

# NIMBUS AND CLARKE ANALYTICS COLLABORATE TO DEVELOP TRUSTWORTHY ARTIFICIAL INTELLIGENCE (AI) SOLUTIONS



## **BACKGROUND**

Clarke Analytics Ltd is a wholly-owned Irish consulting and training company specialising in data analytics and data science consulting and training. The company was set up in October 2016 by Dave and Helen Clarke to address Industry needs in this space.

### **THE NEED**

Having worked in the data industry for many years, Dave recognised the challenges that company executives across all industries had in leveraging their data assets effectively for business benefit.

Increasingly, executives now have the added pressure of ensuring that wherever they use AI, it is used in an ethical and trustworthy way.

The European Commission's Ethics Guidelines for Trustworthy Artificial Intelligence (AI) put forward a set of 7 key requirements that AI systems should meet to be deemed trustworthy:

- 1. Human Agency & Oversight
- 2. Technical Robustness & Safety
- 3. Privacy & Data Governance
- 4. Diversity
- 5. Non-Discrimination & Fairness
- 6. Societal & Environmental Well-Being
- 7. Accountability

The EU guidelines state, trustworthy AI should be:

Lawful - respecting all applicable laws and regulations.

**Ethical** - respecting ethical principles and values.

**Robust** - from a technical perspective, considering its social environment.

Clarke Analytics intend to develop a software platform solution to independently assess the compliance of Al algorithms employed in the industry.



# THE SOLUTION

In conjunction with the Nimbus Technology Gateway AI team, Clarke Analytics are currently developing a proof of concept prototype to address the interpretability of AI used against a corporate data set. This will freely and autonomously appraise if:

- A company is ethical in its application of AI technology.
- An Al algorithm is making an ethical decision.

### **BENEFITS OF THE ENGAGEMENT**

Clarke Analytics envisages that this work will "help their clients better understand how to use their data for business value" and to eliminate any inherent bias that may be within an employed AI solution. This is to "give our customers confidence in their data analysis outcomes, i.e. that any software analysis isn't prejudiced".

"The work being delivered by the Nimbus Technology Gateway is pivotal to new Clarke Analytics Ltd services and offerings. Conor and his team have been very innovative and the whole experience to date has certainly been worthwhile, amazing value and rewarding. We are currently planning further projects with the Nimbus Technology Gateway for 2020 and beyond."

- Dave Clarke CEO & Founder, Clarke Analytics Ltd.