



HYUNDAI HEAVY INDUSTRIES

Improving business
resiliency with IBM
Resiliency Disaster
Recovery as a Service

BUSINESS CHALLENGE

Even one of the world's largest shipbuilding companies isn't immune to the mayhem Mother Nature can cause.

Hyundai Heavy Industries (HHI) was faced with that harsh reality when a 5.8-magnitude earthquake struck in 2016. Since the company's backup center was located near headquarters in Ulsan City, Korea, the earthquake served as a wake-up call for HHI to examine its disaster recovery systems and determine preparedness for a full range of potential disruptions.

IBM BUSINESS RESILIENCY SERVICES

As HHI's global network grows, the role that Information and Communication Technologies (ICT) infrastructure plays in supporting the company's core businesses becomes increasingly critical. In partnering with IBM Korea and adopting IBM Business Resiliency Services®, HHI established a new disaster recovery center in a low-risk area outside of Gyeongju and Ulsan City. The new center relies on IBM DRaaS. As a result, HHI's new facility can withstand earthquakes that register 7+ in magnitude. Multiple, uninterruptible emergency power supplies can be tiered based on the importance of the system or data. The system is built to recover data within 24 hours of an incident, with additional production and process systems that can be normalized within a week.

Additionally, HHI and IBM Korea regularly conduct simulated training of virtual IT disaster situations. This exercise ensures that disaster recovery systems and procedures have been thoroughly tested to ensure ongoing stability and security of the company's major business systems for finance, purchasing, personnel, customer support and more.

TRANSFORMATION

In partnership with IBM Business Resiliency Services, HHI implemented the Resilient Enterprise Blueprint (REB), a proactive response framework for core system shutdowns and other serious impacts on IT services that took just five months to administer. With the disaster recovery system and strategy in place, HHI is confident that system disruptions or outright failures won't derail business objectives.

HHI chose to partner with IBM Business Resiliency Services for strategic disaster recovery operations based on the extensive experience that IBM has in regional and global disaster recovery."

—JUNG HUN SEO
CIO, ICT Innovation Center, Hyundai Heavy Industries

HHI AND IBM AT A GLANCE

292 application systems covered by IBM DRaaS with same day Recovery Time Objective

Near-zero Recovery Point Objective that minimizes data loss and ensures successful data recovery

New Disaster Recovery Center can withstand **7+-magnitude earthquake**

Multiple, uninterruptible emergency power supplies tiered based on importance of system or data



This strategic IT planning secures the future of our business—even in the event of a disaster that affects shareholders, staff, clients and partners—and strengthens our competitiveness.”

–BO KYUNG CHUN
Team Leader, ICT Infrastructure Technology, Hyundai Heavy Industries

HHI BY THE NUMBERS

12 domestic workplaces

16 overseas branches

25 overseas branches

More than **16,000 employees** in production, research and development, management, and administration

Five business divisions

- Shipbuilding
- Special & Naval Ships
- Offshore & Engineering
- Industrial Plant & Engineering
- Engine & Machinery

A JOURNEY TO DIGITAL TRANSFORMATION

In the past, IT was simply in charge of system maintenance and management. Now, IT is charged with providing high-value service to the business. For HHI, that means delivering simplified, modern and informative manufacturing capabilities.

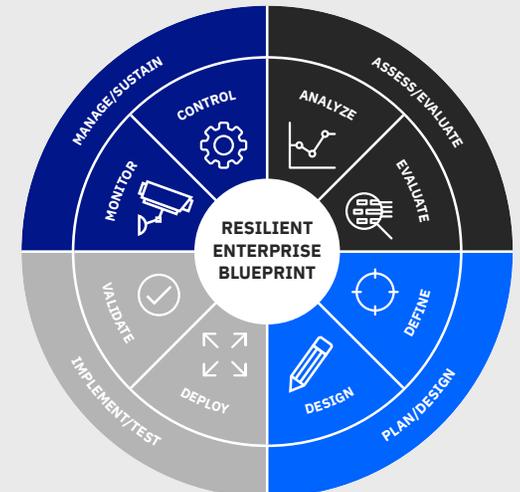
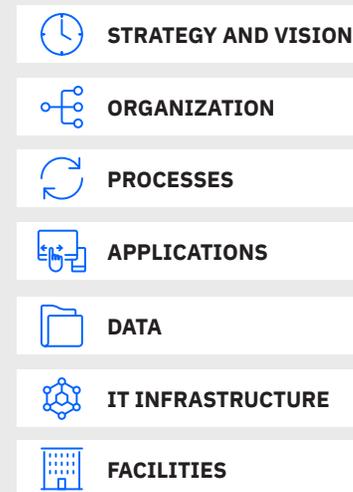
Application availability and data protection are key challenges in digital transformation. Traditional backup and disaster recovery are designed for system-level recovery and not recovery from platform or configuration corruption. A resilient disaster recovery center that provides rapid, end-to-end preservation of data and uninterrupted access to applications is critical to the success of a digital business.

HHI plans to undergo a digital transformation of its data center in the next few years. In the short term, the company is focused on implementing more cloud services into its daily operation.

IBM BUSINESS RESILIENCY SERVICES

The innovative IBM Business Resiliency Services portfolio provides solutions and services designed to give clients greater flexibility and agility in their backup workloads. IBM operates more than 300 global delivery data centers across 54 countries to help companies maintain business operations and improve resiliency.

IBM BUSINESS RESILIENCY SERVICES 7-LAYER FRAMEWORK



“Hyundai Heavy Industries has complex IT systems in terms of infrastructure and application systems that support core businesses. Generally, this kind of environment has a tendency to make it difficult to apply resiliency solutions and framework. Starting from current state assessment, IBM resiliency team performed business impact analysis, categorized mission critical ones from whole business supporting systems, and then planned, designed, architected, implemented and tested Hyundai Heavy Industries Disaster Recovery systems successfully within five months. This was a very demanding timeline for this kind of project. The IBM team is proud of our work here, successfully ensuring Hyundai Heavy Industries has a strong future.”

–JONG KI RYU
Senior Managing Consultant and Business Development Executive, Resiliency Services, IBM