



INFOSYS GENOME SOLUTION NAVIGATES CHALLENGES OF INDUSTRIAL MANUFACTURING



Manufacturers of engineering products and industrial assets, such as farm machinery, motors, production and packaging equipment, turbines, and Automatic Teller Machines (ATMs), have a business imperative: maximize uptime for customers. It requires Original Equipment Manufacturers (OEMs) to service assets at regular intervals and provide prompt onsite assistance in the event of breakdown.

The Infosys Genome Solution enables asset health monitoring and also helps in predicting likely failures to ensure high availability of industrial assets. Our platform helps analyze data streams generated by the equipment and its ecosystem, including machine logs, trouble tickets, maintenance schedules, transaction load, service calls due to part(s) failure, and replacement and repair reports. Predictive insights into device data and performance metrics boost operational efficiency. Use cases for the Infosys Genome Solution span the industrial manufacturing value chain.

Product engineering

Our analytical framework combines real-time and historical data from asset, supplier, customer, and distributor-related applications to identify specific components that are likely to fail as well as attributes contributing to the failure. In addition, it correlates asset failure with features such as the load factor, age of machine, frequency of scheduled maintenance, etc. Predictive insights from failure log analysis empower R&D, product

engineering and manufacturing teams to address the root cause(s) of equipment/component failure, and explore cost-effective strategies to enhance reliability as well as uptime of industrial equipment.

The Infosys Genome Solution can help discover common/repetitive failures across assets, operators, customers, suppliers, and regions. It enables enterprises to implement appropriate risk mitigation strategies ranging from supplier quality control to training modules for operators

and maintenance crew.

The Infosys Genome Solution facilitates exploratory data analysis to estimate the lifespan of critical parts and components. It helps OEMs better manage sourcing and distribution to maintain health and boost efficiency of machinery. Significantly, our solution enriches the Industrial Internet of Things (IIoT) manufacturing environment by supporting tracking applications for product/parts traceability, and regulations for industrial safety and asset performance.

Asset maintenance

Predictive insights into asset-specific performance and maintenance costs enable OEMs to improve planning and optimize maintenance schedules. The Infosys Genome framework predicts asset/component failure up to 48 hours in advance. It assigns an asset health score and segments each asset class based on factors such as cost of part failure, frequency of component replacement, and average downtime.

Visibility into an asset's health helps the manufacturer/service provider minimize failure, unplanned repair/maintenance, and emergency breakdown service. In addition, it maximizes returns on assets by eliminating over-maintenance and optimizing allocation of service resources, while complying with service-level

agreements for service contracts.

Actionable maintenance alerts generated by the Infosys Genome Solution framework maximize asset availability and reduce mean time to repair (MTTR). Further, visibility into the demand for components and service parts helps manufacturers consolidate procurement orders and negotiate terms of sub-contracts.

Warranty management

Since original equipment manufacturers are responsible for asset performance during and after the warranty period, a data-driven approach to warranty and post-warranty service plans is a business imperative. The Infosys Genome Solution framework enables global OEMs to rationalize costs, while offering bespoke warranty and extended coverage plans to customers.

Our predictive analytics platform grows warranty revenue for OEMs and after-sales partners with accurate insights into the equipment lifecycle. It analyzes the cost of repair/replacement, overheads and additional service options to customize warranty and post-warranty policies. Further, predictive analytics enables distributors and servicing agents to optimize parts inventory across asset categories.

The Infosys Genome Solution enhances the industrial manufacturing ecosystem through predictive analytics. It provides a unified data model that can be leveraged for multiple advanced analytics models. These can increase productivity by 10%-25%, decrease maintenance costs by 10%-40%, and reduce asset downtime by up to 20%.



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