#### **CASE STUDY**





# **B2B E-COMMERCE SYSTEM**

MAINTENANCE SYSTEMS IN THE SOFTWARE SERVICE SECTOR FOR THE FIELD OF CONSTRUCTION MACHINE CONTROL

## **HIGHLIGHTS**

Construction Software System

The Subscription Portal system is where you can buy software and services. This system has three parts: the MH part, Magento development API, and the Batch part which is written in Python.

Ability to Understand External Systems

Luvina is capable of quickly adapting and understanding a new system developed by another company and is exceptional at maintaining it.

#### **OVERVIEW**

The project that Luvina undertook this time was a maintenance project for the Subscription Portal system. This system is responsible for selling products related to construction software and services for the conglomerate. Additionally, the system includes the MH part, API development on Magento, and a Batch component written in Python. This marks Luvina's first project in developing and maintaining a Magento ecommerce system. By maintaining a strong commitment to learning and working on things not previously known, Luvina has demonstrated its expertise. It actively participated in designing the business administration activities of a large-scale ecommerce website within the software industry.

- Country: Japan
- Industry: Information Technology
- · Collaboration model: Offshore Development
- Duration: Since January 2020
- Technology:

Code: PHP, Magento, Python, JavaScript, CSS, HTML

Server: AWS, MySQL
Testing Tools: Postman
• Scale: 8 - 20 man-months

#### **ABOUT CLIENT**

Luvina's client is one of the well-known IT conglomerates in Japan, specializing in system integration and application development for customers in the financial and retail sectors. Since 2009, Luvina has been honored with the recognition of "Partner F" by this client for its high capacity, strong technical response, and exceptional information security. Over 14 years of collaboration, Luvina has completed numerous projects in various sectors, including sold systems, securities, banking, insurance, and more.

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### **CHALLENGES**

01

This is the first Magento E-commerce system development and maintenance project for Luvina Software. Luvina is actively involved in the business design of the back-end administration activities of large-scale e-commerce websites within the industry of specialist software for industrial machine control. Before accepting the position, Luvina had limited expertise with Magento and a severe lack of qualified Magento programmers.

The client's system requires a high load capacity and generates requests to change/update APIs monthly, on average.

02

03

As a maintenance project, the work packages allocated to Luvina are frequently challenging to anticipate in advance in terms of size and workload, deployment needs, and release requirements in a relatively short period. This requires Luvina to maintain a high level of human availability.

#### **SOLUTIONS**

1. Magento Expertise: Luvina prioritized hiring technically proficient personnel with high expertise in Magento for the project. The swift implementation of a training program and the establishment of an internal documentation system facilitated the rapid recruitment of human resources for the later stages of the project. This demonstrated Luvina's adaptability in scaling up personnel as required by the client. 2. Flexible Project Management:

Depending on the scale and tasks at hand, Luvina adopted flexible project management approaches, including Agile and Waterfall models, task breakdown into manageable units, and adherence to project milestones. This allowed Luvina to meet project progression standards with ease.

In this project, Luvina completed the following phases:

- Analysis
- Design
- Development (Coding)
- Testing & Integration

- Deployment
- Maintenance (Operation & Support)
- Establishing UT and IT test environments on AWS (used by both Luvina and the client).



# **ACHIEVEMENTS**

After more than two years of implementation, the Client's assigned task packages have always been completed on time and to the highest standards. Clients continue to trust and select Luvina for system maintenance and development of new projects due to their satisfaction. Luvina amassed valuable expertise in Magento design and development while building a sizable Magento development team, ready to take on new projects.

The client continually expresses gratitude to Luvina for precise and rational project management as development activities continue to escalate. Luvina remains a trusted partner for upcoming projects.