Disruptive Technologies

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IAASB Meeting
March 20, 2023
Agenda Item 3
March 2023 CAG Discussion

• Update provided on technology initiative activities
• Representatives asked for their views on the technology landscape in Audit and Assurance
Technology: IAASB Focus

Support Current and Future Workplan Activities + Investigate Disruptive Technology Trends

Build
- Digital Advisory Group
- Knowledge Base

Maintain
- Outreach/Connections
- Research activities
- Technology Consultation Group

Share
- Market Scan
- Roundtables/Presentations

Outreach/Connections
- Digital Advisory Group
- Knowledge Base
- Outreach/Connections
- Research activities
- Technology Consultation Group

Support Current and Future Workplan Activities

Investigate Disruptive Technology Trends

Ongoing workplan projects
- Non-Authoritative Guidance

Future workplan activities
- IAASB ways of working
- Publications / Thought Leadership
Technology: IAASB Focus

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Maintain

Share
- Market Scan
- Roundtables/Presentations

Connections with IFAC, IESBA, National Standard Setters and Regulators

Research activities
- Technology Companies
- Industry colleagues
- Desktop research

Counsel to ongoing workplan projects (Going Concern, Fraud) and technology focus areas

Non-Authoritative Guidance – Performance Materiality and Addressing Exceptions

Market Scans
- Homomorphic Encryption
- Robotic Process Automation
- Digital Assets

Presentations
- Forum of Firms
- IAPI
- Ed Exchange
- SAICA

DAG meeting #2
Ongoing updates to Knowledge Base
Shared access to IESBA colleagues
Technology: Actions from Digital Advisory Group

Technology in Auditing Standards
Identify opportunities for technology related standard setting activity including areas that may not be fully addressed through existing standards.

Encouraging the Use of Technology
Explore approaches to more clearly articulate the IAASB’s position about the value of technology in the audit.

Accessibility and Consumption of Auditing Standards
Investigate options to make auditing standards more digital and capable of integration into audit technologies.

Addressing Barriers to Adoption of Technology – Data access
Examine opportunities to address data standardization requirements or opportunities with relevant stakeholders.
Thought Experiments

• Designed to enable a better understanding of the impact of different technologies on achieving the audit objective and on auditing standards
• Use of scenarios to determine where gaps may exist in the standards or where standards may be helping or hindering the adoption of technology.
• Scenarios covering entity-deployed technology and auditor-deployed technology – algorithms, machine learning, open banking and anomaly detection
• Participants with different backgrounds and experience to provide broad spectrum of perspectives
1. The Board is asked for its views on the technology initiatives update presented.
Technology adoption in audit and assurance

Person factors
- Training and skills – technology topics in audit curricula, timely tool training, availability of specialized skills
- Characteristics - Growth mindset, agility, critical thinking
- Audit firm culture that promotes technology adoption
- Confidence in audit quality value of technology
- Engagement budget and time pressures eased to support technology adoption

Task factors
- Technology and tools to complement auditor judgement (e.g., Contract analytics)
- Automation solutions to replace time intensive, repetitive tasks
- Availability of appropriate exogenous data for benchmarking and deeper insight
- Judgement framework for systematic treatment of outliers (to address information overload and algorithm aversion)

Environment factors
- Regional/Global investment in and development of technologies
- Client expectation of use of technology, support for data access and transformation journey
- Audit firm innovation investment to achieve/maintain competitive advantage
- Availability of necessary talent to develop and deploy emerging technologies
- Positive perceptions of stakeholders (inc. regulators) to audit quality benefits of technology

Source: Digital Transformation & Innovation in Auditing: Insights from a Review of Academic Research | IFAC
Forum of Firms – Polling results

To what extent are the following technologies currently used in your audits?

- Descriptive analytics (e.g., data visualization)
- Algorithms and Machine Learning
- Process mining
- AI for unstructured data (e.g., contracts, invoices)
- Predictive analytics (e.g., for Going Concern, Impairment)
- Robotic Process Automation
- Data extraction and transformation technologies

To what extent are the following technologies being used by audited entities?

- Blockchain / Digital Assets / Smart Contracts
- AI and Machine Learning (e.g., for anomaly detection)
- Robotic Process Automation
- Data analytics (as part of internal control environment)
- Internet of Things (IoT) technologies
- Imaging Tools / Drones
Where in the audit is technology most benefiting audit quality?

- Substantive testing (inc. sampling)
- Risk assessment
- Client collaboration/project management
- Journal entry testing
- Portfolio risk management
- Planning
- Going concern/Fraud
- Other

What do you think are the main barriers to adoption of technology in the audit?

- Cost of adoption (time/investment)
- Reluctance to change/Mindset
- Skills/Training
- Access to data
- Client readiness
- Perceived regulatory risk
- Lack of authoritative guidance

How might the barriers identified be addressed?

- Education (including education for regulators and standard setters)
- Audit firm/network collaboration and cross sharing
- Case studies and examples of technology in standards
- Market driven change (client and/or regulatory)
Matters for Board Discussion

2. The Board is asked for its views on the technology adoption research and adoption statistics from targeted outreach presented.