

# MAINTENANCE OF A SOFTWARE SYSTEM FOR A JAPANESE TRAVEL AGENCY

## HIGHLIGHTS

### **Automated Testing Tool Creation:**

Based on analyzing common business flows of the client, Luvina has developed test scenarios and created an automated testing tool, significantly increasing productivity and reducing costs for the client.

### **Capability to Understand Large Systems:**

The client possessed a massive system with various business operations and functions. Luvina's tasks often involved only a small part of the system. However, to ensure seamless system operation, we had to study all relevant areas to fulfill our tasks.

## PROJECT OVERVIEW

Luvina was tasked with maintaining a massive system for the client, a large travel agency, on a ticket-by-ticket basis. Whenever the client required upgrades, testing, or optimizations for a part of the system, Luvina ensured the completion of the ticket and the overall smooth operation of the system.

- **Country:** Japan
- **Services:** Software Maintenance, Software Testing, and IT Security Services
- **Industry:** Travel
- **Technology:** VB.Net, C#, .Net Framework 3.5, 4, and 4.6.1; Oracle DB
- **Scale:** 2-3 people/month



## ABOUT CLIENT

*Our client is one of Luvina's long-standing strategic partners. We are honored to be their F-partner, and we anticipate that the relationship between Luvina and the client will become even stronger.*



### Regarding End-User Clients

Our end-user client is a major travel agency in Japan, operating for over 30 years with nearly 4 million global customers annually. They own a massive software system with various business operations and functions that require regular maintenance.



### Regarding Client Requirements

The client expected Luvina to perform system maintenance tasks for end-user clients on a ticket-by-ticket basis, depending on the end-user client's needs. This required Luvina to be flexible in resource allocation and always ready to scale up resources for the project as needed.

## CHALLENGES

The client's system was massive, **comprising various business operations and functions**. This posed a significant challenge for Luvina when addressing minor details within the large system while ensuring seamless system operation.

Since tickets were assigned unpredictably, both the client and Luvina need to be **extremely flexible in resource allocation**, both in terms of manpower and knowledge.

# SOLUTIONS

Luvina, with our inherent ability to learn, continuously sought solutions to ensure tasks were completed with the highest quality and within deadlines.

We had implemented proactive solutions such as:



Self-learning and seeking clarification from the client regarding the system, then explaining it to team members.



Regular team collaboration to define work methods, share encountered issues, and discuss solutions to improve investigation quality.



Clarifying the context upon receiving requests from the client to understand the objectives and further analyze the feasibility of the request. This allowed us to suggest better solutions to the client if possible.

# ACHIEVEMENTS

During the project implementation period, Luvina consistently completed assigned tasks with high quality and within deadlines. The client was highly satisfied with our work productivity and desired to maintain a long-term cooperative relationship with this project and with Luvina in general.

*Throughout the project's implementation, Luvina achieved several notable accomplishments, including:*

**1** Developed automated tests for 16 major functions within the client's system.

**2** Successfully upgraded the client's Redmine system from version 3.0.3 to 4.1.1.

**3** Successfully optimized data search speed using N-Gram solution.