HITACHI
Inspire the Next

Hitachi Consulting helps Smiths Detection evolve existing systems and processes

Improved process and product quality

Background

Smiths Detection helps customers in threat and contraband detection with their comprehensive range of detection technologies. Smiths have a broad portfolio of customers in the global transportation, ports and borders, critical infrastructure, military and emergency responder markets.

Business challenge

Due to the changing nature of the detection business sector, Cargo Inspection Systems (CIS)—a business unit within Smiths Detection—wanted to improve the product time to market in order to meet the constantly evolving customer demands and rising expectation. Smiths also wanted to fine-tune its complete software development and maintenance processes to be more adaptive and efficient. There was a distinct need for robust, comprehensive and repeatable processes to help enhance software product development and maintenance throughput.

CIS was continually looking for opportunities to launch new products to address new markets, meet ever-evolving security threats, manage a strong replacement cycle and tap into opportunities that the globalization of trade provides.

The end objective was to enhance organizational preparedness for delivering the new product pipeline efficiently and also ensure minimizing the time and effort bandwidth expended on maintaining existing client installations.

The organization needed next-generation development and test processes to improve the collaboration between business, R&D and product development teams and was very keen to work with a partner who could help them define and implement a state of the art Product Lifecycle Management (PLM) platform for a portfolio of products. They also wanted a partner who could train and coach the CIS internal teams in the new processes, and work as an extension of the CIS in-house team in a true collaborative manner.

The company engaged Hitachi Consulting as a partner of choice, after a thorough evaluation process, to help optimize their software product development needs.

Solution and approach

Starting with an in-depth audit of existing development and testing processes, Hitachi Consulting's expert application lifecycle process consultants cameup with a series of recommendations exploiting all the industry best practices based on Agile practices. Working together with the CIS team, they defined a governance model including portfolio management processes, product roadmap definition, testing and quality assurance and

Overview

Project objectives

- To improve product stability and to deliver a faster time to market for new product innovations
- Improve collaboration between business, R&D and product devel- opment teams
- The ability to scale-up develop-ment teams when required while controlling costs

Scope of solution

- Audit of existing development and testing processes
- Defined a governance model including portfolio management processes, product roadmap definition, testing and quality assurance
- Hitachi Consulting's platform team setup and configured a solu- tion to support product lifecycle management
- Offshore development team to develop and test the entire suite of CIS software products

suggested an overhaul to their toolset in order to improve collaboration and productivity.

Hitachi Consulting's platform team was subsequently brought in to setup and configure a state-of-the-art Product

Lifecycle Management (PLM) platform providing the tools to support continuous delivery practices, distributed source control and Agile project management.

Hitachi Consulting's process consultants continued to work onsite conducting Scrum Alliance certified training courses and further in-depth coaching to various stakeholders including product owners, technical team members and other stakeholders across the organization.

During this period, Hitachi Consulting's Offshore Development Center (ODC) was being ramped up and went through detailed knowledge acquisition of the existing CIS suite of products. The team was then tasked with re-architecting the system into a modularized, loosely coupled adaptive software system.

Outcomes

Improved processes

Hitachi Consulting's expertise in Application Lifecycle Management helped CIS set up robust processes to streamline the creation of the product roadmap by focusing on improved collaboration between business, R&D and product development teams. This has allowed CIS to:

- Better respond to change
- Improve visibility of progress
- Improve outcome measurement
- Improve software quality
- Implement shorter product release cycles

Improved systems

Hitachi Consulting's expertise in building complex applications helped refactor a large monolithic system. This was rebuilt into a more modularized, loosely coupled and adaptable product without causing disruptions to ongoing installations.

Key benefits included:

- Ability to upgrade/replace individual components with minimum risk and a reduction in coste
- Collection of improved and targeted diagnostic data
- Avoidance of single points of failure
- An adaptive product architecture that is much more flexible to business needs

Reduced costs

Hitachi Consulting's Offshore Development Center has provided CIS with the ability to scale-up development teams offshore while helping control costs.

CIS and Hitachi Consulting have embarked on a collaborative roadmap for a continuous improvement initiative to help optimize product development and maintenance capabilities of CIS's software products. This will help CIS deliver enhanced value through optimized products and solutions to its end clients.

"I chose Hitachi Consulting to help develop software for our products because of their proven track-record and their ability to align consulting best practices with their development practices."

- Karim Hyatt,
Managing Director, Smiths Detection
CIS – Vitry-sur-Seine, France

About Hitachi Consulting

Hitachi Consulting is the global solutions and professional services organization within Hitachi Ltd., a global innovation leader in industrial and information technology solutions and an early pioneer of the Internet of Things. Hitachi Consulting is a business integrator for the IoT era and a catalyst for digital transformation. Using our deep domain knowledge, we collaborate with clients to help them innovate faster, maximize operational efficiency and realize measurable, sustainable business and societal value. As a consulting-led solutions company, we can help you leverage data as a strategic asset to drive competitive differentiation, customer loyalty and growth. To learn more, visit www.hitachiconsulting.com.

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