



Achieving sustainable growth now and for the future

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ALEX KNIGHT/UNSPLASH

Recently, artificial intelligence (AI) has been widely discussed being a focal point for debates about hope and scepticism related to the world's future development. AI is an innovation which will profoundly change our economy, politics and society – it is therefore time to ask if and how AI will change corporate social responsibility (CSR) practices, and which opportunities this will bear for companies.

Data is important – but not everything

Already now, AI is part of everyday life for many people, as it is used for instance in online shops, search engines or voice-controlled devices. Besides the application in 'intelligent' products, AI is also used to optimise logistics or labour and production processes. Generally, there are three conditions which must be met to ensure successful application of AI:

- Availability of enough qualitative data and does this data contain meaningful statistical connections and correlations?
- A clearly defined problem which needs to be solved, and clear purpose / targets of the project
- Sufficient complexity of the problem which needs to be solved to justify the use of AI algorithms



Other key components for a successful AI project relate to the way a project is operated: It is advisable to start with small projects which quickly yield results rather than setting up a complex multi-year project with uncertain outcomes.

Where will you go, AI & CSR? Numerous potential applications

A recent report published by the World Economic Forum (WEC) showcases the significant opportunities in employing AI for the Earth¹. However, not all the possible sustainability-related use cases for AI offer direct benefits for a company's CSR approach. The following overview provides guidance on where potential opportunities lie:

- ESG (environment, social, governance) risk quantification: Four of the top five global risks in terms of impact are related to environment or society, according to WEC's Global Risk Report 2018². AI can help companies in evaluating and quantifying these risks: For instance, it could contribute to a sound analysis and prediction of risk related to human rights issues among suppliers of a certain country or region.
- Materiality assessment: Materiality is a key concept of CSR. With the help of AI, companies could use large amounts of public and internal data to get a solid prioritisation of relevant topics, saving both time and resources.
- Energetic optimisation: AI could help in analysing large amounts of data and optimise energy efficiency during production. Google, for instance, achieved energy savings of 30% for its data centres by using AI³.
- Carbon Footprint Calculation: A company's carbon footprint is an important KPI related to environmental sustainability. Instead of an extensive bottom-up analysis, AI could be used to estimate the carbon footprint top-down, making use of mostly public data and avoiding the effort of extensive data collection.



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Conclusion: AI for sustainability

Developments related to artificial intelligence have the possibility to impact and change corporate sustainability practices. The increasing amount of available sustainability-related data is an opportunity for a company's CSR practices, and some viable use cases exist already now. Besides having reliable data, it is also important to thoroughly define purpose and target of an AI project and to start on a small scale with incremental improvements.

If you would like to know more about AI and how your company could benefit from it for its sustainability strategy, please contact Judith Ruppert on 0785 2535868 or ruppert@dfge.de. DFGE - Institute For Energy, Ecology and Economy has been offering consulting, software solutions and auditing services for companies since 1999, in order to integrate CSR activities in business activities and the supply chain. DFGE's sustainability intelligence portfolio provides solutions for CO₂ management (greenhouse gas balances), creation of corporate carbon footprints, product carbon footprints/LCAs, as well as support in international rankings and reporting standards like UN Global Compact, Global Reporting Initiative (GRI), EcoVadis or Carbon Disclosure Project (CDP). Being an independent institute, DFGE's work is based on international standards and scientific methods. ■

1 http://www3.weforum.org/docs/Harnessing_Artificial_Intelligence_for_the_Earth_report_2018.pdf

2 http://www3.weforum.org/docs/WEF_GRR18_Report.pdf

3 <https://techcrunch.com/2018/08/17/google-gives-its-ai-the-reins-over-its-data-center-cooling-systems/>