As the call for increased transparency and accountability from companies on their environmental, social and governance efforts continues, companies spend significant time and effort in identifying how to consistently capture meaningful and reliable non-financial data to share with their stakeholders. Digital solutions could offer them support in this challenge.

Companies have been harnessing technology to optimize their business performance for decades. But how can digital disruption be leveraged to not only ensure but also encourage sustainable business practices? When it comes to ESG efforts, companies are beginning to discover the rapid expansion and potential that technology offers.

Here are the top five technology innovations that are accelerating, amplifying and prioritizing sustainability in today’s business world:
1. BLOCKCHAIN
This much buzzed about technology has already had a positive impact on sectors such as Energy and Financial Services, redefining broken systems and data consumer security. But blockchain is a game changer for supply chain management, enabling greater transparency and efficiency. The complexity and opacity of how supply chains are managed today is extraordinary. Blockchain has the potential to allow companies and consumers to more securely and transparently track transactions to ensure that suppliers are adhering to their values – whether that be environmental stewardship or sustainable manufacturing.

2. DATA MINING
Having insight into the ESG risks and opportunities for a company is increasingly important, particularly as the information is becoming a non-negotiable from both regulators and stakeholders at large. The lack of homogenous, high quality data in a world where more and more data is produced presents a real challenge for companies who are seeking an easy look into their ESG attributes. As data mining tools become increasingly advanced – from machine learning to optical character recognition – their development will provide access to data and insights that have not been user-friendly before, empowering all parties to quickly and efficiently hone in on value.

3. ARTIFICIAL INTELLIGENCE (AI)
AI is not limited to just predicting and modelling sustainable initiatives but has the potential to transform company reporting processes when it comes to ESG. While sustainability information flows into the market, AI allows companies to sift through these large data sets at unparalleled speed. As the value of ESG data is better understood and increasingly demanded, AI provides an opportunity to smartly analyze mass amounts of fractured data, chartering sustainable new pathways for business.
4. INTERNET OF THINGS (IOT)

IoT is one of the most significant technology advancements that will impact the global economy over the next couple of decades. Projects that harness the power of IoT can contribute to achieving the UN Sustainable Development Goals, having a global reach and connection to both people and objects that has previously been completely unmet. Improving the quality of life in less developed areas of the world, IoT can move sustainable development forward – from smarter cities to cleaner energy – and within that lies a real opportunity for companies to positively contribute to the SDGs.

5. PREDICTIVE ANALYTICS

The top-speed rate at which data will be produced and analysed in the near future means that companies will have enhanced decision-making tools and support systems to build their insight and structure their governance – particularly when it comes to ESG issues. Shaping that data into applicable insights for a company’s strategy and sustainable development is essential not only for creating value but also delivering essential information to stakeholders. Predictive analytic technologies can address this challenge, identifying material ESG issues, flagging risks and benchmarking a company’s sustainability performance against market players.

In today’s world, the abundance of ESG data is monumental. Significant developments in technology has the power to allow companies to aggregate and analyse this ESG and sustainability data at previously impossible levels. The challenge is now to embrace these disruptive technologies in order to obtain strategic and valuable insight into a company’s long term and sustainable growth.