



IoT in Manufacturing

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Manufacturing is not something new to us. We've been doing it for millions of years. Right from making sharp and pointy things out of stone to building machines which are capable of traversing interstellar space, we've come a long way! And crossed some major milestones. We are now at such a point in time where our decisions and actions could totally transform the way we do manufacturing. It is what the World Economic Forum has called the Fourth Industrial Revolution. It also goes by names such as Industry 4.0 or Industrial IoT (IIoT).

Manufacturing has two major physical aspects to it. One, the inventory and two, the machines and there is also a non-physical aspect, the process of manufacturing itself. Industrial IoT is going to help us transform the way we manage and handle all of these aspects of manufacturing. Here is how.



Automated Manufacturing

Manufacturing is hard. It takes precision, accuracy, speed, consistency and much more. So, it's always a good idea to leave it to the machines when we can. IIoT helps us here by acting as the eyes and ears of the machines to help them achieve the level of quality and speed that we want.



Inventory management

Inventory is the life source of manufacturing. Inventory is to manufacturing as food is to human beings, too little can starve you to death and too much isn't good either. It's about striking a balance. Through enabling Industry 4.0 standard throughout the factory, we get an eagle's eye view of the overall process which helps in better planning and inventory management.



Predictive Maintenance

Predictive maintenance is based on the principle that it is better to be proactive than reactive. IIoT helps in continuous monitoring of the health of valuable assets in order to prevent catastrophic failure by letting us predict and plan downtime.



Security

Security is not something specific to the manufacturing sector, nevertheless, it has an important role in manufacturing. It could take a higher precedence than any or all of the above mentioned aspects depending on which sector we are talking about. IIoT's role in security has different facets to it, but if we were to summarise, it helps prevent unauthorised access to or usage of valuable assets.

About Redeem Systems

Redeem Systems is a pure-play Engineering and Digital Services Company with focus on mission critical highly engineered + high availability systems. Our global presence spans Asia-Pacific, Middle-east, Europe and North-America.

Our focus verticals include – Tele-communications, Medical Electronics and Aerospace & Strategic Electronics.

Our Product Engineering competencies include Product Design and Development, Verification & Validation, Emerging Markets Strategy and Product Life-Cycle Extension through Value Analysis and Value Engineering

Our Digital competencies are focused on Industrial Internet-of-Things (IIoT), Engineering Big Data Analytics and Software Defined Networking (SDN)/ Network Functions Virtualization (NFV).