

# DIGITAL IA: ENHANCED ENVIRONMENTALLY INTEGRATED DESIGN ENABLED BY DIGITAL ADVANCES

*6 July 2023*



**International Association  
for Impact Assessment**



***Welcome!***

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**@IAIAnetwork**

**#iaiawebinar**

- ✓ **Webinars on demand, available to all:**
  - **The IFC's MALENA:** What might artificial intelligence offer to IA?
  - **New Approaches to Challenges:** Emerging technologies and analyses for biodiversity impact assessment
  - **Think Big 2050 City Megagrowth:** Assessing and addressing the impacts of urbanization *and many more!*
  
- ✓ **Upcoming events**, including the IAIA24 annual conference
  
- ✓ **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](http://www.iaia.org)**

<https://2024.iaia.org/>



43rd Annual Conference of the  
International Association for Impact Assessment

**24-27 APRIL 2024**

**IMPACT ASSESSMENT FOR A JUST TRANSFORMATION**

# Housekeeping



- ✓ Recording?
- ✓ Questions?
- ✓ Slides available?

# DIGITAL IA: ENHANCED ENVIRONMENTALLY INTEGRATED DESIGN ENABLED BY DIGITAL ADVANCES

**Moderator:** **Josh Fothergill**  
*Fothergill Training & Consulting*  
*UK*

**Panelists:**

**ATKINS**

Member of the SNC-Lavalin Group

- **Paul Morgalla**
- **Dan Parsons**
- **Pietro Rescia**



*The State of Digital IA Practice*  
Webinar Series

Webinar 4

**Enhanced environmentally integrated design  
enabled by digital advances**

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# What is Digital Impact Assessment?

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# Defining Digital IA...

- Not formally defined in national IA laws / financial institution standards.
- Lots of different views of what is / is not within the scope of Digital IA - based on differing experiences and perspective on practice.
- IAIA Innovation Grant funded a project to help frame the subject, which led to the following broad definition:

***“The use of advances in digital technologies and their applications in the pursuit of enabling more effective IA practice”***

**Fothergill & Murphy , 2021**

# ***The State of Digital IA Practice Report***

December 2021:

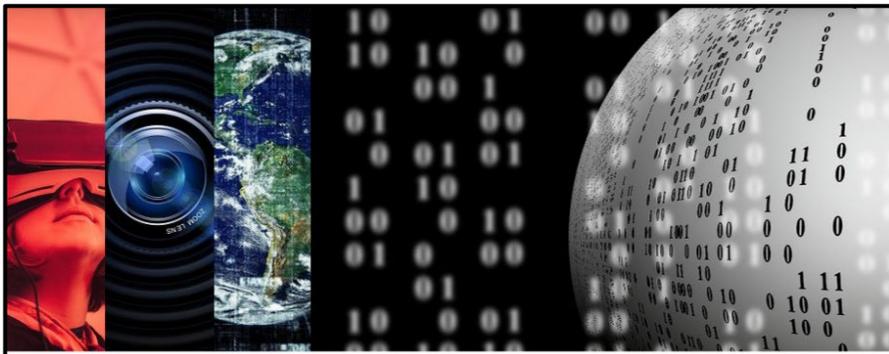
<https://www.fothergilltc.com/digital>

Launch Webinar:

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

Digital IA workspace webinar Mar'22:

<https://www.iaia.org/webinar-details.php?ID=43>



## The State of Digital Impact Assessment Practice

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

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# The State of Digital IA Practice identifies **10 Elements** of Digital IA Practice

<b>Digital Impact Assessment</b>	
Digital Approaches & Technologies enabling progress in Digital IA	Digital Transformation within Aspects of the IA process
Inter-IA and online environmental and social management systems	Digital screening tools
Digital baseline data capture devices	Digital IA platform / workspace
Artificial intelligence (AI) in IA	Digital stakeholder engagement
IA and virtual, augmented & mixed realities	Digital EIS and web-based reporting
Online learning and capacity building	Digital follow-up: monitoring and auditing

# Digital IA

## Key Areas of Change Requiring Management

### Data

Access, Integration  
and Trust

### Quality & Costs

More effective  
practices / loss  
skilled humans in  
IA?

### Engagement

Equity, Inclusion +  
Reach: *Digital Divide*

### Safety, Privacy + Security

# Transformations to Digital IA are progressing across global practice

## 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 State of Digital IA Practice

Defined areas where more thought was needed as practice and technologies advance...

Can digital IA provide new ways to demonstrate ESG outcomes?

What role will AI play in the future delivery of the IA process?

Might digital move IA from plans/projects to *geographies*?

Will open-source data and tools enable democratization of IA?



# Enhanced environmentally integrated design enabled by digital advances

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**ATKINS**

Member of the SNC-Lavalin Group



SpaceX image, sourced from  
[www.unsplash.com](http://www.unsplash.com)



# Q&A - Discussion

Enhanced environmentally  
integrated design enabled by  
digital advances

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Member of the SNC-Lavalin Group

ANY  
QUESTIONS  
?

## ***Upcoming Webinars***

*Check out our upcoming webinars and register at  
<https://iaia.org/webinars.php>*

**19 July:** Launching of the First Geoportal of Migratory Austral Geese  
An Online Tool

**1 August:** Think Big: 2050 City Megagrowth – 2<sup>nd</sup> part  
*registration will open soon*

# ***Thank you!***

Let's continue the discussion:

**@IAInetwork #iaiawebinar**



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