Internet of Things (IoT), which is fueled by the latest innovations in information and communication technology, has led to connections that were never deemed possible earlier in the century. Now, machines that can communicate and collaborate with each other without human intervention can be connected.

Asset Monitoring & Advanced Maintenance solution, designed by Infosys uses IoT to ease the way in which operations and maintenance tasks are executed. Infosys has developed this in-house solution on Oracle e-business suite to capture real-time data from various asset units installed across locations and monitor them to deliver a maintenance service par excellence. With inherent ability to sense data deviations and act proactively, IoT-enabled Oracle EBS capabilities can result in the highest levels of asset utilization and overall system efficiency.

Infosys offering

Infosys aims to provide an asset monitoring solution that integrates every aspect of asset maintenance; from monitoring the health of asset-using quality module, creation of work requests, work orders, preventive maintenance using Oracle enterprise asset management (EAM) module to automatic spare part replenishment using inventory and purchasing module. This solution can further create field service requests for field assets. And also brings to the table an intelligence on the nearest available mobile field teams to assist planner in planning the field service jobs. The scheduled job information quickly flows to the nearest field team on their mobile devices. On completion of the task, information flows back to the application and the field request is closed. Complete automation of data collection and data analysis ensures painless execution of maintenance requests that eventually increase the uptime of machines. This increases the overall plant efficiency and customer order fulfillment capability.
Solution benefits

- Remotely connected assets and autonomous monitoring without human intervention
- Remote monitoring both onsite and offshore
- Remote authorization of assets
- Holistic view of assets and equipment
- Archive historic maintenance data to formulate preventive maintenance strategy
- Substantial increase in uptime of asset and reduced maintenance costs
- Compliance with regulatory laws such as OSHA and increase in workplace safety by reduction in accidents
- Track important parameters such as mean time to repair (MTTR) and mean time between failure (MTBF)
- Increase overall equipment effectiveness (OEE) and overall plant efficiency (OPE)
- Automatic spare part replenishment

Industry-wide applicability

<table>
<thead>
<tr>
<th>Manufacturing</th>
<th>Transportation</th>
<th>Food and beverage</th>
<th>Oil and gas</th>
<th>Metals and mining</th>
<th>Healthcare</th>
<th>Waste management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capture critical asset parameters, track abnormality to avoid failures, formulate preventive maintenance strategy</td>
<td>Capture speed, mileage data to schedule preventive maintenance, and report breakdowns</td>
<td>Quality and weight analysis of food produced to record any deviation and implement preventive maintenance plan</td>
<td>Temperature and pressure analysis to detect losses and schedule maintenance tasks accordingly</td>
<td>Preventive maintenance of mining equipment</td>
<td>Critical data analysis of health statistics of patients to ensure timely scheduling of preventive tests</td>
<td>Water purity and content analysis for detection of deviations from standards and schedule maintenance appropriately</td>
</tr>
</tbody>
</table>

*Indicative only. Applicable to many more industries and varied business scenarios*