## OCF AI SOLUTIONS: ENERGY



PREVENTATIVE MAINTENANCE

**DRONE INSPECTION** 

PRODUCTION OPTIMISATION

"Data is the new oil. It's valuable, but if unrefined it cannot really be used... Data must be broken down and analysed for it to have value" famously said by a UK data science pioneer Clive Humby.

Today, AI and machine learning are breathing new life into the energy sector. This industry is literally soaked in data – after all, a single drilling rig generates terabytes of data daily – but until recently, only a small fraction has been used to create new business value. OCF has capitalised on the opportunities by combining structured and unstructured data with innovative technology in the energy sector within maintenance, inspection and optimisation.



Predictive Maintenance allows companies to predict when machines/facilities need maintenance with high accuracy, instead of speculating or performing preventive maintenance. Using Artificial Intelligence to observe equipment and detect failures before they happen can save money, time, and lives. Technologies such as sensors and advanced analytics embedded in energy equipment enable predictive maintenance by responding to alerts and resolving machine/facility issues.

Drone Inspection Energy companies are using AI for maintenance of power transmission and distribution of equipment. The challenge they face is the vast area of distribution and site to keep under surveillance. Many drone companies have come forward with sophisticated cameras to identify risk in real-time. These risks could be an intruder in a solar panel field, inspecting a worn part on a windmill and fire a distribution line etc.

**Production Optimisation** AI is poised to drive unprecedented operational productivity and efficiency in energy. AI allows machines to interpret, act and learn from data by combining digital technologies such as machine learning, natural language processing and robotics. By augmenting human decision making through real-time insights, AI has the power to optimise and transform upstream operations.

