Integrated infrastructure effortlessly links Honda and global suppliers

‘With seamless global service, the strength of NTT, we achieved a globally standardized supplier network system, along with faster product development, procurement, and production.’

Mikiya Fujita, Manager, System Service Division, Global Master Management Department, Honda Motor Co., Ltd.

**Company Name:** Honda Motor Co., Ltd.

**Capital:** JPY 86 billion

**Number of employees:** 198,561 (consolidated), 23,467 (non consolidated)

**Business Overview:** With the slogan ‘The Power of Dreams’, Honda promotes development of products and technologies that are useful for our lives and dreams. In addition to the development of cars, motorcycles, and similar products, Honda has been actively pursuing new business areas such as the development of bipedal walking robots and small jet airliners.

[world.honda.com](http://world.honda.com)

**Challenges**
- Creating a globally standardized method of moving large data such as CAD files
- Realizing a flexible supplier network for business continuity even in emergency situations

**Solution**
- Utilize NTT’s global data centers and expansive network
- Leverage NTT’s fast, secure transfer service for smoother data movement

**Benefits**
- Shorten product development with an infrastructure for fast design data transfers
- Lower total data transfer costs by 30%

Disclaimer: The work described in this case study was performed while the company was known as NTT Communications.
**Case study**

‘We not only need to procure parts at optimum cost and speed during normal business operations, but in times of natural disasters as well, we need a global network of suppliers we can work closely with.’

*Mikiya Fujita, Manager, System Service Division, Global Master Management Department, Honda Motor Co., Ltd.*

**Challenges**

**Non-standard data transfer protocols**
Some suppliers used traditional mail service
Needed to transfer a large amount of design data more quickly

Honda produces and sells automobiles, motorcycles, agricultural equipment, snow throwers, outboard engines, and other products globally. They excel at making ‘products that exceed customers’ expectations’ and to do so, it is essential to develop products that foresee customer needs and to build a global supply chain that provides them quickly.

‘We develop our products globally with the aim of meeting varying local needs,’ says Honda’s Mikiya Fujita.

However, they were having issues establishing smooth collaboration with suppliers spread around the globe. When developing a new product, their product development team would first draw up a new mechanism, for example, and then the design would be passed on to suppliers. The suppliers would produce a prototype for mass production in 3D CAD and return it to Honda. Throughout parts testing and production, these large data files had to be sent back and forth.

There are supposedly between 20,000 to 30,000 parts in a car. Each part requires this kind of back and forth of data, and conventional exchange methods vary from region to region. A data transfer service was used in Japan and Thailand, but other regions used other media, mailing paper copies, and other methods.

‘Mail could take up to a few weeks to be delivered, and it was affecting the speed of product development,’ says Fujita.

This difficulty in sharing data across regions was causing issues in the flexible selection of suppliers for their global network to ensure stable supply lines.

‘At the time of the earthquake and tsunami in northeast Japan and the flood in Thailand, both in 2011, many suppliers were unable to operate, which had a huge impact on our production. We not only need to procure parts at optimum cost and speed during normal business operations, but in times of natural disasters as well, we need a global network of suppliers we can work closely with,’ says Fujita.

**Solution**

**Take advantage of a service area covering the globe**
Craft an integrated infrastructure to leverage that global environment

To solve this issue, Honda began developing an integrated infrastructure to facilitate supplier cooperation called the Global Supplier Network (GSN) with NTT as a partner.

It was absolutely categorical that GSN have highly reliable data centers, and a fast and stable global network to ensure smooth cross-regional transfers of gigabytes of data. ‘NTT boasts global network and provides data center services all around the globe. We were impressed with their globally standardized ICT infrastructure and their 24/7 helpdesk services,’ says Fujita.

NTT also provided an integrated portal to manage the data transfer service and supplier information. Instead of creating a completely new system, GSN was put in place quickly and efficiently by utilizing NTT’s global platforms, such as the Biz Storage File Transfer service and Enterprise Cloud.

Measures to reduce data transfer time across regions were also taken, says Fujita. ‘Let’s say a design engineer in Southeast Asia sends data to a supplier in North America. If the supplier has to access a data center in Singapore via the internet to obtain the data, it takes a relatively long time. To counter this problem, we connected the data centers to a backbone network which takes advantage of NTT services to swiftly transfer files between them. Anyone accessing the data will automatically be connected to the nearest data center as indicated by their registered ID.’

**Benefits**

**Network will eventually link 10,000 suppliers**

**Drastic reduction in data transfer costs**

GSN was completed in just 10 months, with data centers in Japan and Singapore connected to the system, and it has been so successful that Honda plans to expand it by linking data centers in Thailand, the UK, North America and other areas for even more global convenience, says Fujita.

‘We expect that 5,000 suppliers will be using this system within a couple of years, a number that will eventually double.

‘Biz Storage File Transfer has a convenient function that automatically restarts downloads in progress when connected, as well as security features such as one of the most effective data and communication encryptions available.

‘Design data is a very important proprietary asset that supports Honda’s competitiveness. Security is an absolute imperative. However, when dealing with Chinese companies, we have to unencrypt data for legal reasons. This flexible service enables users to easily encrypt and unencrypt data for efficient data transfers,’ says Fujita.

The system has also been effective in reducing costs. With the previous system, a fee was charged for each ID registered, so suppliers had to take on an additional cost burden, but GSN solved this issue with a flat fee.

‘Overall operational costs for data transfer, including the costs incurred on the supplier side, have been reduced by about 30%.

As GSN keeps detailed records about each supplier, including cost estimates, it allows unified management and for designers to choose appropriate suppliers through the portal. Honda intends to optimize its supply chain with the evolution of GSN and NTT will continue to support their efforts to create new products and technologies.