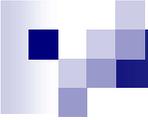


Digital transformation of audit

The audit standards under test

Prof. Giuseppe D'Onza
Full professor University of Pisa
Consultant for Italian Authority for
anticorruption
gdonza@ec.unipi.it



Several audit standard-setters

External audit

- International Auditing and Assurance Standards Board
- National level standard-setters
 - PCAOB, ASB (U.S.)

Internal audit

Institute of Internal auditors

Public audit

International Organisation of Supreme Audit Institutions (INTOSAI)

IT audit

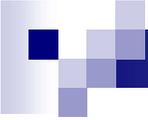
Information Systems Audit and Control Association, ISACA

International Organization for standardization (Quality)



What should be the purpose (s) of audit standards?

- preserve the auditor's personal wealth in case of litigation
- demonstrate to client auditors work in a professional way
- ensure uniformity in the way different auditors work
- judge the quality of audit work (audit oversight authorities for audit inspection)
- improve the audit quality

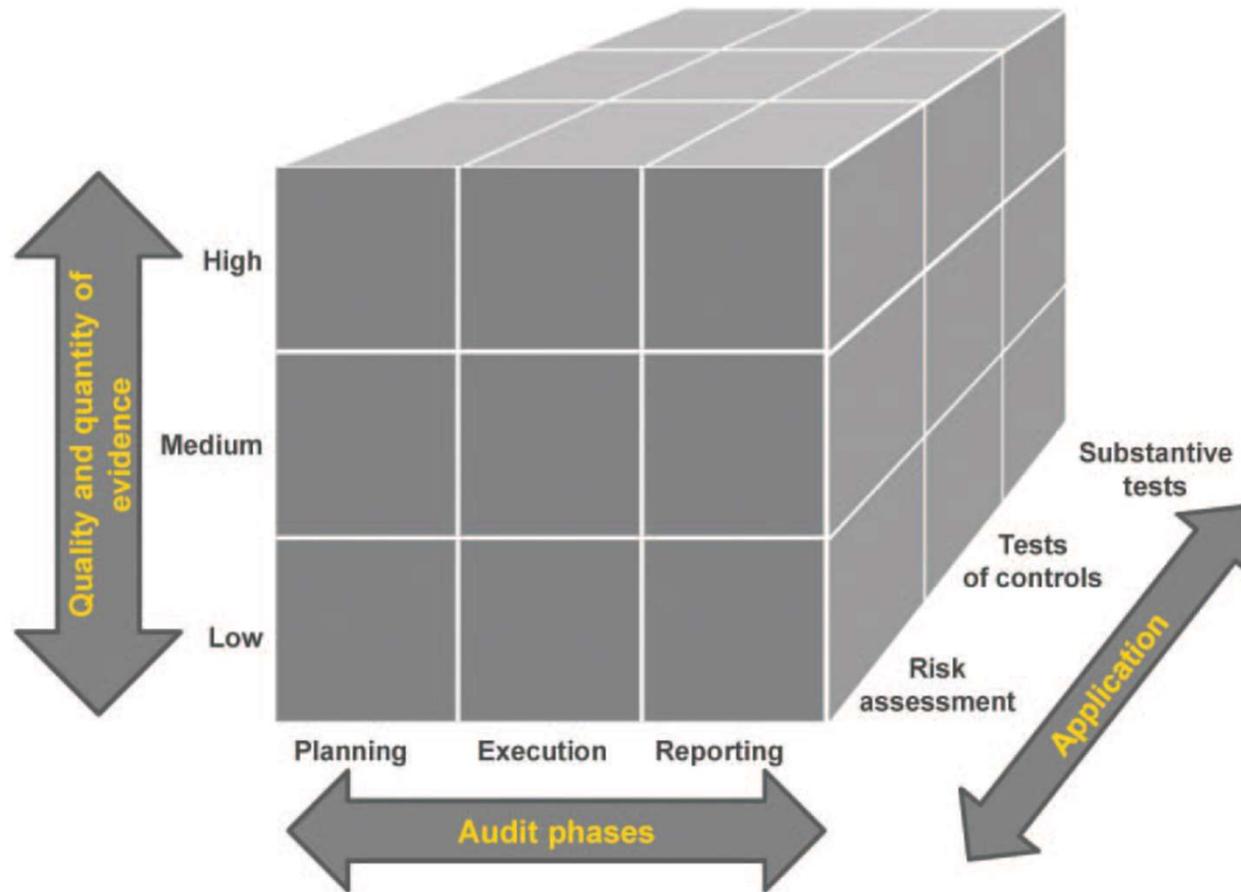


Audit quality in financial statement audit

The **objective of a FSA audit** is ‘*To obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement [...]*’ (ISA 200 – 11a), whereas **reasonable assurance** is “*a high, but not absolute, level of assurance*” due to the inherent limitation of an audit (ISA 200 – 13m)

Advanced technologies (D&A, PM, AI, ecc.) can lead to a **redefinition of the assurance concept** as they can potentially reduce the inherent limitations of the audit (e.g. time restrictions and the persuasive rather than conclusive nature of audit procedures) and **increase the level of assurance.**

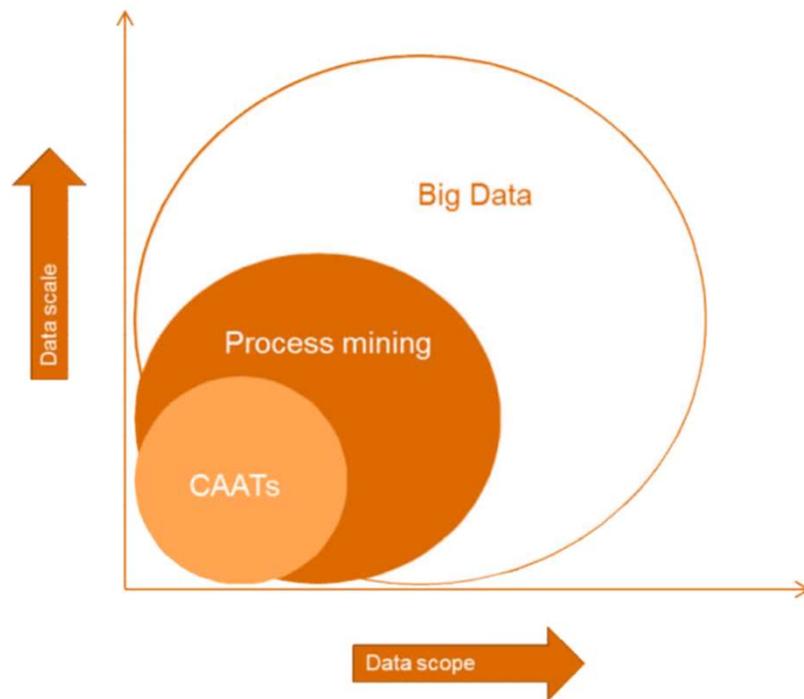
Data Analysis in Auditing



Source: Titera, 2013

Opportunities from digitalization

Technology can increase the efficiency and effectiveness of the audit process, by:



Data analytics developments in financial statements audit perspective.

Source: de Boer et al., 2014.

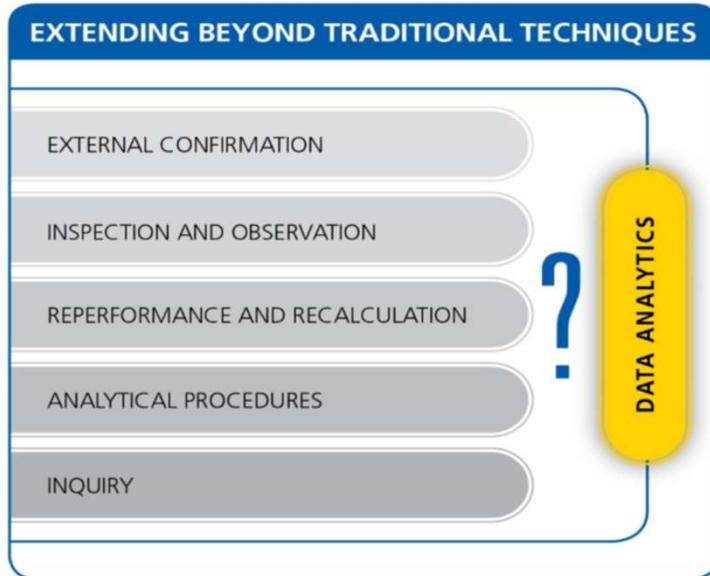
- ✓ Automating previously manual processes;
- ✓ Introducing new forms of evidence
- ✓ Extending the scope of an audit test
- ✓ Introducing an element of timeliness not attainable without the use of technology
- ✓ Improving the quality of audit evidence



Risk from digitalization

- Analysis of data that is not relevant to the audit, is not well controlled, is unreliable or the source of which (internal or external) is not well-understood could have negative consequences to audit quality
- Technologies cannot substitute the professional judgment and skepticism of FS and other auditors (e.g. accounting estimates)
- Caution should be exercised regarding the auditor's and stakeholders' potential "overconfidence" in technology, in which auditors lacking a clear understanding of the uses and limitations of technology falsely believe the results to be infallible

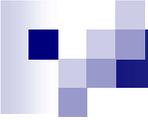
The current state of external audit standards



The ISAs were written in a completely different technological era
ISAs do not prohibit but neither foster the use of advanced techniques in financial statements audit.



Auditing standards may act as a deterrent to use digital technology (e.g. judgmental reason).



The current state of Audit Standards

Only ISA 330 mentions electronic data, stating that Computer Assisted Audit Techniques (CAATs) can be used as an alternative source for audit evidence and/or in combination with controls testing



«The use of CAATs may enable more extensive testing of electronic transactions and account files [...] in responding to the risks of material misstatement due to fraud. Such techniques can be used to select sample transactions from key electronic files, to sort transactions with specific characteristics, or to test an entire population instead of a sample». (ISA 300 – A.16)

«Inquiry alone is not sufficient to test the operating effectiveness of controls. Accordingly, other audit procedures are performed in combination with inquiry. [...] audit evidence about operating effectiveness may be obtained through inquiry in combination with other audit procedures such as observation or the use of CAATs». (ISA 300 – A.26-27)



Where ISAs seem to fail?

The application of CAATs, as currently described in ISAs, does not sufficiently cover contemporary opportunities for the application of digital technologies in financial statements audit (FSA).

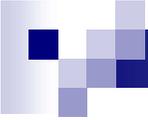
‘The reality is that the current audit model does not adequately address data analytics, which falls in between analytical procedures and tests of details.’ (Titera, 2013)

‘Although the internal audit environment is increasingly using analytics, the external audit field has not responded to the same degree. The regulations have remained unchanged even though many audit clients automate the collection and analysis of 100 percent of their transactions’. (Appelbaum et al. 2017)



What do auditors need from the ISAs?

- ✓ A broader definition of Data Analysis (not limited to CAATs);
- ✓ A clarification on how data analysis fits into the audit model, including **when**, **where**, and **how** it might be used in a financial statement audit
- ✓ The possibility of application not just in discrete phases of an audit, but to continuous auditing
- ✓ Exploring levels of audit evidence (e.g. minimal, corroborative, and persuasive) and factors to consider in applying auditor judgment to achieve such levels
- ✓ Better linking data analysis with audit risk and extent of testing
- ✓ Discussing the need to validate the data and suggesting ways to accomplish that in an efficient manner



Audit risk and sampling

«The objective of the auditor, when using audit sampling, is to provide a reasonable basis for the auditor to draw conclusions about the population from which the sample is selected» (ISA 300.4)

By using audit sampling, there is «the risk that the auditor's conclusion [...] may be different from the conclusion if the entire population were subjected to the same audit procedure» (ISA 300.5c)

The opportunity to test 100% of transactions (via D&A), to deepen analyze business processes (via Process Mining techniques) and to use alternative sources of evidence (e.g. Big Data) should lead to a **redefinition of the concepts of audit risk and sampling**



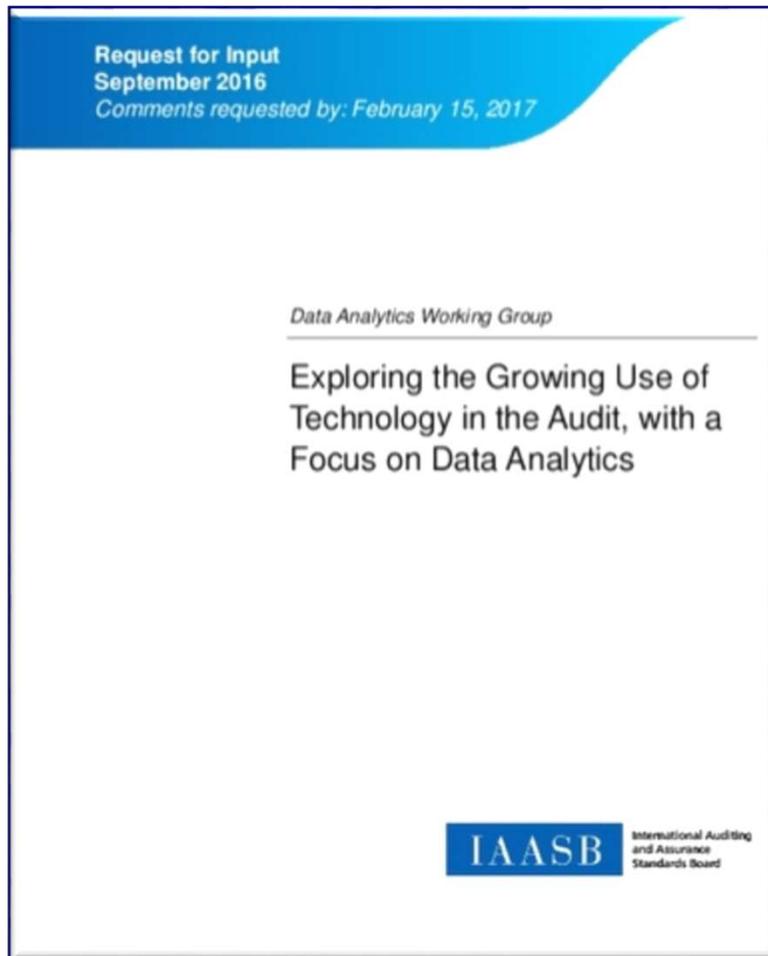
Audit evidence reliability

«The reliability of information to be used as audit evidence (...) is influenced by its source and its nature, and the circumstances under which it is obtained, including the controls over its preparation and maintenance where relevant» (ISA 500.A31)

The opportunity to gather audit evidence from a variety of external and internal sources should lead to a redefinition of the **concept of audit evidence** and of their **reliability**

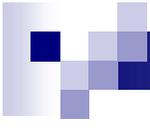
A critical challenge for standard setters is to set a **framework** for **assessing the reliability** of new sources of evidential matters and for **integrating** them with the traditional sources of audit evidence

What are the standard setters doing?



The IAASB considers some emerging issues about obtaining audit evidence through data analytics techniques, the implications on the auditor's risk assessment and response, as well as the effect on the nature and timing of other planned audit procedures and the auditor's ability to obtain sufficient appropriate audit evidence

(IAASB, 2013, p. 40)



Any question?

