Retail stores in Japan get a boost with GMO Cloud

Company Snapshot
Company Name: GMO Cloud
Industry: Service Provider - Retail Solutions
Size: 937 employees
HQ: Tokyo, UK
Arm Solution: Pelion IoT Platform

Goal
Deploy digital retail tags in a major book store chain to help increase book sales and improve the customer experience.

Solution
GMO Cloud based its IoT smart tag solution on the Arm Pelion IoT Platform to take advantage of its connectivity, device, and data management services.

Benefits
- Remote management saves time and costs for maintenance and updates.
- Signage can be securely changed across multiple devices through a web browser.
- Customer data captured in store can be collected and integrated with other enterprise data for real-time insights.
- Platform scalability lets GMO Cloud offer its smart tag solutions across multiple industries.

The GMO Cloud portfolio consists of cloud computing applications for a variety of industries and verticals, including a digital tag solution for the retail sector. Omnichannels and digital marketing are helping the retail industry adapt for e-commerce and changes in consumer behavior in the digital era. Bookstores are no exception. In-store book purchases are decreasing due to the penetration of online sales and the popularity of ebooks. Traditional bookstores are struggling to attract walk-in consumers.

Tohan Corporation, a major bookseller in Japan, launched an initiative to increase in-store book sales using the latest IoT technologies. It chose the “IoT Navi by GMO” smart digital tag solution for the project.

GMO Cloud’s “IoT Navi by GMO” provides one-stop IoT business support to enterprise customers. Its comprehensive service helps enterprises turn their IoT challenges into IoT opportunities. From business concept to go-to-market, IoT consultants act as a one-stop helpdesk, assisting businesses as they adopt new IoT solutions.
Retail stores in Japan have already started to deploy digital retail tags and Point of Purchase (POP) display solutions. However, these are often locked in to proprietary devices, which makes changing the content information very difficult. Another hurdle to deployment is the need for a separate sensor to gather data on consumer demographics and behavior patterns and integrate that data with other systems to inform business decisions.

GMO Cloud chose the Arm Pelion IoT Platform to deploy and manage its smart tag solution. Pelion’s scalable architecture gives GMO Cloud the flexibility it needs to meet its requirements throughout its nationwide retail channels.

For the bookstore application, GMO GlobalSign’s certificate authority is used for encryption, and Arm Pelion device management services let staff change the smart tag display information securely through a web browser. Remote management also reduces maintenance steps and costs, and helps improve overall store operation efficiency and performance.

In addition, GMO connected multiple time-of-flight sensors to the smart tag module to measure the time customers spend picking up books in front of the display, and collect this data for further processing.

System configuration diagram

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“The Arm Mbed IoT Device Platform is a solution that can safely manage millions of IoT devices, not just for the retail industry but also other IoT Navi by GMO service verticals, such as housing, building, energy supply, agriculture, and more.”

- GMO Cloud
Solutions and Results

Tohan is currently implementing its next-generation electronic POP display, using GMO’s digital tag at the Yaesu Book Center head office, located at the Yaesu exit of Tokyo station. This electronic POP display is installed in several places in the store, and the display contents are dynamically switched and displayed.

With this system, the display contents of electronic tags can be changed every day and as a result, book sales have increased by a factor of 20 since implementation.

In addition, Tohan can analyze data from the POP to determine which section in a store gets more foot traffic, and which products are being picked up. This helps staff create more effective marketing programs.

Future Plans

GMO Cloud is currently deploying its new system, and plans to transition to mass production as the number of projects increases. The company says it has received inquiries for a variety of applications across multiple industries, including price tags at convenience stores and supermarkets, and inventory control at factories.

Learn more about the Arm Pelion IoT Platform [www.arm.com/pelion](http://www.arm.com/pelion)