**Artificial Intelligence (AI)**

**What is artificial intelligence?**

Artificial intelligence is sets of many different technologies working together to enable machines to sense, comprehend, act, and learn to with human-like levels of intelligence.

**What is Responsible AI?**

Responsible AI is composed of independent processes and systems that explicitly design, develop, deploy, and manage cognitive methods with standards and protocols for ethics, efficacy and trustworthiness.

**Key Elements of a Responsible AI Framework**

Responsible AI must be all of the following.

* **Accountable:**Algorithms, attributes and correlations are open to inspection.
* **Impartial:**Internal and external checks enable equitable application across all participants.
* **Resilient:**Monitored and reinforced learning protocols with humans produce consistent and reliable outputs.
* **Transparent:** Users have a direct line of sight to how data, output and decisions are used and rendered.
* **Secure:**AI is protected from potential risks (including cyber risks) that may cause physical and digital harm.
* **Governed:** Organization and policies clearly determine who is responsible for data, output and decisions.

**Why do AI projects fail?**

There could be different reasons for this, but most of them could be grouped as follows:

**Unclear business objectives**

AI is a powerful technology but implementing it without a well-defined business problem and clear business goals is not enough to achieve success.

**Poor data quality**

Data is the key resource of every AI project. Businesses need to develop a data governance strategy to ensure the availability, integrity, and security of the data they will use in their project. Working with outdated, insufficient, or biased data can lead to failure of the project and wasting business resources.

**Wrong area of application**

It may happen that the data used for some task is too complex, difficult to obtain, or that the result needs to be much more accurate, than any algorithm can achieve.

**Instances where AI has failed**

* IBM’S “Watson for oncology”- System that would help fight cancer. Medical specialists identified multiples of unsafe and incorrect treatment recommendations.
* Apple’s face ID defeated by a 3D mask
* Amazon axes their AI for recruitment because their engineers trained it to be misogynistic (AI for recruitment hated women)
* Microsoft AI chatbot (AI that hated humans)