

## List out 20 use cases of the Internet of Things.

- 1. Remote Monitoring:** With IoT-connected assets, you can monitor equipment usage and health in order to assess performance and deploy service should there be any problems.
- 2. Supply Chain Management and Optimization:** With the Internet of Things, there are several major benefits that the supply chain will experience, summed up well by SupplyChain:
  - Real-time tracking of assets and products
  - Automating warehouse tasks
  - Paperwork management can be digitized
  - Forecasting accuracy improves dramatically
  - Operations have far greater control of inventory
- 3. Digital Twins:** A virtual, or simulated real-world object, concept, or area within a digital space, digital twins are an interesting and powerful use case of IoT.
- 4. Real-Time Machine Monitoring:** Real-time machine monitoring makes this possible, providing a stream of data straight from the machine control to provide accurate data analytics that can be used for in-the-moment decision making or in-depth analysis.
- 5. Predictive Maintenance:** With IoT-connected equipment, manufacturers can move from a calendar-based plan to a condition-based strategy. If manufacturers collect enough data on equipment performance and health, they can closely monitor variables to establish a threshold that can predict impending machine failure.
- 6. Production Visibility:** The only way for most manufacturers to know what is happening on the shop floor is to actually walk out onto the shop floor. Even then it may take some time to observe the operators and machines to truly understand where performance stands. They may have to engage with managers, analyze a whiteboard of part counts, etc.

**7. Integrating Systems:** The CMMS can use this data to automatically deploy maintenance upon a machine failure, jobs can be scheduled in the ERP based on more accurate cycle times provided by the machine data, and financial teams can use the production data to more accurately quote customers and ensure that the right amount of jobs are brought in for production.

**8. Compiling KPIs:** The goal is always to reduce the time and effort it takes to understand if performance is matching expectations. Luckily, IoT platforms are helping to compile and contextualize data into simplified reports and dashboards that can quickly explain how well a business is performing.

**9. Automation:** Industrial automation is one of the largest promises of Industry 4.0.

**10. Asset Utilization:** The Internet of Things allows manufacturers both large and small to monitor and optimize equipment with data analytics. Health and performance and machines can be tracked, downtimes can be categorized, and decisions can be made to better use the equipment.