DATA ANALYTICS FOR INTERNAL AUDITORS

Data Analytics for Internal Auditors (DAIA)

DAY/S: 2 | **CPD: 16** | **LEVEL: 1,2**

DATA ANALYTICS

COURSE SYNOPSIS

Many attempts to use Data analysis as a means to accelerate audits and increase audit coverage seem to fail and this is due to lack of understanding of DATA per se. i.e. How is it structured, how is integrated, where and how to get it and finally what tools to use to manipulate the data to achieve Audit objectives.

In short, if you do not understand the data, you cannot be sure of its authenticity and thus your results from data analysis could be counter-productive or worse, provide inaccurate conclusions. Technology continues to rapidly transform the Audit Activity and it is vitally important that the IA profession keep abreast with these changes. Whether you are an Auditor currently wading in technology back-waters or you are currently utilizing Computer assisted tools to undertake audits it is crucial to understand how the source data is originated, structured, manipulated, stored, safe-guarded and utilized to produce meaningful information. To this end it is necessary for Internal Audit to understand how Application systems are designed and structured as this will form the basis for appreciating and using Data Analytics in auditing. In addition to other benefits such as improving sales, production, resource development etc., Data Analytics can be Risk-focused adding additional insights into effectiveness of Internal Control, Fraud and Compliance while enabling greater audit depth and coverage instead of restricting audit activity to sample auditing due to resource and budget limitations. Given the above, it is extremely important for Internal Audit to leverage DA in Internal Audit activity, demonstrating enhanced and visible IA value-add to the organization.

COURSE OUTCOME

- Understanding the theory and practice of Application Systems design to enable embedded auditing and continuous auditing and audit analysis of data.
- A greater depth of understanding of data definitions, structures and relationship-the basis on which Data Analytics is undertaken.
- Understanding Data Analytics
- The enablers of Data Analytics and,
- The challenges in acquiring and using Data Analytics
- Approach and Implementation Plan

COURSE CONTENT

- **Overview of Application Systems Design & Data Analytics**
  - Introduction, Definitions and Concepts of Data & Databases & Interrelated/Integrated Databases & Data-warehousing.
  - Importance & Benefits to Internal Audit
- **Designing an Application System**
  - Overview understanding of Database concepts
  - Understanding Database Relationships
  - Understanding the Application Systems design process

[Practical Session 1 – Design a database for a given Application Scenario]

- **Programming Considerations for the Database**
  - Understanding Automated Formatting and Edit Checks
  - Understanding Embedded Audit Routines

[Practical Session 2 – Consider Format & Edit Checks & embedded audit routines for your database created in Session 1]

- **Data Gathering Process for Data Analytics Activity**
  - Data collection from single and integrated databases
  - Data collection (Data mining) from data-warehouse
- **Understanding Data Analytics**
  - Overview of Data Analytics & Data Analytics Process
  - Data Analytic Tools
  - Resource Requirements and Challenges
  - Internal Audit use

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- **Using Excel and Excel Add-Ins for Data Analytics (Theory)**
  - Overview of Basic Excel tools for analytics
  - Overview of Advanced Excel Tools
- **Approach to Implementing Data Analytics for Auditing**
  - How to get started – Overcome resource constraints
  - How to Plan for the use of Data Analytics.

METHOD OF EVALUATION

- Assess Group-Work Outputs & Practical Sessions

WHO SHOULD ATTEND?

A must for Internal Audit, IT Audit, Risk & Fraud Risk management as well as Business Unit Managers who seek to leverage Business Improvement from Data Analytics.

Please click here for **general course information**

Delegates are also requested to review the content and the levels of the courses presented before booking, to ensure they are attending the right course.