NSW Builds IoT Solutions for Customers 10x Faster Using ThingWorx Industrial Innovation Platform

NIPPON SYSTEMWARE CO., LTD. (NSW)

Since 1966, NIPPON SYSTEMWARE CO, LTD. (NSW) has evolved their business from providing IT solutions and embedded software development services to offering system integration services that support the growing M2M market in Japan. To be successful in M2M, NSW recognizes the importance of leveraging data and providing analytics to their customers, and they have identified the types of solutions they need in order to provide this level of service to a variety of customers. Unlike traditional cloud service providers that are solely focused on servers and infrastructure, NSW anticipates data will be the biggest business generator in the IoT/M2M era.

NSW supports several industries – including government offices, insurance organizations and large electronics companies. They help their customers create new business value by enabling them to more effectively gather, analyze and utilize big data. In Smart Cities, NSW improves the health of infrastructure through ongoing monitoring and maintenance. And, for its manufacturing customers, NSW provides remote monitoring and predictive analytics to help proactively fix issues before they arise.

The Challenge

NSW's customers – including many smart, connected product manufacturers – require solutions they can build quickly at a low-cost. Like many systems integrators, NSW followed a scrap and build approach that helped develop a solution from scratch quickly. However, NSW quickly realized this wasn't a sustainable business model to keep up with rising customer demand.

The Approach

NSW needed a technology partner to help them develop a cloud-based M2M platform. The ideal partner should enable them to develop, implement and integrate solutions quickly, at a lower cost. It should also provide them with the ability to customize solutions based on each customer's unique needs. NSW determined that they needed an IoT platform.

NSW began the process of identifying platform vendors and quickly learned that many were not as robust as they imagined. Of the 15-20 vendors considered, only five were chosen for extensive evaluation. After a year and a half of research and review, NSW determined that ThingWorx, the industrial innovation platform from PTC, was suited to meet their needs.

> **When we found ThingWorx, we saw an IoT platform built on ideas that were completely different from any other IoT platform."**

Daisuke Takemura
Division General Manager and Department Manager, NSW

The Results

Using the ThingWorx platform – specifically ThingWorx Foundation, Analytics and Studio – NSW created Taomi, their own cloud-based IoT platform. Toami provides three types of solution models:

- A custom model with customer-specific applications

- A rebranded OEM model for telecommunications companies (such as Toami for Docomo, a solution created for NTT Docomo)

- A vertically-integrated software-as-a-service (SaaS) solution that combines sensors and devices as well as applications built on Toami.

NSW customers have used Taomi to create SaaS implementations that manage temperature and humidity, water reservoir levels, restroom occupancy and other sensor-oriented apps.

With ThingWorx, NSW can develop solutions roughly 10 times faster than they could when building from scratch and can now offer them globally. Additionally, NSW can easily update and fine-tune each solution to support a variety of change requests from their customers.

It's now easy for NSW to gather data from connected devices and provide predictive analytics and maintenance services for their customers, especially those with critical applications such as manufacturing or medical equipment. In the future, NSW plans to develop and deliver additional types of services and increased value to these vendors by further consolidating and analyzing the data gathered.

Toami for DOCOMO platform. This displays 4 functionalities within the platform used in the Sendai Factory, which uses data to manage LED lighting, humidity and temperature levels for customers.

Beyond the benefit to its customers, the platform also serves as an engineering training tool, allowing NSW new hires to quickly and efficiently learn how to develop solutions using a common application development environment. This is especially helpful since the engineering team at NSW has grown from three to roughly 80 since the company began using ThingWorx.

The Success

With Toami now recognized as one of the best known IoT platforms in Japan, NSW's customer and prospect base continues to grow. They already work with over 80 companies and attracted nearly 500 attendees to the company's private seminar in 2017.

NSW's ability to scale in response to rising customer demand enabled them to build a customer base very quickly, thus increasing revenue. One prospective customer was working with another vendor for a year and a half before contacting NSW. NSW was able to respond to the proposal at a fraction of the cost and with a much shorter development time compared to the incumbent vendor.

With the ThingWorx platform, NSW can now respond faster to more frequent and diverse customer requests and provide their customers with presentable data to help them run their business more efficiently.

Want to Learn More?

For more information, visit PTC.com. Follow us on Twitter @ThingWorx and LinkedIn @ThingWorx