Call for Abstracts

for the second digitainable expert online event



Mindful use of Digitalization and Artificial Intelligence (D&AI) for the SDGs

When? February 23-24, 2020 from 9.30am to 5.00pm Where? Virtual.

The research team of the project <u>digitainable</u> at the <u>Innovation Campus Bonn (ICB)</u> seeks to bring together a diverse and interdisciplinary community to pool, discuss and evaluate strategies and means to realize the potential of Digitalization and Artificial Intelligence (D&AI) for the 17 Sustainable Development Goals of the Agenda 2030 and to accelerate the progress towards them.

The 17 Sustainable Development Goals (SDGs) as a framework for global sustainable development, called for action to shape our common sustainable future considering the five major elements People, Planet, Prosperity, Peace, and Partnerships. These so-called "5 Ps" multiply interlinked in terms of synergies as well as tradeoffs. The opportunities for sustainable development and making progress in the 17 SDGs provided by D&AI paradigms, such as IoT, Earth observation (EO), Big Data, Blockchain, and machine learning, are enormous. D&AI could augment transparency, fasttrack innovation, help measure environmental, social, and governance performance to support evidence-based decision-making and predictions. Yet on the opposite side, there are also risks and disadvantages to be considered. D&AI could lead to adverse environmental and health impacts related to electronic waste, raw materials extraction, and discarding hazardous substances impacting biodiversity, growing energy and water demands, pollutant emissions, and social effects, such as threats to privacy, endangering working place, an increase of digital-divide and inequality. More need to be learned about whether and to what extend the opportunities provided by D&AI could be mindfully leveraged for decent progress in sustainable development or could even hinder the 2030 Agenda's attainment. Furthermore, there are different perceptions and approaches to sustainable development via digitalization by different sectors, such as the private sector, governance, and scientific perspectives. We are reaching out to experts from various sectors to confront and discuss their diverse viewpoints focusing on the "5 Ps" that shape the SDGs, and with them D&AI.

The "5 Ps" emphasize how the SDGs are an intertwined framework rather than a bunch of siloed goals. Improvement in one of the Ps can balance and support progress on another. Concentrating on the "5 Ps" feels particularly relevant today, given their precise and intended alignment with the goals:

1. D&AI for People:

The People bring forward the alignment of SDGs to address people-centric concerns, such as end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfill their potential in dignity and equality and a healthy environment. In this event theme, we call for participants' contributions approaching D&AI technologies for SDG 1, 2, 3, 4, 5, and their respective indicators. Contributions reflecting how D&AI hold value in the context to end poverty, healthy food services, reducing healthcare disparity, reducing gender equality, and fostering education are highly encouraged.







2. D&AI for Prosperity:

Prosperity aligns those SDGs which aim to "ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social, and technological progress occurs in harmony with nature" are covered in this theme during the event. In this theme of the event, we encourage contributions focusing on the practical strategies and innovative practices in place on how to align the D&AI technologies to provide equitable support for the use of D&AI, therefore, to optimize the benefits and gaps of D&AI for SDG 7, 8, 9, 10, and 11.

3. D&AI for Planet:

Planet carefully aligns goals that help protect the planet from degradation, including sustainable consumption and production, sustainably managing its natural resources, and taking urgent action on climate change to support the present and future generations' needs. In our event theme, we welcome contributions concerning the practical applications of D&AI for SDG 6, 12, 13, 14, and 15 and their indicators. Contrasting viewpoints are very much appreciated.

4. D&AI for Peace:

Sustainable development cannot be achieved without peace, and there is no peace without sustainable development. The peace aspect of the 5 Ps is determined to foster a peaceful and inclusive society free from fear and violence. While the current statistics are sobering, there is a huge opportunity to drive progress using D&AI on the peace agenda and justice for all people. We welcome the expert contributions on the various aspects of the SDG 16 and other peace-related indicators where D&AI plays some role.

5. D&AI for Partnership:

The partnership is aligning the determination of SDGs to mobilize the means required to implement Agenda 2030 through a revitalized Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focussed in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people. In this theme, contributions are invited to explore D&AI's relevance for the SDGs (SDG 17) and their indicators. This theme also aims to identify the key strategies which promote the development and sharing of practical knowledge and unleash the potential of D&AI. Fostering knowledge creation and dissemination based on implications of D&AI for SDG indicators are crucial for sustainable partnership.

Potential topics for oral presentations include:

Abstracts with a focus on technology and its implementation could include (but are not limited to) the following items:

- Theoretical and/or methodological measures to explore the significance of D&AI for SDG(s).
- Approaches addressing the SDGs and their indicators that have connections to D&AI technologies.
- Novel approaches that could help address existing gaps of SDG(s) achievement using D&AI.
- New D&AI resources and tools that add value to the attainment of SDG(s).
- Showcases, demonstrations, and research projects that are relevant to D&AI applications for SDG(s)
- Mapping counterproductive actions of D&AI for SDG(s) at the indicator level.
- Identifying data vacuum while monitoring SDG indicators and how D&AI can help.
- Mapping, measuring, and addressing the spillover effects of one SDG over another using D&AI
- Identifying investment gaps.
- Identifying the uneven allocation of D&AI for SDG(s).







Abstracts with a focus on technological and social perspectives of the implementation of D&AI in sustainable development could address (but do not have to) the following guiding questions:

- How to systematically contextualize the application of D&AI for themes and their SDG(s) indicators?
- How can we measure the usability and RoI aspect of D&AI in a sustainability context considering each theme?
- How can we address the gap of lack in stakeholders' alignment for the coherent application of D&AI?
- How can we identify the interdependencies between SDG(s) and measure the counterproductive measures for curbing tradeoffs using D&AI?
- What are the opportunities and challenges of D&AI for society? What are the key focus areas to look at? How can society at large support and embrace digital transformation?
- What are the societal obstacles that prevent D&AI toward the SDGs to be unleashed?
- How can we rethink the interchange among D&AI, society, and sustainability?
- How can D&AI serve people within the domains of human wellbeing and not the other way around?
- How to prevent new forms of inequality in society that may be developed as ownership of, access to, and capabilities to deal with technologies and data?
- Some stakeholders may not be mindful of D&AI in their domain; how to sensitize and develop mechanisms to be able and appropriate to tackle inequality and insecurity?
- What are the tradeoffs and impacts of digital transformation in our society and the environment?

Abstract Guideline

We are looking for contributions from experts in the industry, in policy, academia, from NGOs, and other practitioners and experts in the broad field of sustainability and sustainable development who operate with D&AI solutions. Please describe your "use case" or specific work at the interface of sustainability and D&AI in the form of an abstract or a brief summary (no more than 300 to 500 words) and highlight the linkages to D&AI technologies for the SDG(s) which are relevant for your work. Please also state how your work/ use case relates to one of the five themes we introduced above. Selected applicants will be invited to present their work. The abstracts for the selected use cases will be collected in the event booklet and made available for all participants on our website.

Please submit your abstract using this <u>online abstract submission form</u> until **January 31, 2021**. This online form will also allow you to register for the event at the same time.

We look forward to your abstract submission and participation in the digitainable Forum!

Yours sincerely,

the digitainable research team:

Dr. Shivam Gupta (digitainable Forum coordinator) and Dr. Mahsa Motlagh

Contact

If you have further questions, please contact:

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