G-Cloud

Hitachi Digital Services

GCP Cloud
Maturity Assessment

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 optimize 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 makes 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	Consulting/ Advisory Cloud Services	HARC/ Cloud Services	Healthcare Services
AWS Cloud Maturity Assessment	Business Analysis & Product Management	Cloud Cost Management – Assessment (FinOps)	Digital Care & Operations (DCO)
Azure Cloud Maturity Assessment	Data Strategy	Cloud Migration/Modernisation Assessment Strategy (Planning & Journey)	Lifestyle Management
GCP Cloud Maturity Assessment	Digital Transformation Strategy & Roadmap	Cloud Maturity Assessment	Secure Data Environment
Databricks Enablement Services	Cloud Organization Strategy & Design	Cloud Migration and Modernisation	Digital Healthcare Advisory and Technology Services
Oracle ERP	Organization Change Management	Cloud Operate Services	Lightbeam Health by Hitachi DS
SAP Cloud Support	Innovation Incubation Accelerators	Cloud Services	Luminai by Hitachi DS
Pentaho	Managed Service – Advisory	Harc Operations	Ambience Healthcare by Hitachi DS
	Managed Service – Rail	Performance Testing and Engineering Services	
Sustainability Cloud Services	Cloud Managed Services	Quality Assurance and Engineering Services	**AI Cloud Offerings**
Application and Software (IT decarbonisation)	Oracle Cloud Support	Resilience and Chaos Testing and Engineering Services	AI Business Accelerator Incubate & Launch
Energy efficiency for buildings	Maturity Assessment	Security Testing and Engineering Services	AI Business Accelerator Innovate
ESG Supplier assessment and engagement	Observability Assessment	Security Services	AI Business Accelerator Optimise & Solidify
GHG Emissions Dashboard	Reliability & Resiliency Assessment	SWAT Services	AI Business Accelerator Foundation Platform
Energy Strategy	Security Posture Assessment	FinOps – Managed Cloud Cost Implementation	AI Business Accelerator Starter Platform
ESG Strategy	Advisory/Consulting – Service Management (Cloud Managed Service)	IOT – Internet of Things	GenAI Strategy Assessment
		Smart Spaces and Video Intelligence (SSVI)	

Context

Ensuring a comprehensive grasp of a Buyer's requirements is crucial for delivering successful services. At Hitachi Digital Services, we pride ourselves on offering end-to-end Cloud services covering all categories outlined in Framework Schedule 1 Specification. Our aim is to facilitate seamless cloud migration, modernisation, and management, meeting Buyer's needs effectively.

Hitachi Application Reliability Center (HARC), our comprehensive engineering services to plan, design, build, run, and operate workloads across private, public, hybrid, and multi-cloud environments. HARC is the confluence of finest engineering talent, best in class tools and frameworks and a purpose-built modern facility (Follow the Sun delivery) that delivers the most advanced cloud workload management function yet. Our primary objective is to deliver value to the business leveraging digital cloud engineering functions.

Challenges

As companies continue to embrace cloud computing, they encounter various challenges in achieving maturity in their cloud operations. These challenges can arise from technical, organizational, financial, and security aspects. Here are some common challenges:

1. **Lack of Cloud Expertise:** Many companies lack skilled personnel who understand cloud technologies deeply. This can hinder effective cloud adoption, as it requires expertise in areas such as architecture design, security, compliance, and optimization.
2. **Legacy Systems Integration:** Integrating existing legacy systems with cloud environments can be complex and challenging. Compatibility issues, data migration challenges, and the need to refactor or re-architect applications can slow down the migration process.
3. **Cost Management:** Cloud costs can spiral out of control if not managed properly. Companies need to understand and optimize their cloud spending, including resource provisioning, usage monitoring, and cost allocation across departments.
4. **Security and Compliance:** Ensuring data security and compliance with regulatory requirements is critical in the cloud. Companies must implement robust security measures, such as encryption, access controls, and regular audits, to protect sensitive data and maintain compliance.
5. **Scalability and Performance:** Achieving optimal scalability and performance in the cloud requires careful planning and architecture design. Companies need to ensure that their applications can scale seamlessly to meet changing demand while maintaining performance and reliability.
6. **Vendor Lock-in:** Companies may face vendor lock-in when relying too heavily on a single cloud provider or proprietary technologies. This can limit flexibility and increase dependency on a specific vendor, potentially leading to higher costs and reduced agility.
7. **Operating Model:** The transition to cloud computing often poses challenges when integrating it as an additional layer to traditional operating models.
8. **Data Migration:** Common challenges we have seen in many organisations is data migration and how the data can be made more trustworthy.
9. **Data Driven decisions:** Raising business case and continuously evaluating and making decisions based on data is always a challenging in any cloud migration. So, we may at most importance in driving this ahead of the migration.
10. **Governance and Control:** Maintaining proper governance and control over cloud resources is essential for ensuring compliance, security, and cost management. Companies need to establish policies, processes, and tools for monitoring and managing cloud usage effectively.

Solution

This GCP cloud maturity assessment delves into the existing state of GCP cloud maturity within the organisation & across the industry, meticulously identifying gaps and areas for improvement. Its primary objective is to pave the way for improving business value through cloud transformation.

Through a comprehensive evaluation process, the assessment aims to scrutinize the organization's current practices, technologies, and processes surrounding cloud operations. By pinpointing inefficiencies, shortcomings, and bottlenecks, it sets the stage for the formulation of a strategic roadmap.

This roadmap delineates actionable steps and initiatives necessary, wherein engineering teams take the helm in orchestrating and optimising cloud usage. Ultimately, the assessment serves as a guiding beacon for organizations seeking to enhance agility, efficiency, business value, and innovation by moving into cloud.

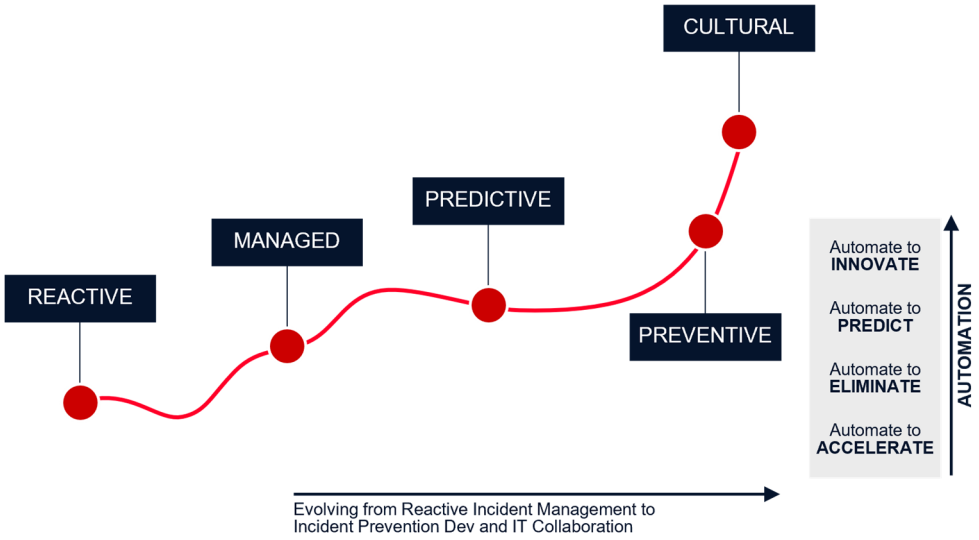
Comprehensive suite of assessment and planning services precisely tailored to meet each Buyer's specific needs and status. Our approach aims to identify the scope, requirements, and objectives of the migration project, culminating in the development of a detailed migration plan outlining strategy, timeline, resources, and key milestones.

Cloud Platform Engineering			Cloud Center of Excellence		Leadership
Operations	Platform	Security	Governance	Business	People
Observability	Cloud Resource Lifecycle Management	DevSecOps	Architecture	Product Management	Skillset Management
Service Management	Configuration Management	Infrastructure & Network Security	Reporting	Finance Management	Org Change Management
Lifecycle Management	Upgrades, Patching & Manage	IAM	Vendors & Third-parties	Delivery Management	Operating Model
Capacity Management	Tagging Management	Vulnerability & Patch Management	Security, Risk & Compliance	KPI Management	Knowledge Management
Resiliency & Reliability	Continuous Integration & Delivery	Continuous Monitoring & Alerting	Policy & Process Management	Integrations	KPI Management
Continuity Management	Automation	Data Protection	Networking & Engineering support	Strategy & Vision	Process Methodologies

Organizational Dependencies			
Change Management	Service Management	Procurement process	SDLC

Application Dependencies			
Reliability Engineering	Application Engineering	Security Engineering	Release Management

Assessment poised to harness the spectrum of cloud maturity outlined in the maturity curve, spanning infrastructure, platform, data, and application services. Beginning with the REACTIVE stage, characterized by basic responsiveness, the journey progresses towards the pinnacle of maturity represented by the CULTURAL phase. At this zenith, the organization embodies best-in-class practices, seamlessly integrating reliability engineering into the fabric of its culture. By leveraging this maturity curve, the Hitachi Application Reliability Center's (HARC) initiative aims to guide the organization along this evolutionary path, fostering a culture where reliability is paramount and ingrained within the team's ethos.



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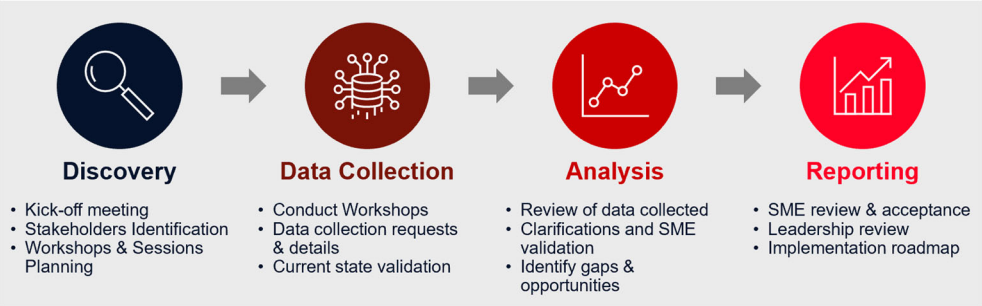
Approach



Key Features

These services can be provided individually or in combination to address the needs and requirements of the Buyer to facilitate a successful transition:

Cloud Assessment Services – Cloud strategy, capability, to-be state and roadmap.

- Conduct assessments of GCP cloud environments and integration.
- Evaluate the suitability of different cloud services based on Buyer's requirements, and infrastructure.

Cloud Maturity Assessment – Gaps and cloud maturity journey

- Assess the maturity level of Buyer's cloud adoption journey to identify areas for improvement and optimization.
- Provide recommendations for advancing Buyer's cloud maturity and maximizing benefits.

Cloud Operating Model Assessment – Cloud Operating model setup

- Evaluate Buyer's current cloud operating model to ensure alignment with organizational goals and objectives.
- Identify opportunities to enhance efficiency, scalability, and agility in cloud operations.

Cloud Architecture Assessment of pillar(s)

- Conduct assessments at the pillar level to evaluate key aspects of cloud performance and functionality.
- **Security Assessment:** Ensure robust security and compliance controls, focusing on application, infrastructure, data, automation, cyber resilience, and continuous compliance.
- **Observability Assessment:** Revamp your monitoring frameworks and transition towards AIOps and Automated Incident Management with a comprehensive observability assessment.
- **Cloud Cost Assessment:** Gain a clear insight into your cloud cost spent, budget, forecast, showback vs chargeback, ensuring efficient, cost-effective cloud application operation on GCP, concentrating on design, comprehensive tagging, proactive investment, and elimination of waste.
- **Reliability Assessment:** Maturity towards SRE principles across the below dimensions for managing modern workloads through engineering fault-awareness, fault-prediction, fault-prevention, and self-healing capabilities. Elevating reliability maturity with a holistic view of release management, observability, resilience, performance, incident response, and automation.

- **Sustainability Assessment:** Focused primarily on energy reduction and efficiency across all components of a workload by achieving the maximum benefit from the resources provisioned and minimizing the total resources required.
- **Performance Efficiency:** As the GCP cloud continuously grow, it is vital for any organisation to review the trade-offs, take advantage of the technology advancements, performance objectives, and continuously improve on high-performing architecture.

These planning services adopts Enterprise Architecture patterns (like TOGAF), Cloud Well-Architected Framework (WAF), our experiences & learnings and industry & domain specific challenges to enable us to provide tailored recommendations and solutions.

Benefits

Experience the HARC Advantage: Choose HARC to experience unparalleled reliability, security, cost efficiency, and operational excellence for your GCP cloud workload. Be part of the future of agile, resilient, secure, cost optimised and reliable cloud solutions with HARC.

- Cost Optimised − 35% reduction through modern engineering principles.
- Reliable − 60% reduced risk
- Always-On − 15% operations efficiency with improved reliability.
- Integrated and seamless deliver.

Reduction in Manual Coding Efforts

Automate code life cycle and improve cloud efficiencies with Hitachi Cloud Accelerator Platform.

Increase in Engineering Team productivity

Accelerate your journey to cloud with best-practice processes and blueprints-based automation resulting in 7 months of saved time for cloud migration.

Modernization Project ROI

Maximize value of cloud by rehosting and optimizing enterprise applications without rewriting.

Consistent Deployments

Automate infrastructure creation and deployment with proven, efficient and on-time delivery.