

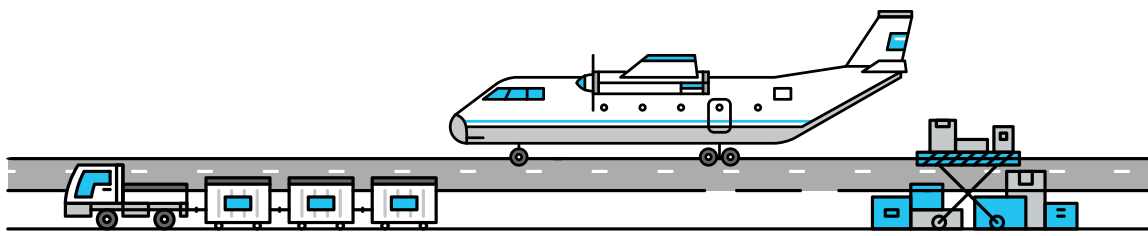
World-class service experience with predictive maintenance analytics

The client is a leading global aircraft design and manufacturing company.



Customer Pain Points

- Need for continuous improvement in performance metrics for reliability and service management in a changing commercial aircraft industry serving a dynamic global operator base. [Operators/ carrier fleets, weather and operator-related delays, and scheduled and unscheduled maintenance]
- Need for re-imagination of current systems of acquiring, cleansing, harmonizing, and analyzing the enormous volume of aircraft sensor data across multiple fleets. [One aircraft has 100,000+ sensor; one aircraft engine alone has 40,000+sensors]
- Lag time created by manual processes used to analyze unstructured data from disparate sources. [Text files, aircraft logbook, maintenance notes used across supply chain, operations, maintenance]



- **Define and implement new business processes and performance metrics**
 - Develop standards and practices aligned to new processes and technologies across a global organization
 - Reimagine the current processes of data flow to enable real-time processing and analytics leading to 'fastest-path-to-answer'
- **Build and deploy change the business strategy with minimal disruption to internal and external customers**
 - Integrate new technologies with internal solutions across the customer base
 - Re-train workforce to use advanced analytics

Challenges Resolved

How we did it

HCL adopted the Agile Analytics approach to achieve results quickly. The team selected three use cases applied to client pain points and completed three agile sprints making them navigate the entire life cycle multiple times.

Data Management	Predictive models	Capability deployment support
Seamless data acquisition, cleansing and harmonization	Service event related data grouping	Methodology Consulting
Data correlation and analysis capability building	Combination of text and sensor data	Infrastructure architecture and implementation

- **Improved performance metrics for reliability and service management**
 - Established advanced analytics process to continuously improve the 97.9% reliability rating
 - Reduced the defect identification process from weeks to hours
- **Established Analytics-as-a-Service**
 - Reduced time to insight from 30-90 days to one day
 - 75% initial accuracy achieved in identifying service actions and related interruptions
- **Established Data -a-Service to reduce time and cost of time delays in identifying service interruption factors**
- **Establish Infrastructure-as -a-Service to reduce time and cost to acquire, process, and analyze data**
- **Establish capability for new revenue generation services**
 - Data Analytics-as-a-Service model
 - Proactive predictive diagnostics for fast detection of potential failures and maintenance schedule mapping

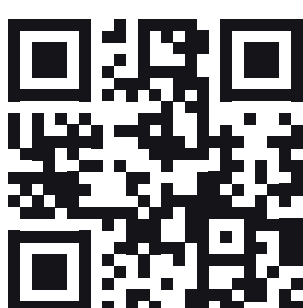
IoT WoRKS Impact



HCL Technologies (HCL) empowers global enterprises with technology for the next decade today. HCL's Mode 1-2-3 strategy through its deep-domain industry expertise, customer-centricity and entrepreneurial culture of ideapreneurship™ enables businesses transform into next-gen enterprises.

HCL offers its services and products through three business units - IT and Business Services (ITBS), Engineering and R&D Services (ERS) and Products & Platforms (P&P). ITBS enables global enterprises to transform their businesses through offerings in areas of Applications, Infrastructure, Digital Process Operations and next generational digital transformation solutions. ERS offers engineering services and solutions in all aspects of product development and platform engineering while under P&P, HCL provides modernized software products to global clients for their technology and industry specific requirements. Through its cutting-edge co-innovation labs, global delivery capabilities and broad global network, HCL delivers holistic services in various industry verticals, categorized under Financial Services, Manufacturing, Technology & Services, Telecom & Media, Retail & CPG, Life Sciences & Healthcare and Public Services.

As a leading global technology company, HCL takes pride in its diversity, social responsibility, sustainability and education initiatives. As of 12 months ended June 30, 2020, HCL has a consolidated revenue of US \$ 9.93 billion and its 150,287 ideapreneurs operate out of 49 countries. For more information, visit <https://www.hcltech.com>



www.hcltech.com