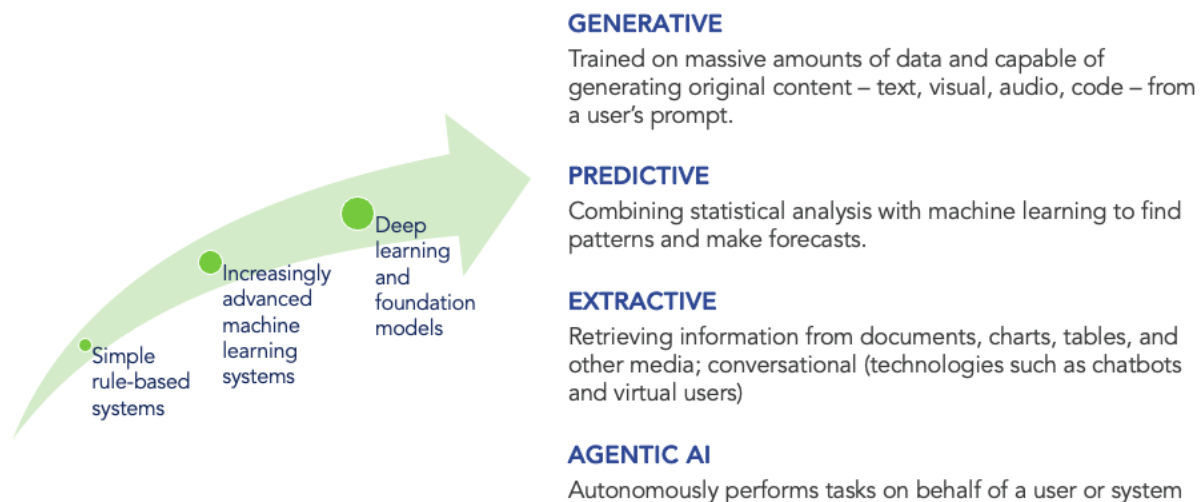


ARTIFICIAL INTELLIGENCE AND SUSTAINABILITY

Artificial intelligence is transforming society and the world of work, with significant – and often unforeseen – consequences. In this peer discussion, we chatted about the trajectory of AI advancements and adoption, and how sustainability teams can better prepare and adapt for the integration of AI technology within the context of its burgeoning risks and impacts.

We will be publishing a more in-depth series of blog posts that expand on the points below in the coming weeks.

- **AI is rapidly evolving.** In a span of a few decades, we have seen AI advance from simple rule-based systems to increasingly advanced machine learning systems, and now – in just the past few years – we have seen the arrival of deep learning and foundation models trained on enormous amounts of data and adapting this data to achieve many tasks. Most recently, we are seeing advancements such as generative, predictive, extractive, and agentic AI. Looking forward, we can expect growing advancements in multi-agent systems, increasingly autonomous systems that operate with limited (but hopefully highly strategic) human oversight, and increasing advancements in AI in robotics.



- **Several emerging trends are shaping the conversation around AI and reinforce the need for clear AI strategies.** Recent research indicates that public sentiment is turning against AI – feelings of excitement and hope for the future have declined, and fear, anxiety, and anger related to AI tools and technology are growing rapidly. The more people use AI, the less

they trust it. Rapid uptake within organisations is also fueling concerns of obsolescence among workers. Research also indicates that AI is amplifying bad judgement and leading to widescale “deskilling.” Liability risks are also on the rise, with companies facing lawsuits over their AI-generated outputs. Meanwhile, the cost of AI implementation is exploding – subscription fees and token costs are on the rise, as is the consumption of tokens, due in large part to the ever-increasing token need of increasingly advanced AI tools.

- **Meanwhile, organisations and sustainability professionals are increasingly embedding AI into their work.** We heard that teams are increasingly using AI for brainstorming; locating and reviewing specific references from reports and other documents; and generating new, public-facing content from internal data. While AI can be an effective drafting tool, it may be more helpful to think of AI as a workflow support – one that can identify pain points; organise, reconcile, and check information; and identify gaps before drafting begins. Other key use cases include checking the quality of ESG data; providing “first-pass” gap analysis of disclosures against sustainability frameworks; building a claim and supporting evidence register; and as an internal knowledge assistant.
- **AI has a growing range of social and environmental impacts that must be addressed.** Across the implementation spectrum, from chip manufacturing through to querying, AI has a large and growing water and carbon footprint. Emissions are rapidly growing, and as AI tools evolve and their use expands, so too does the consumption of resources to power it. Data centres located near residential neighbourhoods have been criticised as a source of noise pollution. In the absence of sufficient controls, AI is also eroding community resilience through unintended biases that can amplify and reinforce discrimination; by empowering malicious actors that use AI to spread misinformation and disinformation and to commit cyber-attacks; reducing cognition in children and adults; contributing to the consolidation of power and threatening democratic systems and society; and by other chronic and acute means. AI is also disrupting the job market, displacing workers and raising concerns of a net loss in jobs in both the near and distant future.
- **Take a precautionary approach.** Understand the limitations of AI, such as persistent challenges related to traceability, transparency, and explainability, and prioritise AI use for workflows that are bounded, repeatable, auditable, and subject to human approval. Remember that you are accountable; treat AI outputs as flags, not evidence, and implement a rigorous system of human review. Maintain your organisation’s tacit knowledge by augmenting – rather than replacing – experience and expertise, and remember that AI is not a replacement for human judgement, intuitions, and instinct. Do not allow AI to dictate your sustainability-related priorities and ambitions, and take care to proactively manage the environmental and social impacts of AI while also considering limits on non-essential AI use.