Sustainability in ADM services

Enterprise IT faces a new reality in The Eco-Digital Era™

Capgemini

Sustainability is the newest economic buzzword, ushering in an era where businesses must deliver not just economic results, but environmental and social results as well.

Our research reveals that nearly eight in ten organizations agree that we are experiencing a dual transition to a more digital and sustainable world.[1] A majority (60%) of organizations express confidence in technology's potential to expedite the achievement of sustainability goals, leading to increased investment in digital solutions for their sustainability impact.[2]

This Eco-Digital Era™ offers ample opportunity to yield environmental and social benefits, in addition to economic ones. And we have just scratched the surface.

"79% of respondents believe they are currently witnessing the emergence of an Eco-Digital Era™ that is more interconnected, data-driven, accessible, and sustainable, resulting in significantly greater reach, scale, and social impact." [3]

Capgemini Research Institute

1 https://www.capgemini.com/insights/research-library/the-new-digital-economy-research/

2 Ibid.
3 Ibid.

01

Technology: Significant carbon footprint

Traditionally, Enterprise IT has been hugely detrimental to the environment. The sector emits 350-400 megatons of carbon dioxide-equivalent gases (CO2e) and generates 53.6 million tons of e-waste – an increase of 21% in five years. Generative AI (Gen AI) consumes huge amounts of power, with data centers emitting gigatons of CO2 and exceeding 20% of the grid power in high-penetration areas.[4] And, as more devices come online – estimated to be 55.7 billion by 2025 – the volume of data will continue to grow and will need to be stored.[5]

Moreover, legacy ways of working are slow and uncollaborative, making processes inefficient in terms of effort and energy.

64.2 zettabytes of data were generated globally in 2020.[6] By 2025, that number will triple, with over 180 zettabytes of data generated per year.[7]

But new realities play to the need for a more sustainable IT

Our research tells us that 64% of organizations surveyed know that sustainability is on the C-suite agenda.[8] This is quite obviously because enterprises are under pressure from various stakeholders on this topic.

Regulators and lawmakers are pushing for more transparency and commitment to decrease carbon emissions. Customers are looking for eco-friendly products and services. Employees are looking for more meaning in their jobs and are unwilling to work for organizations seen as detrimental to the environment. Environmentally active investors are asking questions about an organization's sustainability agenda.

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63% of executives surveyed say the business case for sustainability is clear; 57% say they are in the process of redesigning business operating models to be more sustainable, up from 37% in 2022." [9]

Capgemini Research Institute

1 Chien, Andrew A. https://dl.acm.org/doi/10.1145/3606254 Accessed April 2024

2 https://www.capgemini.com/insights/expert-perspectives/is-enterprise-it-ready-to-become-sustainable-it/

3 United Nations, "Big Data for Sustainable Development," accessed September 2023.

4 Statista, "Amount of data created, consumed, stored 2010-2025," May 2022.

5 https://www.capgemini.com/insights/research-library/the-new-digital-economy-research/

6 https://www.capgemini.com/insights/research-library/sustainability-trends-2023/

We know that technology has the potential to be less of a villain and more of an enabler towards a more sustainable future. Well-applied IT technology by enterprises can be five to seven times more energy efficient. It can provide platforms for reporting on sustainability metrics. By exploring sustainable digital technologies, organizations are already integrating more sustainable infrastructure and monitoring their carbon footprint.

Technology moves quickly, iterating on what works and shedding what doesn't, which makes Enterprise IT an ideal partner for the transition towards a more digital and sustainable future – towards the Eco-Digital Era™.

02

Transitioning Enterprise IT to a greener era

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How a good ADM partner can help

The Greenhouse Gas Protocol provides guidelines to measure and manage greenhouse gas (GHG) emissions generated by businesses across sectors and industries. The protocol classifies emissions according to the reporting organization's upstream and downstream activities. Although some of the emissions may not occur at the business, they are included because they result from the business's energy use.

Reducing these Scope 1, Scope 2, and Scope 3 emissions is critical to an organization's sustainability agenda. A reliable ADM partner can help in reducing emissions across all three scopes.

Reducing Scopes 1 and 2

The ADM partner can directly help in achieving an enterprise's Scope 1 and 2 objectives. It can help clients adopt efficient cloud migration approaches and sustainable infrastructure. They can improve data sourcing, collection, and validation to report performance against sustainability objectives and key performance indicators (KPIs), and it can make the client's business processes more efficient by solving for the underlying IT process issues. And at the highest level, it can use the latest technology to outline and implement an environmental, social, and governance (ESG) roadmap, including doing a circularity assessment and creating new business models that are more sustainable.

Reducing Scope 3

The ADM partner is itself a upstream provider to an enterprise. So, by reducing the carbon footprint of the delivery of its own services, it is helping the client reduce Scope 3 emissions.

It can do this in many ways. By using a digital transition platform and avoiding travel, it can ensure transition is leaner and carbon efficient. It can baseline and continuously monitor the carbon footprint of its delivery. By hyper-automation and effort optimization, it can make delivery of services far more efficient. Delivery locations, facilities, travel, its supplier ecosystem – all can be optimized for emission reduction. It can educate and enable its workforce on sustainability, and it can incorporate green coding in its development initiatives. All these are just some examples of how a responsible ADM partner can aid in meeting an enterprise's Scope 3 objectives.

> *Scope 3 is more challenging to monitor – just 51% of executives are able to measure and collect data on Scope 3 emissions."* [10]
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> **Capgemini Research Institute**

10 Ibid.

04

Lasting financial and environmental benefits

Environmental sustainability is a financially viable business pursuit – out of a set of sustainability frontrunners, 12% realized higher revenue per employee compared with the average, and a 5% higher EBIT margin when compared with the average.[11]

Enterprise IT can move on from being the big, bad wolf of the past to a knight in shining armor. It can make itself lean and efficient, and harness the latest technologies to help meet sustainability goals. The CIO can become the trusted partner of an enterprise's CXOs and can work with them hand-in-hand to walk into a greener future. That trusted ADM partner should come in handy!

11 **Ibid.**

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Sustainability at work

Capgemini is helping clients achieve their sustainability goals through our sustainability services

For a luxury fashion house, the Capgemini team identified opportunities for reduction in current CO2 emissions from data centers and cloud, and also the end user services carbon footprint. At the application level, we were able to calculate and visualize emissions, providing tangible actions for optimization to reduce the carbon footprint. Finally, we performed a gap analysis between the current landscape and the desired future, then provided a roadmap to meet that future.

An energy supplier looked for flexibility and scalability in their IT infrastructure, so they partnered with Capgemini to meet their goals. We compared before and after cloud migration scenarios for metrics such as data center efficiency (PUE), average technical age, and usage pattern, and calculated the power usage and carbon savings. Based on these calculations, we were able to visualize the impacts of various scenarios. After migrating to Microsoft Azure data centers, we found:

- More efficient IT infrastructure due to high flexibility, scalability, and utility of Azure data centers
- A carbon savings of 755 tons of CO2e per year
- Future-ready sustainability strategy from Microsoft Azure
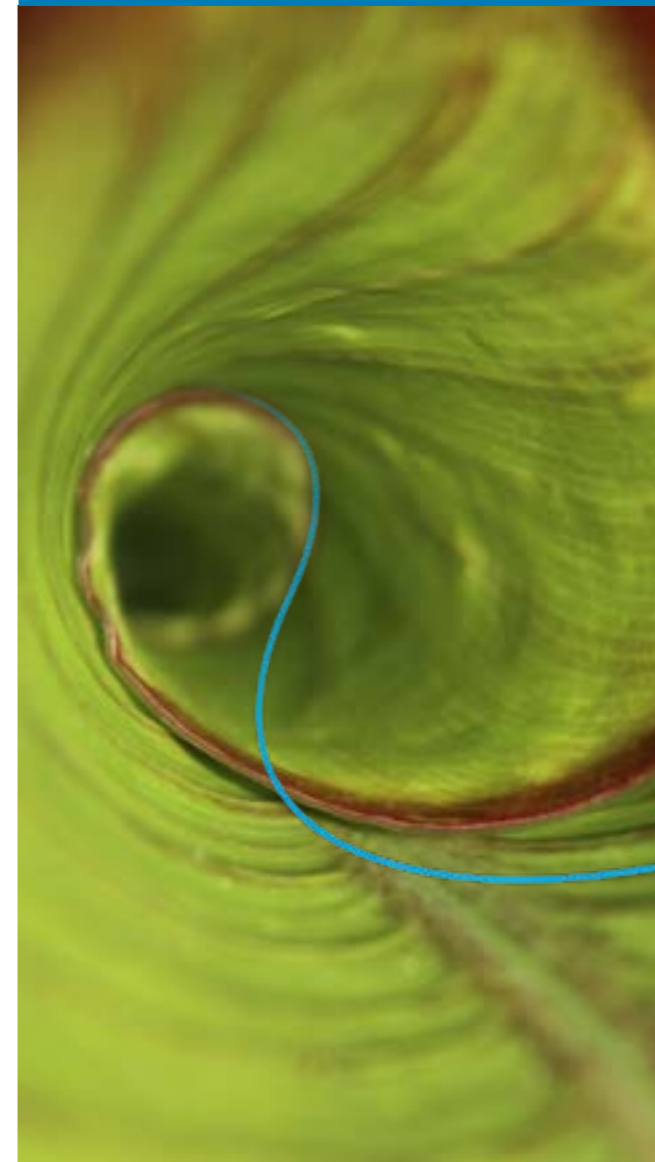
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About Capgemini

Capgemini is a global business and technology transformation partner, helping organizations to accelerate their dual transition to a digital and sustainable world, while creating tangible impact for enterprises and society. It is a responsible and diverse group of 340,000 team members in more than 50 countries. With its strong over 55-year heritage, Capgemini is trusted by its clients to unlock the value of technology to address the entire breadth of their business needs. It delivers end-to-end services and solutions leveraging strengths from strategy and design to engineering, all fueled by its market leading capabilities in AI, cloud and data, combined with its deep industry expertise and partner ecosystem. The Group reported 2023 global revenues of €22.5 billion.

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