

Data Analytics – Challenges & Opportunities

Katharine Bagshaw
Member, IFAC SMP Committee

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IFAC SMP Committee—Overview

- To represent interests of SMPs
- Comprises 18 members and 18 technical advisers from 22 countries
- Three main areas of focus:
 - Input to policy, regulation, and international standards
 - Develop and share tools, guidance, standard support
 - **Practice Management Guide update - new chapter on technology**
 - Promote the visibility and recognition of SMPs
 - **Includes Global SMP Survey - covers technology**



SMPC Response to IAASB Request for Input I

- IAASB Data Analytics Working Group (DAWG) Request for Input 2016: *Exploring the Growing Use of Technology in the Audit, with a Focus on Data Analytics*
- Key SMPC comments:
 - Welcomes and supports the DAWG initiative in a rapidly developing area
 - **Awareness** of DA is critical - it has potential to transform the existing audit model, increase effectiveness and improve client service
 - But communication must focus on **basic mechanics**
 - Opportunities not to be missed for SMPs....



SMPC Response to IAASB Request for Input II

- Key SMPC Comments cont.:
 - Resource challenges more acute for SMP/SMEs
 - Software providers – accessible and affordable tools to encourage adoption...?
 - Short-term priority for IAASB - develop guidance on how DA *fits within existing ISAs*



SMPC Response to IAASB Request for Input III

- Key SMPC Comments cont.:
 - IAASB needs to ensure future ISA changes are proportional and evidence based
 - Education on DA and wider technology developments are critical, Member Organizations have a role to play
 - DA provides an opportunity to address recruitment and retention issues



Data Analytics: How *Businesses* Use It I

- ICAEW publication: *Audit Insights Data Analytics*
- <https://www.icaew.com/-/media/corporate/files/technical/audit-and-assurance/audit-insights/audit-insights-data-analytics.ashx>
- As a tool to achieve existing objectives, or a means to change the nature of the business itself?

ICAEW
AUDIT AND ASSURANCE
FACULTY



Evidence, not assumptions

Audit insights: data analytics

Data Analytics: How *Businesses* Use It II

- Many examples:
 - Managing fleets of vans carrying spares: fewer vans, travelling less distance, with lighter loads
 - Optimizing mark-downs in retail using algorithms: increases profit and takes the guesswork out of provisioning
 - Evaluating the impact of health & safety training in extractive industries
 - Ex-post resume analyses to highlight the effectiveness of HR policies and procedures
 - Revenue collection and fraud detection in telecoms: fraudulent use of handsets, card cloning or unauthorized use of legitimate accounts?

Data Analytics: How *Businesses* Use It III

- Data analytics and governance: who understands and controls the data and the models? Are they accountable?
- Risks of not responding to the challenge and treating it solely as an enhancement of control...
- The death of preventative (vs. detective) controls?
- Expectations of powers of regulators use of data analytics in regulated industries?

Data Analytics for External Auditors I

- ICAEW Publication: *Data Analytics for External Auditors*
 - <https://www.icaew.com/en/technical/audit-and-assurance/faculty/audit-and-technology/data-analytics>
- Interviews with 12 practitioners heavily engaged in DA
- Asks ***fundamental questions*** about the opportunities DA presents to auditors, regulators, standard-setters and academics



Data Analytics for External Auditors II

- About ***enhancing audit quality***
 - Another opportunity for the profession to reinvent itself - innovation in audit is essential, and is happening....
 - Risk of not responding to market demands and external audit being marginalized
 - DA has the potential to improve - and transform? - the ***risk assessment process*** - also substantive procedures and test of controls?
 - Enables auditors to manipulate a ***complete data set*** and ***visualize results graphically, easily and at speed***
 - Has the potential to enhance the quality of audit evidence consistently and cover entire populations,
 - Provides ***broader, deeper and more granular*** insights



Data Analytics for External Auditors III

- Commonly performed DA routines:
 - Inventory ageing and how many days items are in stock
 - Analyses of revenue trends by product or region
 - Three way matches
 - Analyses of capital expenditure v repairs and maintenance
- A lot can be done with basic ‘analytics’ functions in spreadsheets, **but...**
- The interface between auditor and client system is the biggest technical challenge – including data validation and transformation



Data Analytics for External Auditors IV

- Challenges cont.:
 - Data security and privacy issues
 - Legal and regulatory challenges
 - Investment in hardware, software, re-training and re-skilling auditors and recruiting data transformation specialists
 - Ethical dilemmas: management and auditors can see things they have never before been able to...
 - Audit pricing: will future fees be based on the quality of client data?



Looking Forward...

- Audit of the future: hybrid - current models and new tools?
- Pace of change is fast
- Standard setting, the pace of change and innovation?
- The digital journey: Cyber-security, AI, Blockchain?



IFAC Resources

- IFAC SMP Committee: www.ifac.org/SMP
- Follow us on [Twitter](#): IFAC_SMP
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