

ABSTRACT

In every industry, machines are the heart of the industry. If the machine stops the industry's production works full process will be stopped. So, maintaining the machines' health in the industry is a very essential process. If we don't care about that, if the machine is stopped itself with severe errors, then service and repairing will take huge time and sudden unexpected stop of the productions leads to many problems. So, every industry does machine predictive maintenance day in a particular period.

During predictive maintenance day, if the screening of all the system itself takes more time for the service man to check every machine by unscrewing and identifying the which part is problem then it takes many weeks to identify for all the machines available in the whole industry. To speed up this process we DT scanning app and checking the problem area in a machine and doing service in that part and can finish up as faster. For this we introduced AV augmented vision code and DT digital Twin scanner methods.

A Digital Twin (DT) is a digital interpretation of a physical object which plays an important role in the digital transformation of industry, where an important requirement for intelligent manufacturing is cyber-physical integration. One of the objectives is to improve the performance of the real system using the information generated in the virtual part. This project shows the development of a low-cost DT (Digital Twin) used for monitoring the state of the process and the product development.

In our proposed project we use a IOT and sensors to show the demo with the parameters of the machines in the IOT also to sense with Unique the DT scanner gives the DT images for the machines conditions such as if green the machine shows the normal if orange color machine part(ex!, in project as motor) images and severe changes in parameters