

Digital Product Engineering

Accelerate Innovation Time to Market and Improve Customer Experience

SOLUTION PROFILE

As cloud and internet of things (IoT) enabled solutions gain prominence, software companies need to provide cloud delivery and software as a service (SaaS). Industrial firms add software to their manufactured products to make them smarter, IoT-enabled and able to innovate quickly. The key is to balance the use of cloud and IoT technologies for next-generation solutions while sustaining and/or re-engineering legacy products and addressing skills gaps.

Leveraging the cloud and IoT for digital products also requires process change: evolving development, operations, quality assurance and DevOps capabilities. And increased collaboration among product marketing, management, engineering, sales and support is needed to ensure an agile environment across the entire product development life cycle (PDLC) and support rapid innovation. Allocating the right mix of human and financial capital towards both legacy and new technologies is critical. An experienced product engineering partner can help.



Re-Engineer Product Development To Occur More Rapidly and Reliably

In this swiftly evolving and complex environment, it's critical to have a partner who will support your ability to deliver results across the entire PDLC. Without end-to-end PDLC expertise, it's difficult for any one team to enjoy a deep understanding of how all the development pieces fit together during a product's creation and release.

Chief technology officers need a product engineering partner who adds value across entire life cycle – from innovation to quality assurance to distribution. They need a partner who understands global best practices and has the tools to simplify development and get their products to market ahead of competitors.

Partner With Experts To Create an Innovative Product Development Life Cycle

Innovating new software products and becoming more responsive to market demands requires faster release cycles, product management improvements and evolution in the methodologies that drive development. At Hitachi Vantara, we help you create strategies to optimize resources and stay ahead of the next wave of disruptive technologies.

We collaborate with your organization to determine how our expertise will best support your success. In some cases, companies may prefer to assign legacy support and maintenance to Hitachi engineers and allow in-house engineers to innovate and build new software products. Organizations rely on our cloud expertise to create new products, while in-house talent supports legacy offerings. We also provide a wide range of testing and quality assurance capabilities, delivered under our unique testing-as-a-service commercial model.



End-to-End Product Development Life-Cycle Management

To meet the needs of today's software development companies, Hitachi Vantara offers end-to-end product life cycle management (architecture, design, development, quality engineering and maintenance) allowing customers to focus on their business. Our product engineering capabilities include:

1. **Product Innovation:** Conduct assessments of as-is process and define plan for PLCM platform for the portfolio of products.
2. **Product Life-Cycle Management:** Lead the process with prototyping, architecture and design, development and service level agreement (SLA) based sustenance engineering.
3. **Product Modernization:** Improve product scalability, maintainability and user experience. Reduce cost by embracing modern technologies and architectures.
4. **Product Intelligence Services:** Supply extensions to software products and instrumentation for embedded systems, leveraging latest technology trends, including AI, machine learning (ML), IoT, cognitive services, and commercial off-the shelf software (COTS).
5. **Product Quality Management:** Deliver total quality engineering and automation.
6. **Product Sustenance:** Provide ongoing product maintenance and support.





Modernization Approach

Phase 1: Assess and Decompose

During this phase, we assess application technical requirements, evaluate business processes and needs, decompose the product and determine areas of separation. We define business considerations, identify key business drivers, determine potential or desired benefits, and ascertain the criteria for modernization.

Phase 2: Design Modernization Architecture

In this phase, we evaluate all options with respect to approved architecture and services. We help define the approach and timelines, confirm the business value against costs and benefits, and finalize the most suitable architecture modernization approach for the product and customer.

Phase 3: Implement and Test

During this phase, we set up the architecture practice, and decompose, modify and deploy code developed for target architecture. We also test and validate the modernized product (services, integrations, regression) to get optimized performance.

Hitachi Builds Software and Smart Products for the Enterprise of Tomorrow

Cloud delivery and IoT place tremendous pressure on the entire PDLC. This challenge impacts broad segments of our economy: software companies, industrial manufacturers, automakers and any other organization that makes products that involve software. Customers expect rapid innovation in the products they consume. Product management wants to drive more frequent releases. Continuous development and integration is radically disrupting the world of DevOps. All of these challenges are against a backdrop of legacy code, deep-seated processes and financial constraints. And it's all moving at an accelerating pace.

Hitachi, Ltd., has over 100 years of heritage in innovation excellence, product R&D and engineering. As a trusted partner, Hitachi Vantara helps companies innovate, prioritize, develop, bring to market, and manage new product offerings. We apply our multifaceted expertise to meet the needs of today's software development companies.



How Hitachi Vantara Accelerates Software Product Innovation

Industry foresight: Assess, define and understand market trends and competitive positioning to set strategic performance targets.

Portfolio strategy: Set portfolio mix targets, evaluate opportunities and establish an offering road map to attain your desired mix.

Strategic alignment: Align on strategic process area touchpoints, innovation, organization, design and execution, enabling your IT platform road map.

Process improvement: Assess and align on innovation process scope to attain desired business results; identify and prioritize innovation process gaps and choose from alternatives which improvements to pursue; design, develop and deploy; streamline process improvements.

Organizational design: Assess the current decision-making structure and design the recommended structure with vertically and horizontally aligned roles and responsibilities.

Performance management: Identify and prioritize innovation performance; design, build and execute a performance management program focused on improving performance through innovation.

Assess and prioritize: Tackle technology gaps that need to be addressed to achieve innovation maturity goals.

Implement integrated capabilities: Leverage tech resources to support a sustainable innovation process.

We work alongside each customer, applying our unmatched industrial and digital capabilities to their data, processes, applications, infrastructure and organization. [Read this case study](#) to learn more.



We Are Hitachi Vantara

We guide our customers from what's now to what's next by solving their digital challenges. Working alongside each customer, we apply our unmatched industrial and digital capabilities to their data and applications to benefit both business and society.

Hitachi Vantara



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SP-296-A BTD September 2020