

How AI is curing many companies' ESG headaches, or not

We have many problems in the sustainability industry. I remember the days when finding data was like going on a scavenger hunt that often resulted in nothing. We used search engines to look for specific data and statistics, but the ESG specific terminology that can be used by different industries and in different contexts, usually resulted in irrelevant search results.

Temps de lecture : minute

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This has changed considerably with the availability of a significant amount of information from various sources. Now the problem is to decide which data to use and how to manage the large datasets. The task of finding data and interrogating it is a prime candidate for applications of new technology. The issue is, however, that technology experts and subject matter experts rarely collaborate, so the technology delivered often misses the point. Most people in this space are so excited about the technology and the 'cool' applications of AI that they forget about the problem we are trying to solve. I work the other way around with the understanding that everything is possible with AI, and we should focus on finding the priority issues we are comfortable solving. Automating data collection and extracting information, in my view, are the perfect entry level application for AI tools in the ESG industry.

Collecting your data

Automating the collection of data is another good way to utilise technology for more efficiency. I have many clients that try to implement smart data collection processes where their internal system automatically picks up statistics and data from various sources. The best use case to demonstrate the efficiency of this relates to collection of health and safety statistics regarding incidents, accidents and near misses for clients who operate multiple facilities. Data is collected on a daily, weekly and monthly basis by different personnel and on different sites. Ensuring that this data is automatically feeding into a master database has saved countless hours of repetitive, manual work.

Environmental data, including emissions, water, soil and air quality for instance pose a similar challenge due to the multiple measuring points and continuous data flow from devices. Automating the flow of information from decentralised devices into a central database is a good entry level use of technology.

Is your data 'relevant' and 'meaningful'?

The fact that data is available doesn't mean that it is all useful, relevant or meaningful for our purposes. We don't have to go too far into the future with sci-fi like technology to see how AI could support human experts by eliminating unnecessary work. In a parallel universe we might have drones with cameras connected to an AI that identifies the various plants and animals in our observational area to demonstrate our commitment to biodiversity conservation. The experts I've talked to in the field expressed scepticism and concerns regarding the 'black box' and AI's decision-making capabilities. At a recent conference I attended a presentation that proposed a more realistic use of AI, where the machine uses a binary system to identify whether or not there is an animal on the photo picked up by the drones. Even this simple use of AI decreases the

number of photos a human needs to look at from 25,000 to 3,000 which is significant time improvement!

The other issue with letting AI loose without human supervision is when it tries to compute and make decisions. Recently in a blog I argued that saying 'I don't know' is the human superpower in the age of AI, as you can rest assured, AI will find an answer or make one up! As a social specialist, this issue hits close to home, as a lot of my work on the social side involves picking up on feelings and sentiments of communities. The 'S' in ESG is also zooming in on employee wellbeing, the capabilities of supply chain management systems and the adequacy of stakeholder engagement. In the world of numbers and statistics, how can we make sure that this information gets picked up and forms part of our ESG performance analysis?

Private data vs. public data

A few years ago, a fund approached me to support their framework of collecting ESG data from companies they might invest in. Long story short, while information that a company voluntarily decides to disclose and must disclose under legislation are available, this data limits our understanding of the inner workings of their ESG strategy and provides no overview on management systems. The more interesting data and statistics around the management of environmental and social issues on a site level remain private.

For this very reason, the technology industry for ESG emerged with the mission to support companies to analyse and visualise the data they need to disclose. The workings of this tech are simple: the user uploads their data, and the machine analyses it, benchmarks to standards and might even generate reports. Most products on the market follow the main ESG reporting standards, including the new EU directives. Supporting the clients with automating reporting based on their data is another great

way to introduce technology into the ESG workflow.

Climate modelling is another interesting field, where models used for calculation are approved on an industry level. The data that companies provide for the calculation are private, but the output of the calculation is made public as part of the annual sustainability report. The concerns around the transparency of the models and the decision-making of the machine are cited by several experts in the field.

Other applications, such as LLM have been used to 'chat' with your information and documents. This is especially useful as a tool for someone like me who has to work with different types of data that is de-centralised. Tools like this dramatically reduce the time spent on research and verification, whether preparing impact assessments or reports on project implementation. Privacy of data remains a key issue which could be solved by separating public documents from internal or private documents for interrogation. One chatbot is interrogating the publicly available information only, while the other is connected to a closed, private knowledge base with confidential information.

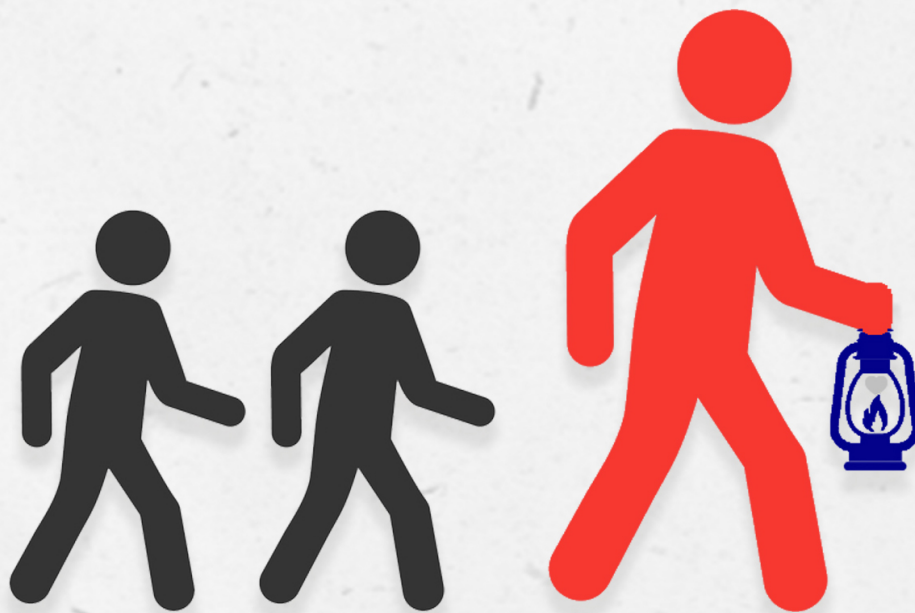
The future is bright

I am a firm believer that technology can work for us – not instead of us. My preferred approach to adopting technology for the ESG sector follows the human-in-the-loop principle, where AI works under human supervision. Humans decide what training data is provided and the reinforcement learning is delivered by a human expert. This address concerns around AI being a 'black box' with no transparency on the training data and the decision-making process of the machine. Now, I see that everything is possible with the incredible breakthroughs in technology. The focus of ESG experts should be prioritising the problems to be solved and finding a delicate balance between humans and machines working together. The aim should be to empower human

experts to focus on their greatest added value: using their professional experience and expert judgement!

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