Big Data - a way to reach the 17 SDGs?

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The 17 world goals are to be achieved locally and globally by 2030. Multiple responses are needed to achieve them and to create tangible impacts of their implementation for all. Thus, the opportunity is recognised that AI in sustainable development can avoid errors due to the large amount of data that can be processed and that the achievement of goals can be planned more efficiently. However, selecting the "right" data is key to success. Bad players can abuse big data - (cf. Hillier, W. https://careerfoundry.com/en/blog/data-analytics/is-big-data-dangerous/) Indicators and data sets to measure the impact on goal achievement will require a large amount of data that can be managed with new technologies, among others. (cf. https://www.un.org/en/pdfs/Bigdata_SDGs_single_spread_2017.pdf) In addition to a socially non-discriminatory approach to data collection, evaluation tools are also needed to help assess results. Media education that supports the recognition of fake news based on AI-generated data should be a matter of course.

Sustainable development requires a humanistic attitude. This should also be further developed through an examination of digital humanism. (cf. Nida-Rümelin, J. et al: 2022). Sustainable development and digital humanism have a clear interface, as ecological, social and economic responses meet an ethical debate for the digital age.

In the course, on "technology and society" in the degree programs "Energy and Environmental Management", "Building Technology" and "Software Engineering"we workl with these aspects and interfaces. To understand the interfaces, we use models of technology assessment to find answers, which examine interaction between technology (Big Data and informatics applications) and social aspects (as Managing Diversity in practice). The students use concrete case studies and questions to work out which data are required to use AI in the sense of sustainable development. The questions are guided by the three recommendations mentioned on the UN website:

Fostering and promoting innovation to fill data gaps.

Mobilising resources to overcome inequalities between developed and developing countries and between data-poor and data-rich people.

Leadership and coordination to enable the data revolution to play its full role in the realisation of sustainable development. (cf. https://www.un.org/en/global-issues/big-data-for-sustainable-development)

In the planned contribution on cloudEARTHi conference, the procedure and the results will be presented on the basis of a maximum of two concrete cases and made available for

discussion with literature and participants. In this way, participants' own experiences and knowledge can be further developed in exchange with others.