

G-Cloud

HITACHI

Hitachi Digital Services

Managed Service Rail



Hitachi Digital Services vision and mission

Hitachi has been a trusted supplier to the UK government for over half a century in Transport, Energy, Technology and Research, among the numerous sectors where we have consistently delivered social value and value for money.

Hitachi Digital Services offers a diverse array of innovative technology solutions tailored to meet the specific needs and desired outcomes of governmental agencies. Specialising in advanced IOT, ERP, Machine Learning, data analytics, and cloud services, we stand out for our unwavering commitment to security, reliability, and innovation. With a track record of delivering robust and scalable solutions, Hitachi empowers government entities to streamline operations, increase efficiency, enhance data security, and optimise performance, thereby enabling them to better serve the UK public. By leveraging state-of-the-art innovative technology and a deep understanding of governmental challenges, Hitachi emerges as the premier choice for governmental agencies seeking to bolster their digital foundation and achieve their mission-critical objectives. Our cross-sector view and technology expertise make us ideally placed to advise government on data-driven, end-to-end digital transformations that delivers value for money.

Hitachi Digital Services G-Cloud offerings

Partnership Offerings	Cloud Services	Services	
Pentaho	Business Analysis & Product Management	Cloud Cost Management – Assessment (FinOps)	Digital Care & Operations (DCO)
Pentaho Data Services Implementation & Consulting Services	Data Strategy	Cloud Migration / Modernisation Assessment Strategy (Planning & Journey)	Digitally Enabled Lifestyle Management
Databricks Enablement Services	Digital Transformation Strategy & Roadmap	Cloud Maturity Assessment	Digital Healthcare Advisory & Technology Services
	Cloud Organisation Strategy & Design	Cloud Migration & Modernisation	Population Health & Deviceless Remote Patient Monitoring - powered by LightBeam Health
	Organisation Change Management	Cloud Operate / Run Services	Process Automation Services HARC Agents & Agentic AI
	Innovation Incubation Accelerators	Cloud Services	AI Cloud Offerings
	Managed Service – Advisory	HARC Operations	AI Business Accelerator Incubate & Launch
	Managed Service – Rail	Performance Testing & Engineering Services	AI Business Accelerator Innovate
Sustainability Cloud Services	Cloud Managed Services	Quality Assurance & Engineering Services	AI Business Accelerator Optimise & Solidify
IT Decarbonisation	Advisory / Consulting - Maturity Assessment	Resilience And Chaos Testing & Engineering Services	AI Business Accelerator Starter Platform
Energy Efficiency for Buildings	Advisory / Consulting - Observability Assessment	Security Testing & Engineering Services	AI Advisory Services
ESG Supplier Assessment & Engagement	Advisory / Consulting - Reliability & Resiliency Assessment	Security Services	AI Data Reliability Engineering & Sourcing
GHG Emissions Dashboard	Advisory / Consulting - Security Posture Assessment	Swat Services - HARC	AI LLM Development, Fine Tuning & Adoption
Energy Strategy	Advisory / Consulting – Service Management (Cloud Managed Service)	FinOps – Managed Cloud Cost Implementation	AI Readiness Framework & Reference Architecture
ESG Strategy & Reporting	Advisory / Consulting - FinOps	Smart Spaces & Video Intelligence (SSVI)	AI Responsible AI
	IoT – Internet of Things Advisory	HARC Agents	AI Software Development Transformation
	Microsoft Azure Advisory Planning, Deployment & Migration Services		

Challenge

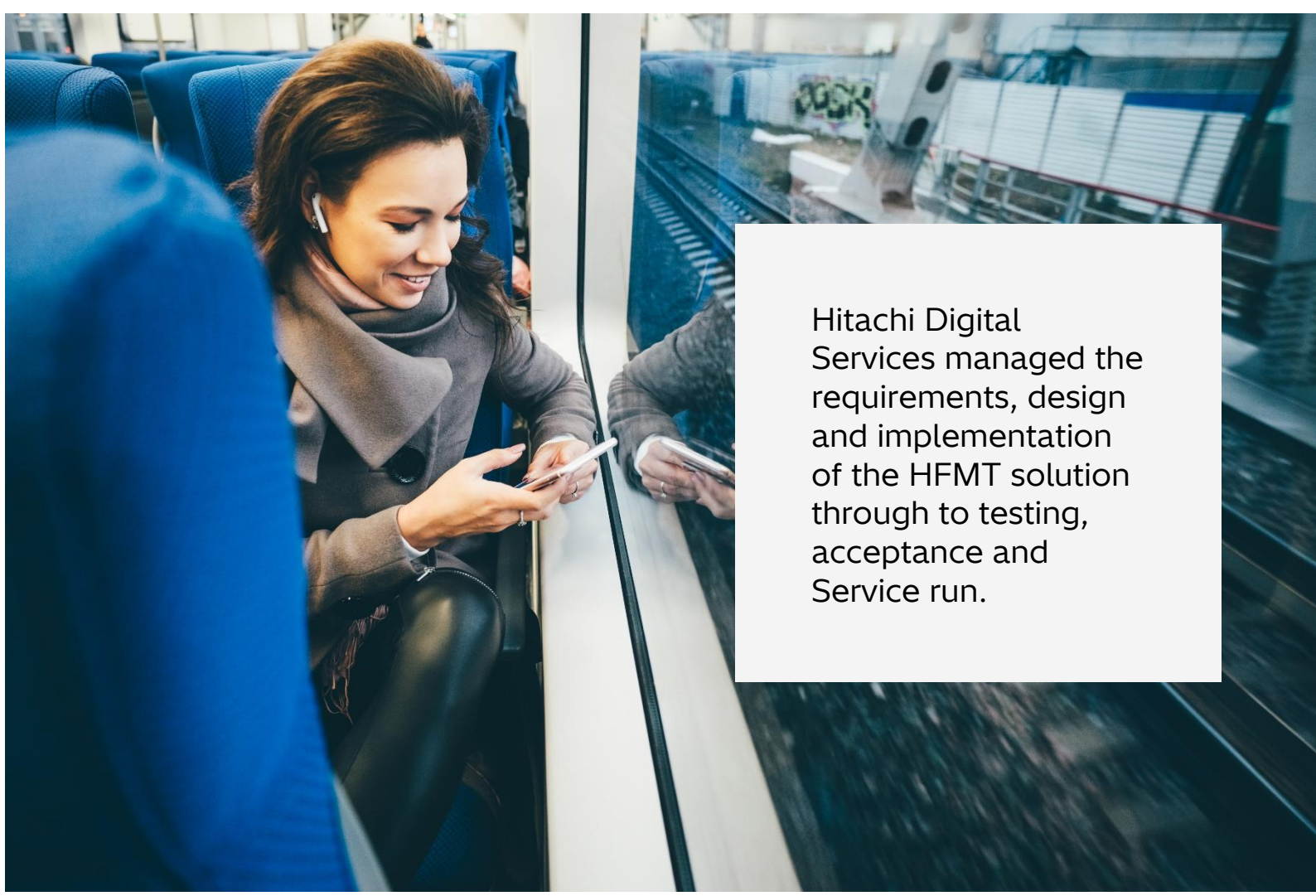
Faced with increasing build and maintenance costs and a complex ecosystem of suppliers and support organisations, Hitachi Rail engaged Hitachi Digital Services to develop and managed the HFMT solution as a data platform to support the transition to Condition Based and Predictive Maintenance regimes.

Hitachi Digital Services managed the requirements, design and implementation of the HFMT solution through to testing, acceptance and Service run – the Managed Service integrated multiple vendors via a centralised Service Desk and Support function, providing a single Service Level to the client.

Context

Hitachi Rail is a global provider of superior Rail transport solutions, with over 12,000 employees, yearly consolidated revenues of 1.437 billion EUR, and a long history working in the industry. Run: Create more value with managed services

The requirement was to develop and run an integrated Train Management System to continuously monitor over 300 trains across the UK and support the transition away from traditional maintenance regimes.



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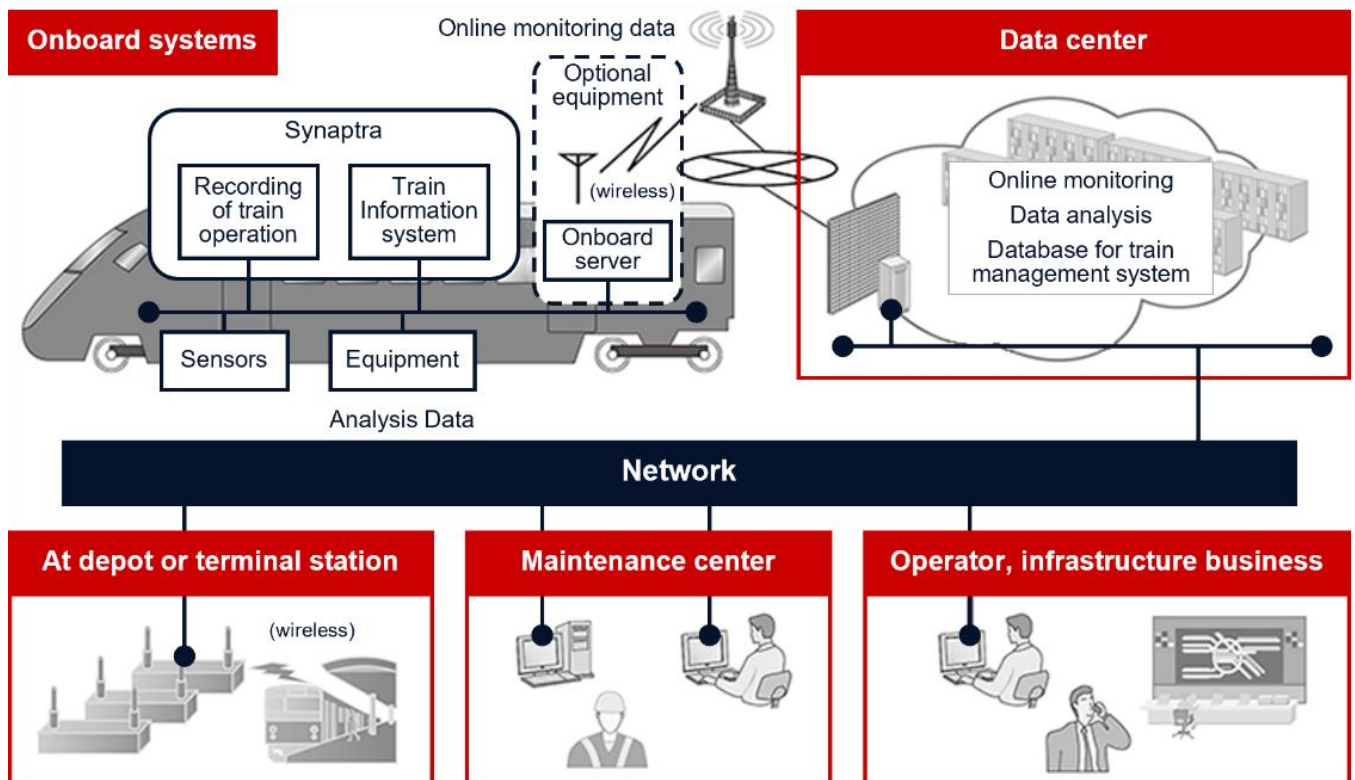
Solution

The HFMT solution comprises:

- A custom-developed application delivering real-time monitoring & train comms.
- Hitachi Pentaho data platform for batch processing, analytics and reporting.
- Hitachi Vantara hardware for compute and storage.
- integration and management of 3rd parties delivering data centre hosting, mobile comms and 'train-side' technologies.

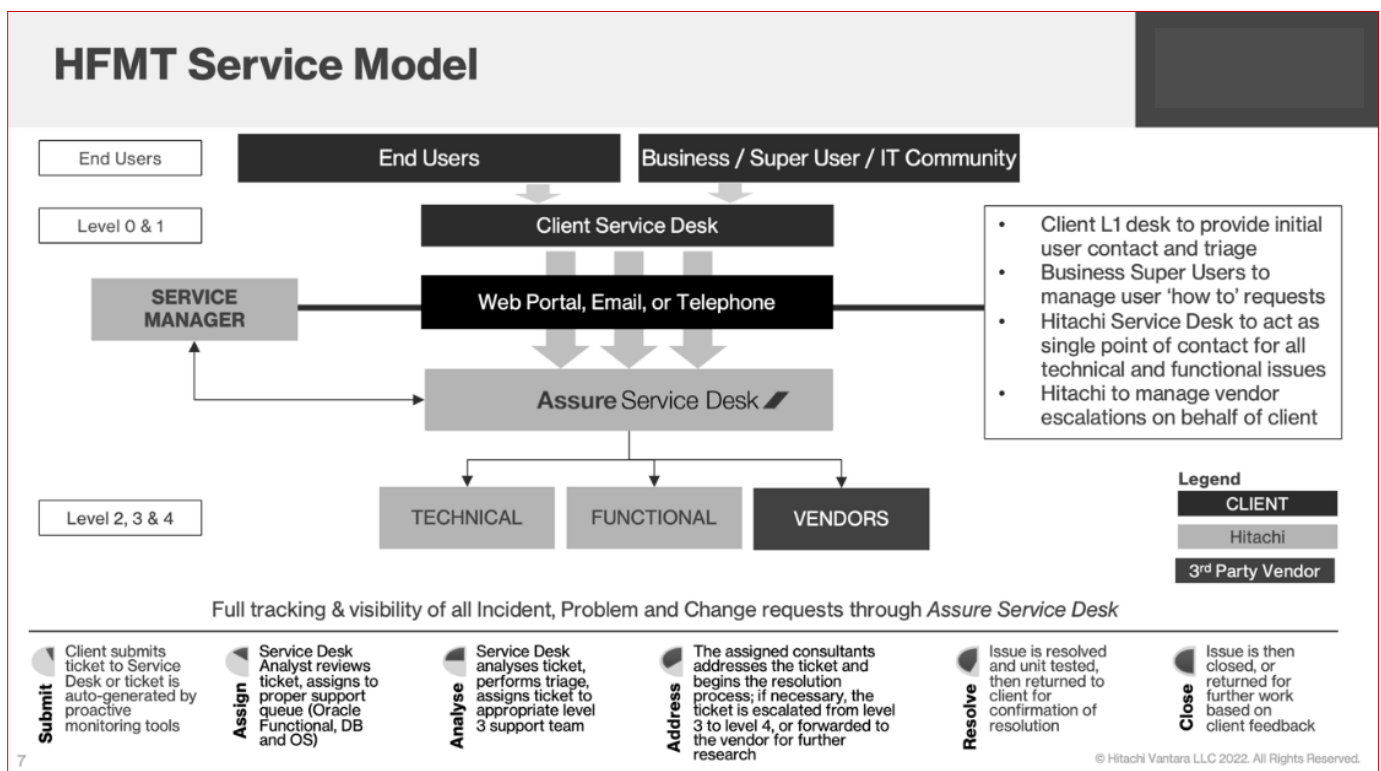
Features

- **Real-time Monitoring and Altering:** monitor real-time data and alert alarms based on the pre-defined rules.
- **Reliable Interface with Trains** to collect data, monitor the status of the device and track train location via GPS signal.
- **Adaptability to Interface with other Maintenance Systems:** support users to send work order in time and view maintenance plans, upload timetable, seat reservation & download energy consumption information.
- **Fault Diagnostic:** Investigate and diagnose faults of devices to prevent downtime of trains.
- **Dashboard Visualisation:** Analyse data and make an analytics report.
- **Remote Train Controlling:** Support Train Operating Companies (TOC) to remotely send commands and request onboard data easily.



The Managed Service provides:

- 24x7 Service Support: Global support provision to maintain continuous operation and minimal downtime via Delivery Centres across EMEA, APAC and AMER.
- Established Service Delivery framework - ITIL aligned ISO27001 and ISO 9001 accredited service governance framework covering Incident, Problem, Change & Release and Capacity Management.
- Centralised Service Management for reporting and continuous Service Improvement
- Single defined Service Levels integrated across all suppliers
- Business Continuity / Disaster Recovery



Benefits

- Reduce the overall cost of fleet maintenance by supporting the adoption of reliability centred maintenance practices
- Meet contractual Train Operating Company (TOC) commitments as part of the current Inter Express Programme *
- Develop a technology tool that enables more effective maintenance and then use this solution as a source of competitive differentiation in the marketplace
- Develop a predictive maintenance capability that informs future train designs

The HFMT continues to evolve adopting cloud-based technologies and machine learning and AI to further expand the data analysis capability.

* IEP is the largest ever UK rolling stock project to replace high speed trains across the East Coast Mainline and Great Western Mainline

Qualifications

- ISO 9001
- ISO 27001
- Cyber Essentials Certified
- DSPT Certified
- AWS Premier Tier Services
- AWS Managed Service Provider
- AWS Public Sector Partner
- AWS Solution Provider Program
- AWS – APN Immersion Days
- Select Databricks Partner
- Microsoft Solutions Partner: Infrastructure
- Microsoft Solutions Partner: Data and AI
- Microsoft Solutions Partner: Digital & App Innovation
- AWS Oracle Competency Partner
- Google Cloud Premier Partner
- AWS Premier Consulting Partner
- ISO 9001
- ISO 27001
- Cyber Essentials Certified
- DSPT Certified
- AWS Premier Tier Services
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- Microsoft Solutions Partner: Digital & App Innovation
- AWS Oracle Competency Partner
- Google Cloud Premier Partner
- AWS Premier Consulting Partner

Case Study

Intelligent Asset Management System Overview

IBM MAS & Intelligent Remote Monitoring System Implementation

Goal

- Monitor, Track and Manage Rail assets.
- Realtime gathering of sensor data from assets on field and interface with EAM solution.
- Insights through real time reports and dashboards.

Solution

- Implementation of IBM MAS and configure Asset Management, Work Management & Inventory Management.
- Implementation of Remote Monitoring System and Integration with IBM MAS.
- Implement Mobile solution for Asset Inspection, Work Execution and Inventory Transactions.

Outcome

- Real Time Asset Monitoring & Tracking.
- Accurate Insights into Asset health condition.

Solution Overview

Scheduled Maintenance

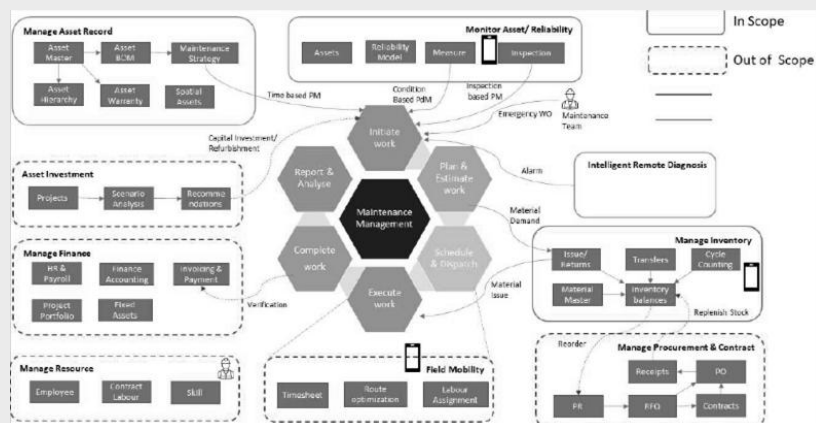
- Need Based Maintenance
(Scheduled Inspections will be mandatory to ensure SAFETY)

Improved Availability of Signalling Assets by

- Smart Maintenance Practices
- Intelligent Monitoring

Achieve High level of operational efficiency

- Lean Maintenance Organisation
- IBM Maximo v8.11 Implemented as Enterprise Asset Management Solution



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Hitachi Digital Services, a wholly owned subsidiary of Hitachi, Ltd., powers mission-critical platforms with cloud, data, IoT, and ERP solutions, underpinned by advanced AI. With over 110 years of expertise, we drive innovation and growth for a more sustainable future.