Technology Disruption in Audit and Assurance

Presented by: IAASB Staff & Founders Intelligence
January 26th, 2021 IAASB Call
Objectives of the Initiative

- To position the IAASB for opportunities created by technology disruption transforming audit and assurance:
  - How can disruption affect the IAASB in the long term?
  - How to inform ourselves about the “unknown”? e.g., the opportunities created by disruptive technology
- To demonstrate how the IAASB can explore the opportunities created by the disruption
- To help meet expectations that the IAASB needs to continue to be responsive as a global standard-setter
Implications of Initiative

How has/is/will technology transform audit and assurance

Enablers: resources, expertise, information

Unknown Future Strategy and Work Plan

Current IAASB projects and initiatives

Facilitate opportunities for others to act
Actions to Date

- Engaged Founders Intelligence to assist with research on emerging technology
  - Start ups and established players
- Whiteboarding sessions (August, October 2020) to discuss key takeaways and possible actions
- Roundtable (November 2020)
Two main phases

1. Innovation Landscape
   • Research (using FI’s The Intelligence platform)
   • Founder / Innovator / VC / Practitioner & Expert interviews

2. Roundtable
   • Dialogue with founders, innovators and industry participants
   • Discussion about implications for IAASB & industry
### Protecting Information
- INTRALINKS
- Imprima
- Privitar
- ENVEIL
- Datasite
- Pay
- Hazy
- Fortanix

### Accessing Information and Data
- ahold
- text IQ
- Skydio
- arm
- Infosum
- TDI
- CTO
- IBIS Automation
- appzon
- Quantexa
- Gather
- Samsung

### Verifying Information
- UiPath
- Rimilia
- H2O.ai
- AuditBoard
- DataRobot
- Tableau
- Blue Prism
- IBM
- Dataiku

### Assessing Internal Controls
- datamolino
- Eigen Techs
- Sparkcognition
- Lexalytics
- SOXgill
- NetGuardians
- Sana

### Tools and Tech for IAASB
- Twist
- Superhuman
- Slack
- Collabify
- Flock
- Pragly
- Talknest
- Splendid
- Collabify
- Hopin
-辑度
- Dream
- Confluence
- Coda
- Asana
- Mavenlink
- Coquillete
...and Interviewing Representatives From >20 Companies...

Innovators

Audit and Assurance Companies

Regulators, Associations, and National Standard Setters
Innovations are Happening Across Audit and Assurance

**Accessing Information & Data**
- NLP and Computer Vision for Digitising Documents
- AI for Deriving Insights from Unstructured Data
- API Access to External Data Sources for Enriched Analysis
- Data Standardisation Platforms for Enabling Data Access
- IoT Networks for Asset Monitoring and Data Generation
- New Imaging Tools for Capturing On-site Physical Data
- Blockchain for Digitising Ledgers of Financial Transactions

**Verifying Information**
- Robotic Process Automation for Executing Repetitive Tasks
- Analytics for Assessing Data, and Error and Fraud Detection
- AI-Powered Advanced Analytics for Risk Detection and KRI Design

**Protecting Information**
- Virtual Data Rooms for Sharing Sensitive Files
- Data Anonymisation for Filtering Sensitive Information
- Homomorphic Encryption for Analysing Encrypted Data

**Assessing Internal Controls**
- OCR, NLP and ML for Intelligent Document and Voice Analysis
- AI for Detecting External Threats and Risks
- Simulations for Scenario-Testing Controls and Policies
- Process Mining and Computer Vision for Observing Controls Compliance
- AI and Behavioural Analytics for Monitoring Employee Conduct and Communications

**Other Relevant Trends**
- Regulatory Sandboxes
- Behavioural Motivators

**Unifying Themes**
- Continuous and Real Time Audit and Assurance
- Remote Audit and Assurance
- Analytics Based Audit and Assurance
- Technology-Enabled Profession
Impact on Audit and Assurance Will Increase

WIDE-SCALE AUDIT & ASSURANCE ADOPTION TIMELINE

- **LOW-HANGING FRUIT**
  - Virtual Data Rooms for Sharing Sensitive Files
  - Regulatory Sandboxes
  - Behavioural Motivators
  - API Access to Third-party Data Sources For Enriched Analysis

- **TRANSFORMATIVE TECH**
  - NLP and Computer Vision for Digitising Documents
  - Robotic Process Automation for Executing Repetitive Tasks
  - Analytics for Detecting Errors and Fraud
  - Data Anonymisation for Filtering Sensitive Information
  - OCR, NLP and ML for Intelligent Document and Voice Analysis
  - IoT Networks for Asset Monitoring and Data Generation
  - Process Mining and Computer Vision for Observing Controls Compliance

- **NEXT-GEN TECH**
  - AI-Powered Advanced Analytics for Risk Detection and KRI Design
  - AI for Detecting External Threats and Risks
  - Data Standardisation Platforms for Enabling Data Access
  - Blockchain for Digitising Ledgers of Financial Transactions
  - Simulations for Scenario-testing Controls and Policies
  - AI for Deriving Insights from Unstructured Data

**AUDIT & ASSURANCE IMPACT**

- **WIDE-SCALE AUDIT & ASSURANCE ADOPTION TIMELINE**
  - Robotic Process Automation for Executing Repetitive Tasks
  - AI-Powered Advanced Analytics for Risk Detection and KRI Design
  - Blockchain for Digitising Ledgers of Financial Transactions
  - Simulations for Scenario-testing Controls and Policies
  - AI for Deriving Insights from Unstructured Data

- **LOW-HANGING FRUIT**
  - Virtual Data Rooms for Sharing Sensitive Files
  - Regulatory Sandboxes
  - Behavioural Motivators
  - API Access to Third-party Data Sources For Enriched Analysis

- **TRANSFORMATIVE TECH**
  - NLP and Computer Vision for Digitising Documents
  - Robotic Process Automation for Executing Repetitive Tasks
  - Analytics for Detecting Errors and Fraud
  - Data Anonymisation for Filtering Sensitive Information
  - OCR, NLP and ML for Intelligent Document and Voice Analysis
  - IoT Networks for Asset Monitoring and Data Generation
  - Process Mining and Computer Vision for Observing Controls Compliance

- **NEXT-GEN TECH**
  - AI-Powered Advanced Analytics for Risk Detection and KRI Design
  - AI for Detecting External Threats and Risks
  - Data Standardisation Platforms for Enabling Data Access
  - Blockchain for Digitising Ledgers of Financial Transactions
  - Simulations for Scenario-testing Controls and Policies
  - AI for Deriving Insights from Unstructured Data
Question 1:
What technology innovation trends are likely to have the greatest impact on audit and assurance?
Of particular interest is which of the areas identified in slide 9, above, may be most impacted in the 7+ year time horizon?
How do we connect what we have heard to our thinking about the way forward?

Q2: Maintaining awareness of emerging trends
Q3: Current and future workplans
Q4: Strategic considerations
Getting Future Ready: Ideas for Consideration

Maintain awareness of future trends

- Regular technology and innovation roundtables
- Maintain an inventory of technology trends and potentially disruptive technology
- IAASB outreach
- Remaining alert to needs of SMPs and less-developed regions

Question 2: What combination of initiatives should the IAASB undertake to maintain awareness of emerging trends (to stay close and connected to the technology innovations related to the audit and assurance ecosystem)?

Such initiatives may involve, for example, staff, Board expertise, external expertise or advisory groups.
Current and Future Workplans

- Continue to monitor technology
- Establish approach for dealing with technology in standards, including use of different/evolving tools to meet requirements
- Guidance on technology issues
- Remaining alert to needs of SMPs and less-developed regions

Question 3:
Based on the emerging trends, would you adapt the current workplan (including, if and how trends may affect current workstreams or projects) or are there topics that you would prioritize once existing projects are completed?
Possible IAASB Actions

Strategic Considerations

- Continue to monitor technology developments (via inventory)
- Skills matrix for IAASB staff: permanent staff and secondee
- Upskill IAASB staff
- Consider innovation advisory group
- Ongoing education sessions for IAASB members and staff

**Question 4:**
What strategic considerations are there arising from disruptive technologies?

What does it mean for the IAASB’s ways of working?
Appendix
Who we are

Founders Intelligence is the strategy and venture creation arm of Founders Forum, the exclusive private network of the world’s leading entrepreneurs and venture capitalists.

Founders Intelligence helps clients to create growth and innovation by participating in the most compelling new ideas, technologies and business models in their sectors.