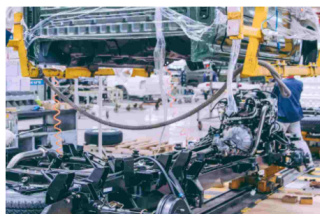


CASE STUDY

Artificial Intelligence and Machine Learning Help a Recreational Vehicle Manufacturer Streamline Supply Chain and Logistics, and Increase Equipment Efficiency



Artificial Intelligence and Machine Learning in Manufacturing – What Is It All About?

Artificial Intelligence and its subsets, like Machine Learning, are changing the face of industries across the world. One industry that has particularly benefited from the advent of AI and ML is the manufacturing industry. Major manufacturing industry players are heavily investing in machine learning. Major companies across the globe are leveraging predictive maintenance to improve the life of their assets. Data has now become the most valuable resource although it is cheaper than ever to capture and store. With the use of machine learning and predictive maintenance to use data for bringing a significant change in their production efficiency, product quality, and most importantly employee safety.

The Client

The client is one of the largest recreational vehicle manufacturers in the world. They are based out of the US with their headquarters in California. This manufacturing industry player sells motorized recreational vehicles through its subsidiary brands.

Business Challenge

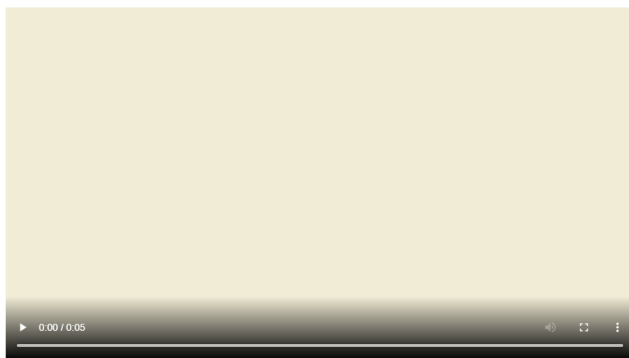
The client had been trying to tackle the problem of frequent machine breakdowns leading to a higher cost of upkeep and reduced downtime. They approached Quantzig to leverage its predictive maintenance expertise to predict the breakdowns and reduce the downtime. This manufacturing industry giant was also facing predicaments with controlling the quality of their manufactured products. This manufacturing company wanted to leverage machine learning in manufacturing to improve product inspection and quality control. The client was aware of the role of artificial intelligence in manufacturing and thus wanted Quantzig's expertise to apply artificial intelligence to detect upcoming quality defects.

The manufacturing industry does not only deal with manufacturing products and maintaining them. It also includes a robust [supply chain network](#) and logistics system. The client wanted to leverage artificial intelligence in manufacturing to streamline its supply chain network and logistics.

Our Approach

The machine learning and artificial intelligence experts at Quantzig analyzed the complete scenario and highlighted the need for deploying a machine learning model to help the client deal with their current challenges. Machine learning in manufacturing helped the client improve their general business process. Quantzig's solutions for artificial intelligence in manufacturing enabled the client to detect all kinds of issues in their routine production. As a result, the client was able to identify the bottlenecks and unprofitable lines in their production.

Business Impact



On collaborating with Quantzig, the client embarked on a journey of deploying machine learning in manufacturing and understood the hidden factors that were contributing to reducing the life of their assets. Quantzig's solutions based on artificial intelligence in manufacturing helped the client to streamline their supply chain networks and reduce delivery costs.

Quantzig's machine learning in manufacturing solutions enabled the client to achieve the following in six months:

1. Reduce workflow time by up to 87%
2. Increase equipment efficiency by 65%
3. Improve the life of assets by an average of three years
4. Increase detection rate of issues by 90%
5. Streamline supply chain and logistics