**Artificial Intelligence (AI)**

**What is responsible AI?**

* **Fairness:** AI systems should treat all people fairly.
* **Reliability and safety:** AI systems should perform reliably and safely.
* **Privacy and security:** AI systems should be secure and respect privacy.
* **Inclusiveness:** AI systems should empower everyone and engage people.
* **Transparency:** AI systems should be understandable.
* **Accountability:** People should be accountable for AI systems.

[Source](https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/strategy/responsible-ai#:~:text=1%20Responsible%20AI%20principles.%20Fairness%3A%20AI%20systems%20should,protect%2C%20and%20control%20AI%20systems.%205%20Next%20steps)

**Example when AI has failed**

## Fail: IBM’s “Watson for Oncology” Cancelled After $62 million and Unsafe Treatment Recommendations

In 2013, IBM partnered with The University of Texas MD Anderson Cancer Center to develop a new “Oncology Expert Advisor” system.

IBM’s role was to enable clinicians to “uncover valuable insights from the cancer center’s rich patient and research databases.”

In July 2018, StatNews reviewed internal IBM documents and found that IBM’s Watson was making erroneous, downright dangerous cancer treatment advice.

The blame was on IBM’s engineers. Evidently, they trained the software on a small number of **hypothetical** cancer patients, rather than real patient data.

The result? Medical specialists and customers identified “multiple examples of unsafe and incorrect treatment recommendations,” including one case where Watson suggested that doctors give a cancer patient with severe bleeding a drug that could worsen the bleeding.

[Source](https://www.lexalytics.com/lexablog/stories-ai-failure-avoid-ai-fails-2020)

**Implications of when AI fails.**

The [ICO outlines](https://ico.org.uk/for-organisations/guide-to-the-general-data-protection-regulation-gdpr/automated-decision-making-and-profiling/what-is-automated-individual-decision-making-and-profiling/) how algorithms can be used as a tool for automated decision-making, including profiling, to discover individual preferences, predict behaviours, and/or make decisions that may impact individuals’ rights and interests. The General Data Protection Regulation (GDPR) has put the control over how personal data is used firmly back with the individual.

Article 22 of the GDPR states that individuals have the right not to be subject to a decision that has a legal or similar effect upon them and, that is based solely on automated decision-making (without human intervention). There are some exemptions to this. However, even when applying exemptions, organisations must still ensure they are protecting the rights, freedoms and interests of individuals. At the very least, they must ensure the right to human intervention if requested and, in doing so, ensure that individuals have not been disadvantaged through this process.

**What can organisations do to ensure that they are being responsible with AI and the wider use of data?**

To ensure that any processing of personal data is lawful, fair and transparent, individuals should be provided with specific, clear and meaningful information about how automated decisions are being made about them. Organisations therefore need to communicate the following:

* “**(M)eaningful information** about the**logic involved**” and “**specific information**” about how decisions are made (GDPR Article 13, Article 14 & Recital 71) in relation to any automated decision making;
* The “**envisaged consequences** of such processing for the data subject” (GDPR Article 13 & Article 14);
* **“(S)pecific information”** about how decisions are made (GDPR Recital 71);
* How individuals can exercise their **“right to obtain human intervention”** (unless a clear exception applies) (GDPR Recital 71); and
* How individuals can express their point of view and obtain “an **explanation of the decisions reached”** and, how they can **“challenge that decision.”** (GDPR Recital 71).

[Source](https://pwc.blogs.com/data_protection/2019/01/artificial-intelligence-ai-and-the-gdpr-part-one.html)