ESG, AI and the Metaverse

OPERATIONAL TECHNOLOGIES

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Environmental, Social and Governance or ESG, is more than a new catchphrase or buzzword in the "ratings industry". ESG is a concept used by investors to measure the sustainability and ethics of a company they consider investing in. It will come as no surprise that 90 per cent of investors globally already have ESG policies in place or have plans to develop specific ESG investment policies.

ESG covers a wide range of criteria. The main challenge for mining companies is that ESG will often disregard traditional measures of value while looking at other factors that may have financial relevance.

Due to the large volume of complex data that needs to be analysed and because there are no international standards for ESG reporting, investors have come to rely heavily on rating agencies to determine attractive investments.

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1 Fraud or Mistake?

But historically, many companies who have had stellar ESG ratings have been caught out in the media for serious ESG violations. It would be a fair question to ask how this happens? Is this due to a failure on the side of the rating agency or did the operation being rated misreport information to the agency?

An interesting example in this regard is the British fashion company Boohoo. Boohoo had received a double-A ESG rating from internationally acclaimed rating agency MSCI. Sometime later, it was found that Boohoo was sourcing many of its clothing from a sweatshop located in Leicester, where employees were being exploited with low wages and an unsafe working environment.

The above example illustrates why investors and the public, in general, are losing their trust in rating agencies as well as in the companies that are being rated.

This also creates an opportunity for companies with demonstrably transparent and accurate ESG ratings to move to the top of the list of attractive investments.

2 Reclaiming Trust

Some of the solutions to creating trustworthy ESG ratings will come from Industrial AI and the Industrial Metaverse.

Large volumes of complex data make up part of the information used to determine ESG ratings. Because data analytics is a hard problem to solve, companies rarely interrogate the data robustly enough to find possible flaws. This could lead to a grievous ESG violation being unwittingly overlooked.

Industrial AI systems

could be trained to interrogate data for such flaws while searching for disparate values that don't add up, indicating a source of possible concern. Mining companies that use Industrial AI to run plants or measure and manage their mining operations could make the data available to rating agencies, thereby bypassing the human element and ensuring that real and accurate data is being used to create ESG reports.

The industrial metaverse

will also provide scope for reassuring investors and rating agencies alike. Because the industrial metaverse will resemble a large-scale digital twin of the real world, it will hold a wealth of data that could be made available to ratings agencies or investors.

Most of the value of the industrial metaverse will lie therein that it can predict possible disasters while allowing companies to improve the management of current challenges. The implication will be that data from these digital twins and simulations will be more valuable to rating agencies than human-produced data or forecasts.

Attracting Investors

At 4Sight OT, we foresee that companies who invest in Industrial AI technologies will have an easier time reporting ESG metrics while boosting investor and rating agencies' confidence in the reports.

Contact us today to learn how we can assist your mining operation in gathering reliable and transparent data that will not only boost your bottom line but create investor confidence in your ESG rating.

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