ARE YOU KEEPING AN EYE ON EVERYTHING TO **MITIGATE RISK?**

This is now possible with our visual-based CCTV Artificial Intelligence systems ...

The need for a proactive solution in the global energy and resources sector to effectively utilise funds /assets and supplies to improve operations for better conditions are always being researched and studied. The significance of video-based data has become an important part of this initiative due to its inherent capabilities and real-time characteristics.

However, in terms of surveillance video there are thousands of cameras in the industry that are mainly viewed by human eyes thus consuming a lot of manpower. There is no doubt that it is impossible to monitor all videos and difficult to record, resulting in low efficiency in resources deployed. Therefore, to make use of video data in application scenarios for the oil, gas, and mining industries.

To address this concern in the industry, PNR Engineering has combined Artificial Intelligence and deep machine learning algorithms and developed AIVI construction. AIVI construction can monitor processes and abnormal behaviour in real-time. This technology can monitor and track process-related concerns, dynamics of workers /vehicles, building materials, construction equipment, etc. The system works 24 hours to carry out comprehensive monitoring and reporting to ensure the increase in productivity and the safety of lives and property.

PNR

Powered by **Ai** GROUP
ARTIFICIAL INTELLIGENCE
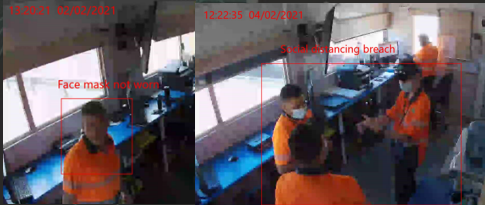
MAKING CCTV SMARTER

AI ALERT ALGORITHM EXAMPLES:

The uncovered bare soil on the construction site can be identified through a video algorithm. AiVi can be programmed to alert if the uncovered soil exceeds a specific amount of area

UNCOVERED LAND DETECTION

During the covid 19-crisis, Governments mandated the wearing of face masks and social distancing in all indoor and outdoor venues. This algorithm is designed to detect individuals who are not following national health guidelines

MASK AND SOCIAL DISTANCING

This Algorithm Recognises the number of people in an allocated production workshop area and reports any overrun situations.

CROWD DETECTION

Recognises vehicles in specified areas by video algorithms and reports license plates when applicable. At the same time, verification of the driver can be processed through real-time uploaded identity information (including photos) and real-time face capture (1: 1 verification).

CHECK-IN OF VEHICLES

Fires in work & production sites can be identified through video algorithms. These incidents could be immediately reported and alerted in real-time for prompt action.

OPEN FLAME RECOGNITION

A video algorithm is used to identify whether workers in the construction area are wearing protective clothing such as hard hats & reflective vests, If such protocols have not adhered to alerts can be generated.

HARD HAT & REFLECTIVE VEST DETECTION

Video analysis combined with Artificial Intelligence recognition algorithms outlining sensitive areas can be monitored in real-time. Intrusive work behaviours in these areas are detected and alarmed

RESTRICTED AREA BREACH

AIVI construction can identify uncovered dirt vehicles, their license plate and body colour. Information can also be registered and alerted under proper conditions.

UNCOVERED DIRT VEHICLES

PNR Engineering

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