Executive Summary: Transforming Cruise & Leisure with HPE GreenLake and Insight

Strategic Reference Architecture for the Cruise and Leisure Ecosystem

Insight® | HPE GreenLake

The Imperative for Transformation in Cruise and Leisure

The cruise and leisure industry is undergoing a significant digital evolution. Guests now demand seamless, personalised experiences that span their entire journey, from inspiration to post-cruise engagement. This shift, combined with increasing operational complexities, strict regulatory requirements, and rapid technological advancements, highlights the critical need for a departure from outdated, fragmented systems. To truly thrive and remain competitive, cruise operators must adopt a unified, intelligent, and scalable digital architecture. This new paradigm allows for agile innovation, accelerated integration, and consistent service delivery across diverse operational domains and partner ecosystems.

Introducing the Strategic Reference Architecture for the Cruise & Leisure Ecosystem

This strategic reference architecture provides a clear, executable blueprint for cruise operators to meet modern guest expectations and operational demands. It's a high-level framework that defines how technology components, business processes, and data flows should be structured to achieve desired business outcomes.

The architecture is built upon a **"dissected onion" model**, illustrating the cruise experience as a multi-layered ecosystem:

- **Core Onboard Experience:** The central focus.

- **Expanding Layers:** This includes crucial elements like embarkation/port logistics, travel orchestration, booking/payments, digital discovery, and post-cruise engagement.

This model effectively showcases how interconnected services and technologies collaboratively support the overarching goal: an exceptional guest experience

Foundational Design Principles

The architecture is underpinned by key principles designed to ensure agility, guest satisfaction, and resilience:

- **Guest-Centric by Default:** Every system and service is designed around the complete guest lifecycle.

- **Composable and Modular by Design:** Allows for rapid assembly of new offerings and seamless integration with third-party solutions.

- **Event-Driven and Real-Time:** Systems respond instantly to guest behavior and operational triggers for personalised experiences and enhanced efficiency.

- **Edge-to-Cloud Continuity:** Ensures uninterrupted service delivery across vessels, terminals, and cloud environments, even with intermittent connectivity.

- **Zero Trust and Privacy by Design:** Security and data privacy are inherently built into the foundation.

- **Intelligence Everywhere:** AI and analytics are integrated throughout systems to enable smarter decisions, adaptive operations, and automated workflows.

- **Sustainability and Resilience:** Supports environmentally conscious infrastructure and continuous monitoring, aligning with ESG goals.

- **Standardisation and Repeatability:** Core elements are designed for consistency and reuse across the entire fleet, simplifying operations.

This architectural framework acts as both a structural model and an operational playbook, ensuring technology aligns directly with guest value, operational excellence, and business innovation.

HPE GreenLake: Powering the Vision into Reality

An innovative architecture requires a robust platform to transform vision into tangible execution. **HPE GreenLake** is the critical enabler that brings this strategic reference architecture to life. As a fully managed, enterprise-grade edge-to-cloud platform, GreenLake is specifically designed for the distributed, real-time, and data-intensive environments characteristic of the maritime sector.

GreenLake empowers cruise operators to seamlessly deploy, govern, and scale every layer of the architecture, providing the essential technical resilience, operational control, and financial agility needed to manage complex, globally distributed, and constantly evolving cruise operations.

Key Strategic and Commercial Advantages of HPE GreenLake

- **Financial Agility (CapEx to OpEx):** Shifts infrastructure investment from rigid capital expenditure (CapEx) to a flexible operational expenditure (OpEx) model. This allows spending to align with demand, freeing up capital for crucial innovation.

- **Fleet-Wide Consistency and Global Scalability:** Ensures a consistent infrastructure and governance model across all ships, ports, and regions, simplifying deployment and ensuring global compliance.

- **Cost Transparency and Governance:** Provides granular visibility into resource usage and spending through built-in metering and analytics, enabling cost optimisation and aligning IT expenses with guest value streams.

- **Faster Time-to-Value:** Offers pre-integrated, consumption-ready infrastructure that accelerates pilot deployments, A/B testing, and rapid rollouts of new services across the fleet.

- **Sustainability and ESG Impact:** Supports environmental, social, and governance (ESG) goals through right-sized provisioning, workload placement optimisation, and integrated telemetry for environmental monitoring.

- **Hybrid Edge-to-Cloud Continuity:** Crucial for maritime environments, GreenLake supports running mission-critical workloads locally at the edge (onboard) while seamlessly connecting to centralised cloud systems, ensuring performance and resilience even with intermittent connectivity.

HPE GreenLake fundamentally transforms architectural intent into executable outcomes by delivering the necessary tools, infrastructure, and financial model for precise, agile, and controlled operations.
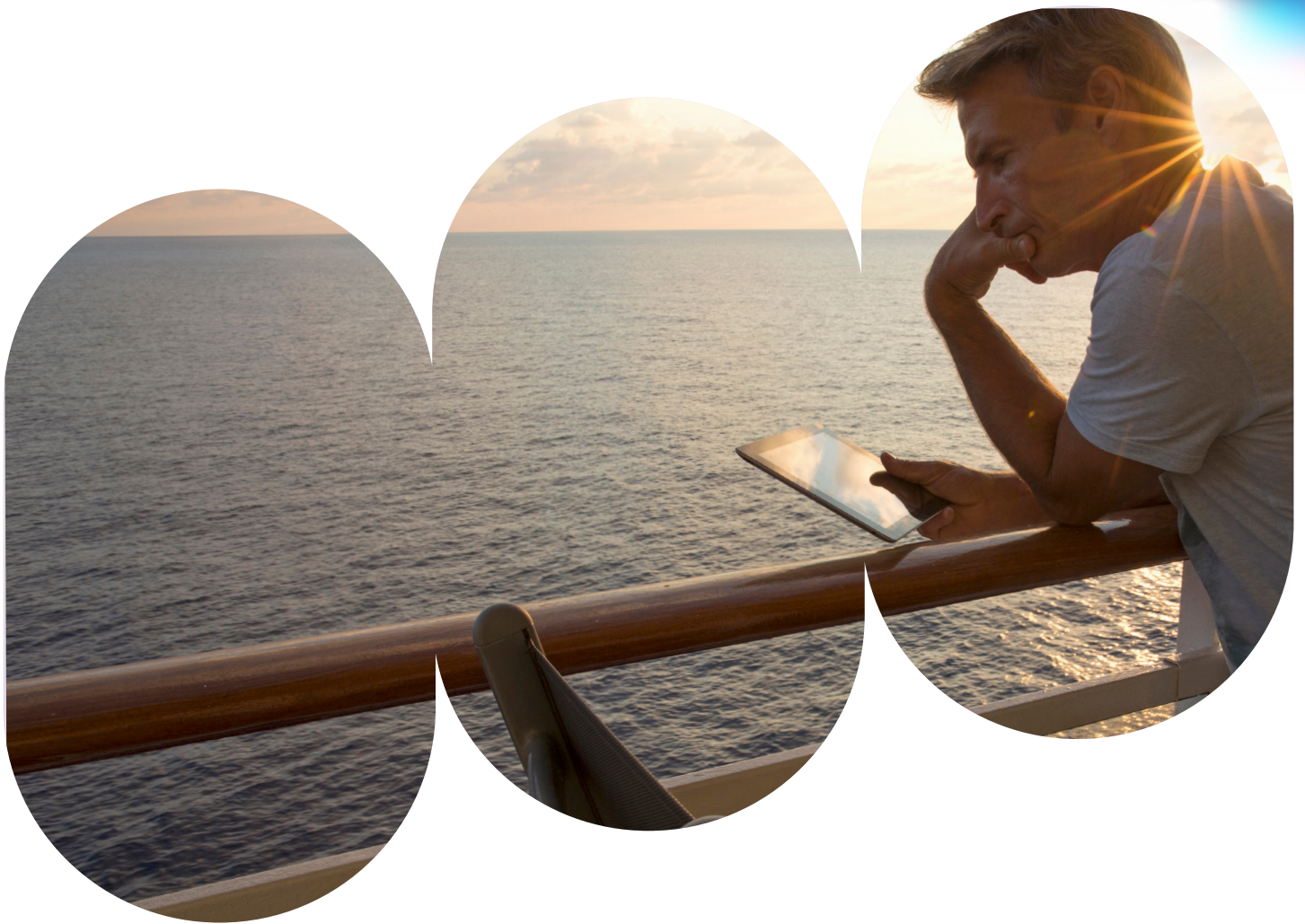
Strategic Value Across the Organisation

The combination of the strategic reference architecture and the HPE GreenLake platform delivers significant, tangible value to all stakeholders:

- **Maritime Executives:** Achieve differentiation through superior guest experiences, unlock new business models, gain real-time strategic insights, and de-risk innovation.

- **Technology Leaders:** Adopt a modern, composable, edge-to-cloud architecture, accelerate integration efforts, establish unified security and governance, and boost team velocity.

- **Financial Stakeholders:** Realise reduced operational costs, link IT spend directly to measurable ROI, enable real-time forecasting, and drive revenue growth through data-informed innovation.

- **Business Operations Leaders:** Ensure uninterrupted service continuity at sea, optimise crew coordination, streamline embarkation processes, monitor key performance indicators (KPIs) in real time, and respond rapidly to disruptions.

- **Sustainability and ESG Leaders:** Contribute to reduced emissions and energy consumption, facilitate ESG tracking and reporting, and build greater resilience across the fleet.

Partnering for Maritime Transformation with Insight

While the strategic reference architecture provides the blueprint and HPE GreenLake offers the platform, **Insight** is uniquely positioned to guide and accelerate this transformative journey. As a leading global solution integrator, Insight brings deep expertise in hybrid edge-to-cloud platforms like HPE GreenLake, proven capabilities in data strategy, orchestration, and AI adoption, and extensive experience in maritime, hospitality, and multi-vertical transformations.

Insight adopts a collaborative approach, focusing on aligning technology with guest value, operational resilience, and measurable business outcomes. We don't just deploy solutions; we co-architect your future. We offer flexible commercial and consumption models that reduce upfront capital expenditure, improve forecasting, and enable you to scale infrastructure and innovation at your own pace, thereby de-risking investment and accelerating your return on value.

Your Platform for Growth Starts Here

- Reimagine your guest journey through modular, intelligent systems.

- Realign your infrastructure strategy with core business outcomes and evolving guest expectations.

- Replatform with confidence—scaling experience, data, and innovation through an architecture designed to evolve and adapt.

Let Insight help you design, deliver, and govern your future-ready cruise and leisure platform—powered by architectural precision, data intelligence, and operational flexibility at scale.

The destination is transformation.
The time to embark is now. ■

Get in touch
Contact our maritime solutions team to schedule your discovery session: **maritime.solutions@insight.com**