Cases > Management > ABN Cleanroom technology

Background

ABN specialises in the design, development and construction of pre-engineered cleanrooms. They aim to increase energy efficiency, reliability and speed in cleanroom projects. ABN Cleanroom Technology is mainly active in the health care, biotechnology, microelectronics, pharmaceuticals, automotive and food processing industries.

Objectives of the cooperation

ABN was looking for a partner that could help them with the further development of their pre-engineered cleanrooms. More specifically, they wanted to develop a system that aided employees with the maintenance of the machinery. This system needed to be capable of identifying anomalies, predicting required maintenance and reducing maintenance costs and downtime.

Process

To reach the desired end goal, ABN and CROPLAND combined their expertises. ABN offered their know-how on cleanroom technology and the Internet of Things and CROPLAND added their knowledge on A.I. to the mix. This resulted in the development of AIoT, the Artificial Internet of Things. The final product was the development of an algorithm that identified anomalies, monitored the situation in the cleanroom and flagged employees when it differed from the normal situation.

RESULTS

CROPLAND provided ABN with a long-term and viable solution. ABN raised their customer value by offering improved and reliable products. Their clients can now monitor the current situation in a clean room and see to what extent it deviates from a normal situation. All of this information is bundled in a centralised data platform. Clients can predict maintenance and save time and money by predicting which machines will need maintenance at what point. The machines have a higher availability because of this and long-term outages are prevented.

Technology *IoT I Artificial Intelligence*