oil analysis- allows engineers to constantly check the condition of a machine's oil lubricant and determine if it has been compromised by other particles and contaminants.

Advantages of Predictive Maintenance

- 1. Minimizes unplanned downtime of mission critical assets
- 2. Reduces time spent on maintenance
- 3. Increases the life expectancy of machines and equipment in some cases by 20 to 40 percent
- 4. Reduces machine breakdowns and unexpected failures
- 5. Minimizes costs spent on labor, spare parts, and equipment
- 6. Reduces stock of spare parts due to increased service life of assets
- 7. Improves safety throughout the workplace for technicians and operators

Disadvantages

- 1. Detailed and time-consuming planning to ensure this maintenance approach it deployed throughout each facility and details all assets.
- 2. Purchasing the right condition-monitoring of the which can result in high upfront cost
- 3. Hiring skilled out or training mainterence teams which can be expensive