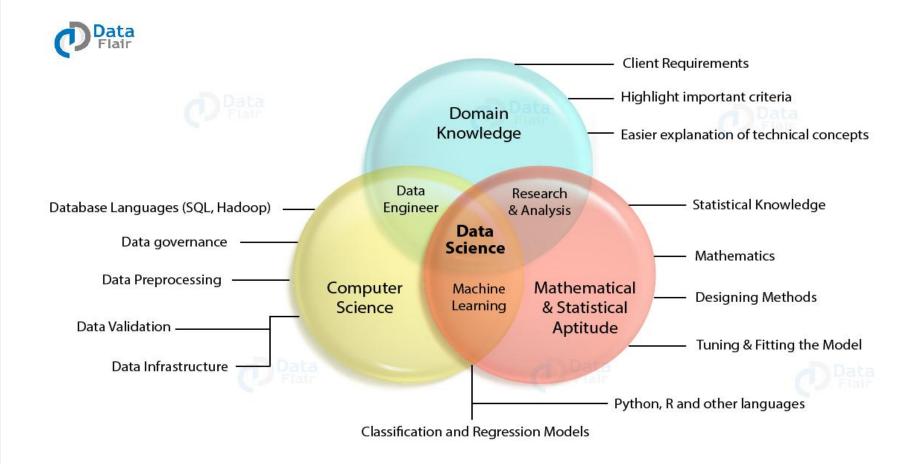


R: R is a counterpart of SAS and is free as it is an *open-source platform*. It is widely used among statisticians and data miners for developing statistical software and data Analysis.



<u>Python</u>: Python is an interactive and interpreted <u>high-level</u> <u>object-oriented</u> programming language. It is known for <u>simplicity</u> and <u>clear syntax</u> which in turn increases readability. It is easy to learn and understand. It is largely used as an <u>open-source</u> scripting language that supports many <u>libraries</u> used for model building or statistical operation on data.

About Data Science



Golden rules for Data Science

Extract Value of Data

Not Software Engineering

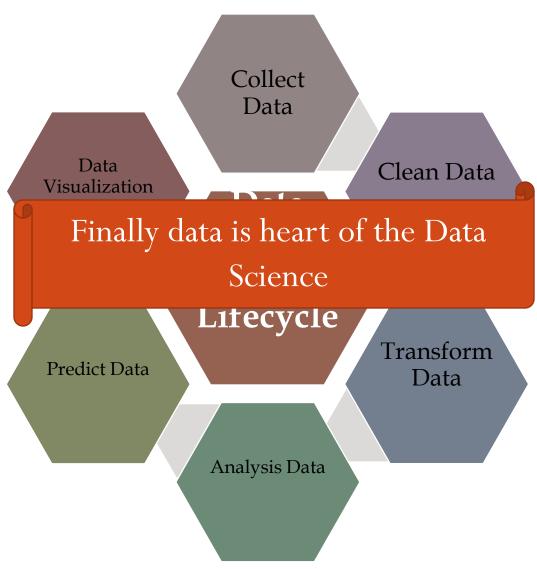
Goal of programming in Data Science

Solve a Business Problem

programming is means to end

One

Golden rules for Data Science



Golden rules for Data Science

Become jack of all tools but master only one tool

Mastery in one Tool > beginner in many Tools

Which Tools should I learn/master ???????

Audit Type - Assignment

Internal
External
Operational
Compliance
Information System
Payroll
Pay

Statutory
IT Tax
GST Tax
Excise
PF/ESIC

Financial
TEV
Due Diligence
Concurrent Revenue
Stock
Forensic

Collection of Information (External/Internal)



Various Reports From Web



Master Data of Company
Director Present
Director status in other company
Charge with FI
Company Merger
Default Company \$ Director
Financial of Company



Same as MCA site, however some details additional details



Same details with some graphics presentation

Various Reports from Client/Auditee



Product

Plant details

Key Management

Competitor Entity

etc.



Data Dump
Details TB/GLB
Purchase Register
Sales Register
Voucher Dump
Debtors/Receivable
Creditor/Payable
GRN/IN Material
MIS
PRTOPAY



Understanding of Business Module

Investor Information

Loan/FI

Compliance

IT Return

GST Return

TDS Return

PF Return

Related Parties

Data Analysis - Case Studies - Stock Audit

- Information about Master Data of Company /Director & KMP Present & Past/ Bank Loan / Group Company Details / KMP key position in other Company / Compliance of ROC
- Input Processing Output (Time As well as Value Term)
- Analysis of Day to day Transaction / Various un-structure report i.e. Data dump in Structure data
 - Various reconciliation Sales Register vis-a-vis Debtors / Purchase Register vis-à-vis Stock & Consumption / Credit and Debit Submission vis-à-vis Payment and Receipts
 - ABC Analysis for Inventory/Analysis of Stock Item
 - Drawing Power Calculation on Details Data
 - Compliance of various low i.e. GST/TDS/PF/ESIC etc

Data Analysis - Case Studies - Stock Audit - Issue Identified

• We have noticed that receivable M/s XXXX having value of Rs. XXXX/-belongs to group company due to common director in both the companies. (covered Approx XX% of Transaction)

- M/s XXXX Parties belong to same party as Debtors as well as Creditor, we have found that payment of Rs. XXXX Lakhs reflected in book during the period. (covered approx XX% of Transaction)
- Major difference during the period in value of Unsecured loan and Advances, which XX parties related to group company with amount of Rs. XX and Rs. XX
- As seen books of account due to ITC Credit not adjusted on monthly basis, the Actual GST Credit and GST on Receivable/ Payable still unreconciled.
- The borrower not provide breakup of stock upto 90 days and above 90 days. As per sanction term DP cover period for stock upto 90 days, which our noticed that value of Rs. XXXX...excess reported on Stock Statement

Data Analysis - Bank Audit

- Conversion of various file format to excel or table form
- Analysis of Balance Report BR (Daily/Weekly/Monthly). Approx. each branch is having average 40 thousands +++ account/ledger.
- BR- New Account/deleted Account/ Disbursement.
 - BR watch on Special/Suspense Accounts / compliance of account opening pending however transaction going on....
- AWIR P-NPA / Excess Overdrawn i.e. SMA0, SMA1, SMA2.
 - Window Dressing Increase Assets and Liabilities on reporting date.
 - Month-on-Month trend about Advance/Income/ Expenses
 - Month on month review of Balance-sheet/Profit & Loss/ NPA Account.
 - Change in customer master data i.e. Specially Mobile Number.





Thank You

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