DIGITAL IA: WHAT MIGHT ARTIFICIAL INTELLIGENCE OFFER IMPACT ASSESSMENT? – THE IFC'S MALENA

3 November 2022

International Association for Impact Assessment



Welcome!

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@IAIAnetwork #iaiawebinar ✓ Webinars on demand, available to all:

- **ESG**: What is it, Why is it Important, and How Does it Relate to IA?
- New Approaches to Challenges: Emerging technologies and analyses for biodiversity impact assessment
- **COVID Impacts** on E&S Field Assessment Work *and many more!*
- ✓ **Upcoming events**, including the IAIA23 annual conference, and online training courses
- ✓ **Online training and mentorship** through the Professional Development Program
- ✓ Free downloadable publications, like Best Practice Principles, IA FasTips, and more

Find these resources and more at www.iaia.org

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Questions?



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Moderator:

Josh Fothergill

Fothergill Training & Consulting UK

Panelists:





International Finance Corporation (IFC) World Bank Group USA

- Atiyah Curmally
- Blaise Sandwidi
- Florian Skene

The State of Digital IA Practice Webinar Series

What might Artificial Intelligence offer IA? The IFC's MALENA



The State of Digital Impact Assessment Practice









The State of Digital Impact Assessment Practice

A global review of the uptake of digital technologies and approaches within impact assessment practice





The State of Digital IA Practice Report launch December 2021:

https://www.fothergilltc.com/digital

Launch Webinar: <u>https://www.iaia.org/webinar-</u> <u>details.php?ID=38</u>

Digital IA workspace webinar Mar'22: <u>https://www.iaia.org/webinar-</u> <u>details.php?ID=43</u>



What is Digital Impact Assessment?



Tobias image, sourced from www.unsplash.com

Defining Digital IA...

- No adopted definition of what digital IA is considered to be.
- Lots of different views based on experience and perspective on IA practice.

"The use of advances in digital technologies and their applications in the pursuit of enabling more effective IA practice."

Fothergill & Murphy, 2021





Digital Transformation of IA A Global Phenomenon

North America:

- Canada, Environmental database management system
- IFC, Artificial Intelligence, and data
- innovation for social license

Europe

- Iceland, Early example of the potential of digital EIS
- Netherlands, Digital EIS, diagnostic
- tool country ESIA systems
- Serbia, Envigo digital IA platform

Asia

- China (Hong Kong), Virtual and hybrid reality systems
- Singapore, Autonomous vehicles +
- automated decision support systems
- Nepal, drones + digital air quality devices

South America

 Chile, Remote sensing and live database EIA follow-up
 Guyana, Imagery + GIS to map coastal ecosystem services, with in-field verification.

Africa

- Kenya, Drones surveys
- Nigeria, Developing digital EIA

project + drone surveys

 South Africa, digital screening platform

Australasia - Australia, digital EIA studies, reports and monitoring system.





The Report Explores 10 Elements of Digital IA Practice

Digital Impact Assessment

Digital Approaches & Technologies enabling progress in Digital IA

Inter-IA and online environmental and social management systems

Digital baseline data capture devices

Artificial intelligence (AI) in IA

IA and virtual, augmented & mixed realities

Online learning and capacity building

Digital Transformation within Aspects of the IA process

Digital screening tools

Digital IA platform / workspace

Digital stakeholder engagement

Digital EIS and web-based reporting

Digital follow-up: monitoring and auditing





3. Artificial Intelligence (AI) approaches in IA

Using a program, algorithm to do IA tasks usually undertaken by professionals – risk mapping, scoping, analysis of trends.

Examples:

- DENMARK: BUILDING PRACTICAL IA TOOLS USING AI: THE DREAMS PROJECT
- SINGAPORE AND MALAYSIA: COMBINING DRONES AND DIGITAL SYSTEMS TO AUTOMATE MONITORING OF WATER QUALITY ON INSHORE CONSTRUCTION PROJECTS

INTERNATIONAL FINANCE CORPORATION: MACHINE LEARNING ENVIRONMENTAL, SOCIAL AND GOVERNANCE ANALYST (MALENA)







What might Artificial Intelligence offer IA?

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Q&A - Discussion

What might Artificial Intelligence offer IA?

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Upcoming Webinars

Members only

6 Dec: Professional Success in Latin America (in Spanish). Time and registration link coming soon – stay tuned!

Members: watch your email or IAIAConnect for the registration link. *Non-members*: join IAIA now at <u>https://iaia.org/membership.php</u>.

Thank you!

Let's continue the discussion:

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