

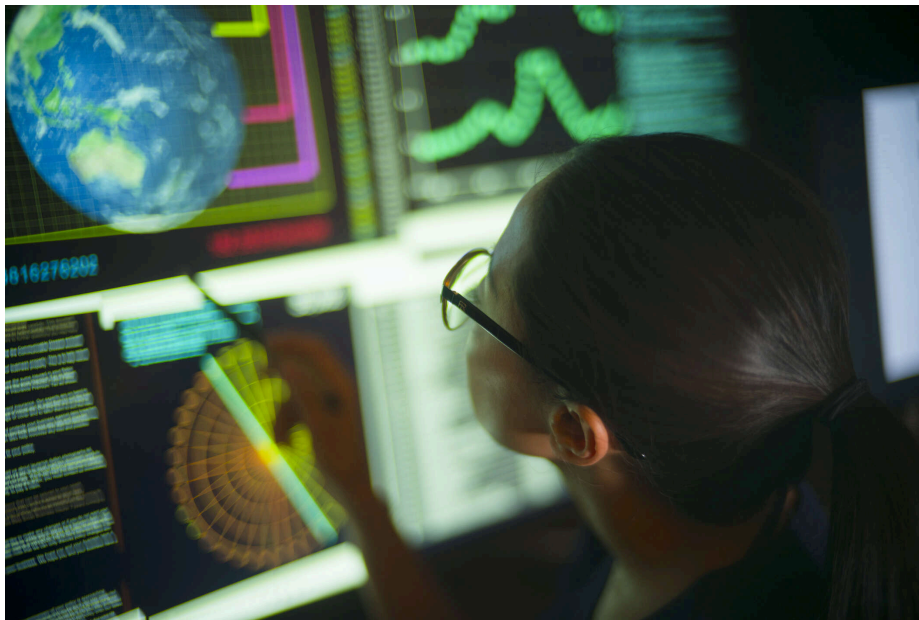
## Sustainability

# What is digital sustainability and how can it support ESG goals?

The tools that support digital transformation can also help companies improve their ethical impact and sustainability, writes guest author Bettina Tratz-Ryan, research vice president at Gartner.

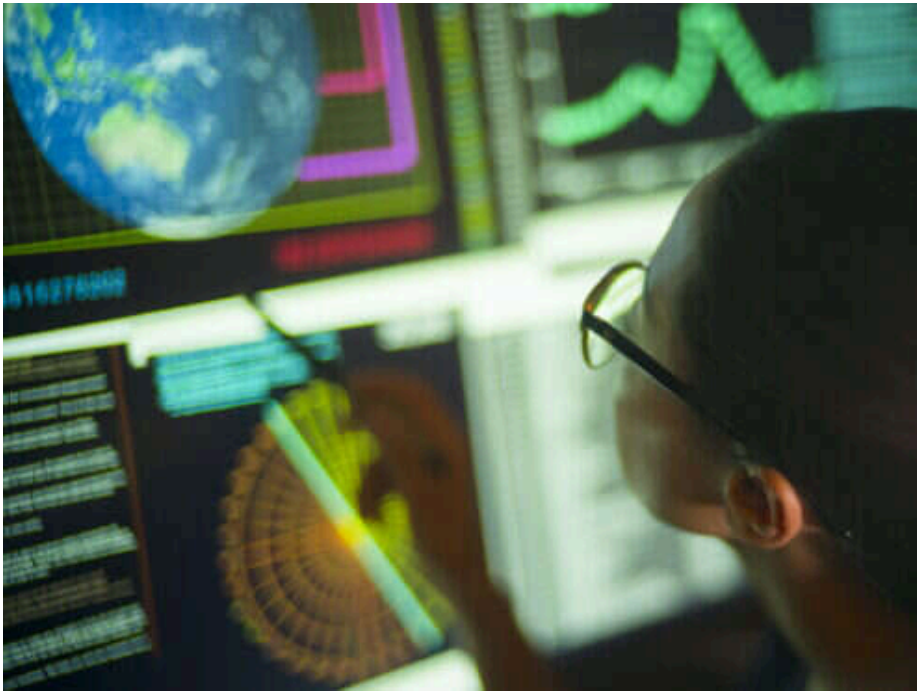
Pete Swabey November 19, 2021

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With out clear goals, digital sustainability initiatives are doomed to fail (Image by Laurence Dutton / iStock)

**E**nvironmental, social and governance (ESG) commitments, which were discussed during the Gartner IT Symposium/Xpo in EMEA last week, have become mainstream standards for all socially conscious companies. They are also used by many investors to measure the ethical impact and sustainability of potential investments. A recent addition to this package of values is digital sustainability, but what is it and how does it apply to a company's overall ESG goals?



Without clear goals, digital sustainability initiatives are doomed to fail. (Photo by Laurence Dutton/iStock)

Digital sustainability harnesses the tools of digital transformation, such as enhanced connectivity and the Internet of Things (IoT), to improve the environment and support sustainable business operations. But with the internet accounting for around 3.7% of global greenhouse gas emissions it can be a tricky circle to square. Fortunately, there are already some well-established, real-world examples of how it can work.

For example, smart building technologies can help building managers reduce the carbon footprint of parts of our built environment by optimising energy use with the help of IoT connectivity and artificial intelligence (AI). Big data analytics can support and strengthen social safety nets that might otherwise be unable to identify, reach and serve all the potential beneficiaries. The issue is identifying how to use technology to solve a problem or to strengthen an existing solution.

## **Harnessing digital sustainability**

A good first step to harnessing digital sustainability is to understand what should shape your strategy. The list is long: from climate change and biodiversity to human

rights, health equity and digital ethics. The key is figuring out how these issues impact your business and stakeholders so you can prioritise your efforts.

Of course, none of these issues are simple, so you'll likely need new thinking. If you try to improve sustainability without defined goals and ambition you are deemed to fail. Digital sustainability requires addressing specific issues with problem-specific solutions, which could include leveraging information technology (IT), operational technology (OT) and engineering technology (ET), as well as non-technical innovations.

By developing a shared understanding of the fundamentals of digital sustainability among senior executives, businesses can prioritise how they develop and deploy the technologies they need. Also, it is important for CIOs and other senior IT staff to meet specific ESG goals related to the sustainability of IT infrastructure and services.

### **Driving delivery and meeting goals**

There is a range of areas that IT professionals need to consider, including ensuring energy efficiency, the management of e-waste, the use of paperless transactions, overall system efficiency and supply chain logistics. There are also several factors that can help evaluate overall IT sustainability, such as the use of cloud storage and the number of devices per employee.

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These steps shouldn't be taken in isolation. IT professionals need to work with executives across a business unit to promote joint initiatives on important issues, although it is also essential to establish ownership of certain initiatives. For example, IT might take control of digital technology and worker safety; marketing might own environmental justice and community engagement; and it might make sense for the supply chain division to monitor a business' carbon footprint and responsible sourcing. Remember,

having a sustainability ‘czar’ won’t guarantee results; success depends on having executives dedicated to implementing change.

It is also possible to apply digital technologies to address issues such as packaging waste. For example, reusable transit packaging can provide location, condition, and other data, while materials informatics can identify ways to safely – and securely – reduce packaging material. Sensors and RFID tags can trace a product’s origins, while a circular economy platform can signal when to refurbish a product. Significantly, IoT connectivity and remote diagnostics, combined with artificial intelligence, can indicate the need for preventive maintenance.

### **Keep track of your achievements**

All these achievements need to be tracked and logged so it’s essential to establish a data platform to gather and analyse ESG-related information from individual operations as well as the entire value chain. Implementing an integrated set of analytical, reporting and business application tools can provide the necessary hindsight, insight, and foresight to ensure that digital sustainability plays a central role in delivery on ESG commitments.

#### **Read more:**

- [How CIOs can drive the ESG agenda in their organisation](#)

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