Data Analytics and Use of CAAT in Systems Audit

Presented By:

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DATA IS THE

NEW OIL

"In God we trust;
all others bring data."

— W. Edwards Deming

Types of Data Analytics

Descriptive	Diagnostic	Predictive	Prescriptive
What happened?	*Why did it happen?*	*What will happen?*	*How can we make it happen?*

Data Analytics and Government of India

Ministry of Finance ✔ @FinMinIndia · Dec 18

GSTN has started work on BI & Analytics. Different scenarios of BI have been identified on which work is going on such as Persona based Analysis, Predictive Analysis, Fraud/Anomaly Detection, Statistical Scoring, 360 degree view taxpayers, Circular Trading & Network Analysis etc.

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GSTN has started sharing data with tax authorities on the following:
a.Mis-match between figures reported in GSTR-1 & GSTR-3B.
b.Mis-match between figures reported GSTR-3B &that computed by the system in GSTR-2A.
c.Taxpayers who have generated e-way bill but not filed tax returns

Steps to Apply Data Analytics

- Define your Audit Objectives
- Compile Data from Data Sources
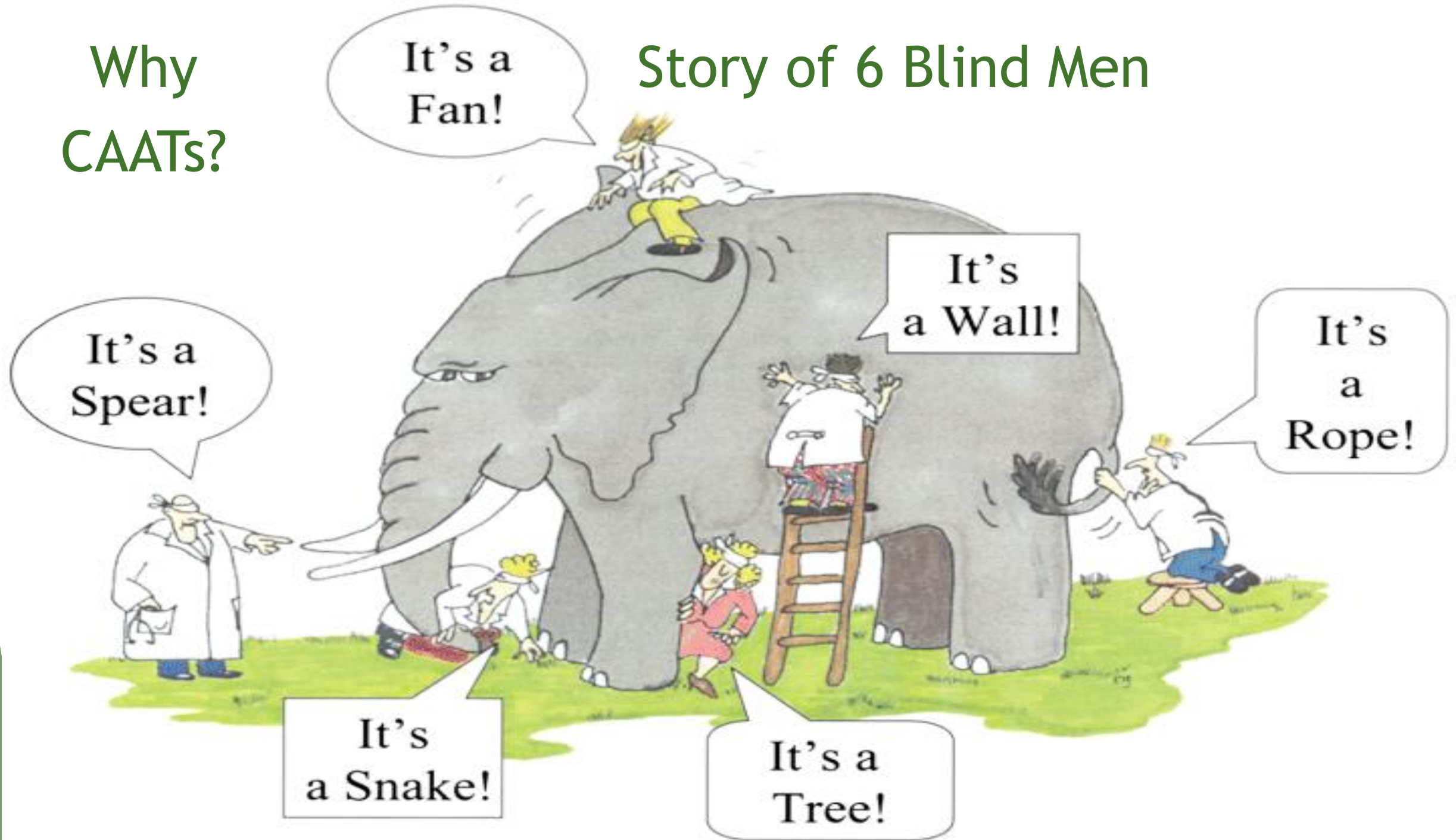- Prepare / Clean Your Data
- Analyse Data
- Report Results

CAAT

► Computer Assisted Audit Techniques; or

► Computer Aided Audit Tools; or

► Computer Assisted Audit Tools and Techniques

Types of CAATs

Generalized Audit Software Packaged program viz. IDEA, ACL, etc.

Specialized Audit Software Purposed written program

Utility Programs used to perform common data processing functions viz. Sorting, creating, printing, calculating totals, etc.
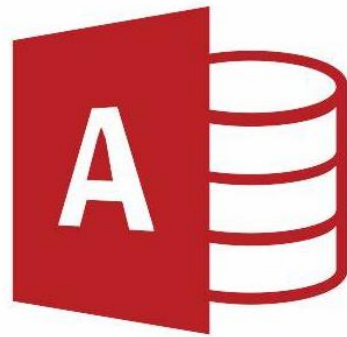
Capabilities of CAATs

▶ Understand multiple file formats

▶ Handle large and complex data structures and volume of data

▶ Data cannot be modified after importing and hence protected

▶ Maintaining audit documentation

▶ Maintains log of activities performed on data imported by audit team

CAATs

Some Functionalities of CAATs

- Data filtration based on user defined criteria's
- Gap Detection
- Detecting Duplicates & Fuzzy Duplicates
- Summarization
- Stratification
- Statistics
- Aging
- Pivot Table
- Sampling
- Joining files and Databases
- Compare Databases
- Visualisations

CAAT usage in Systems Audits

► Data Migration Audit

► Log Analysis

► Test of Controls

► Comparing Test Results with Predefined Results

► Test of Effectiveness of IT Governance Controls

► Authorisation Structure

► And Much More

Practical Demo of CAATs

Some More Audit Management Solutions

- ARC Logics CCH TeamMate
- Audit Assistant
- Audit Leverage
- BPS Resolver
- Built In House
- BVVise
- CaseWare Working Papers/Audit Add-On
- Compliance 360

- Cura Technologies
- Engagement
- IBM OpenPages
- Lotus Notes
- Magique Galileo
- Methodware
- MetricStream
- Morgan Kai MKlnsight
- MS Office suite

- Pentana
- RSA Archer
- SAS GRC
- Share drives
- Sharepoint
- Thomson Reuters Accelus (Paisley)
- Thomson Reuters Accelus Enterprise GRC

More Access to Data by Government

THE GAZETTE OF INDIA : EXTRAORDINARY [PART II—SEC. 3(ii)]

MINISTRY OF HOME AFFAIRS

(CYBER AND INFORMATION SECURITY DIVISION)

ORDER

New Delhi, the 20th December, 2018

S.O. 6227(E).—In exercise of the powers conferred by sub-section (1) of section 69 of the Information Technology Act, 2000 (21 of 2000) read with rule 4 of the Information Technology (Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009, the Competent Authority hereby authorises the following Security and Intelligence Agencies for the purposes of interception, monitoring and decryption of any information generated, transmitted, received or stored in any computer resource under the said Act, namely:—

(i)   Intelligence Bureau;

(ii) Narcotics Control Bureau;

(iii) Enforcement Directorate;

(iv) Central Board of Direct Taxes;

(v)   Directorate of Revenue Intelligence;

(vi) Central Bureau of Investigation;

(vii) National Investigation Agency;

(viii) Cabinet Secretariat (RAW);

(ix) Directorate of Signal Intelligence (Assam only);

(x)   Commissioner of Police, Delhi.

[No.14/07/2011-T]

RAJIV GAUBA, Union Home Secy.

10 central agencies can now snoop on "any" computer they want

THE ECONOMIC TIMES

Business News › News › Politics and Nation

BY ET ONLINE AND AGENCIES | UPDATED: DEC 21, 2018, 01.30 PM IST

In a decision with wide ramifications, the government has allowed 10 intelligence and investigating agencies and the Delhi Police to intercept, monitor and decrypt "any information" generated, transmitted, received or stored in "any computer", an action that has come under attack from opposition parties.

The ministry has vested the authority on the agencies under Section 69 of the Information Technology Act, 2000 and Rule 4 of the Information Technology Procedure and Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009.

Who are these agencies?

Any Questions?

Thank you

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