



## **CASE STUDY**

# **B2B Ordering Platform for the Automotive Supply Chain**



<https://luvina.net/>





# PROJECT OVERVIEW

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Luvina partnered with a leading Japanese multinational specializing in **tire and automotive parts manufacturing** to develop a **B2B ordering platform**. Designed to streamline global order management, the platform enables corporate clients across international markets to submit orders directly to the central supplier. More than just an ordering tool, the system empowers the manufacturer to collect market insights, analyze demand trends, and optimize production planning with greater precision.

**Religion:** Japan

**Industry:** Manufacturing (Automotive parts)

**Focus Area:** Order Management System

**Duration:** August 2021 – Ongoing

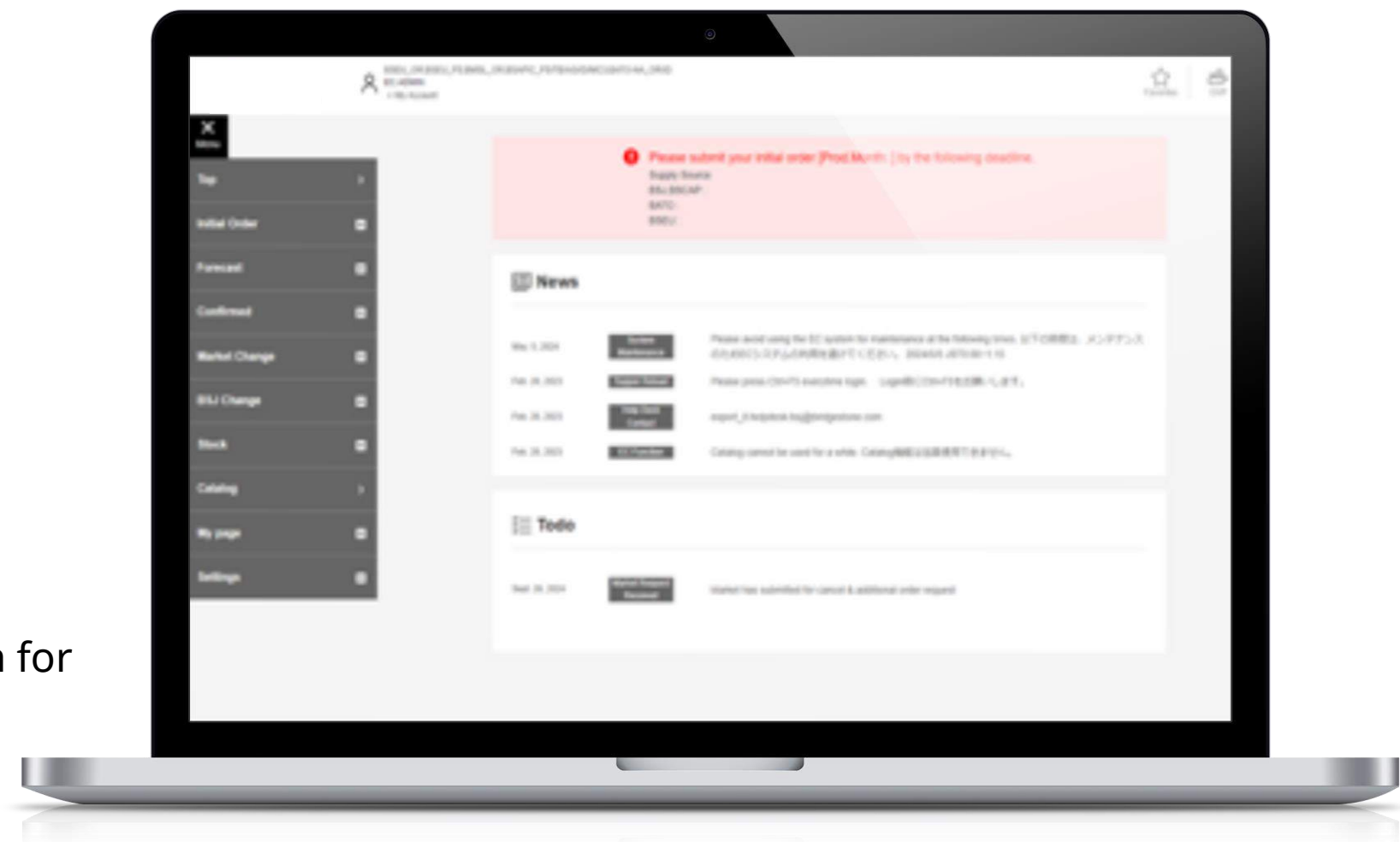
**Scale:** 166.9 MM (Jan – 2025)

## Services Provided

- End-to end web application development
- Continuous maintenance and support

## Key Technologies

- **Salesforce Platform:** World's #1 CRM, enabling seamless scalability and integration for B2B use cases
- **Laravel:** Robust back-end framework for secure and scalable data handling
- **ReactJS:** Dynamic front-end experience for responsive and intuitive user interactions



# PROJECT OVERVIEW

## CLIENT & OBJECTIVES

Luvina's client is a global enterprise specializing in the manufacturing of tires and automotive components. The primary goal of this project was to **develop a B2B e-commerce system that automates the order and distribution processes** to factories and dealers worldwide, enhancing operational efficiency and responsiveness across the supply chain.



### CHALLENGES

- Took over a **partially completed system** with outdated, messy code.
- Needed to support a **large-scale network** of 130 factories in 25 countries.
- System performance was **unstable**, unable to handle heavy data and traffic from global users.



### LUVINA'S SOLUTIONS

- Chose **Salesforce** as the core platform - a powerful cloud solution for CRM and e-commerce.
- Enabled **easy integration** with AI tools, reports, chatbots, and other systems.
- **Redesigned** the order flow and added custom tools to boost speed and scalability.
- Delivered a flexible system that can **handle real-time data and grow with the business.**

# PROJECT OVERVIEW

## ACHIEVEMENT

### **60% faster order processing**

Optimized system performance and data handling, significantly reducing the time needed to process large orders, saving hours of daily operations.

### **Smooth transition of 40% legacy system**

Successfully took over and continued development without service disruption or impact on the customer's existing data ecosystem.

### **System now supports 130 factories across 25 countries**

Enhanced to run stable, real-time ordering and data updates at a global scale.

### **On-time monthly updates using Agile**

Thanks to flexible resource planning, the team delivered consistent monthly releases, quickly adapting to changing business requirements.





# FEATURES & USE CASES





# KEY FEATURES

Feature	Description
Initial Order Creation	Branches can create initial orders by uploading files or through ETL data integration.
Order Submission & Confirmation	Both branches and factories can track submitted and confirmed orders.
Order Modification (Cancel/Additional)	Allows branches to add new orders or cancel pending ones.
Order Status Updates (Change Order)	Factories can update order details such as quantity or delivery schedule.
Demand Forecasting	Branches submit future consumption forecasts, enabling factories to plan production accordingly.
Supply Forecast Response	Factories respond to forecasts by confirming whether supply is feasible or not.
Excess Stock Management	Displays a list of unsold stock (produced but not yet ordered), categorized by market group.
Excess Production Capacity	Shows available production capacity (spare parts in stock) at each factory for the upcoming N months.
Automated Notifications	Sends automatic alerts when there are updates or changes to orders.
User Role Management	Customizable access rights per branch or factory.
Chatbot/Customer Support Integration	Enables seamless customer support through chatbot or helpdesk systems.
Order Analytics & Reporting	Consolidated reporting by time, region, or market to support decision-making.

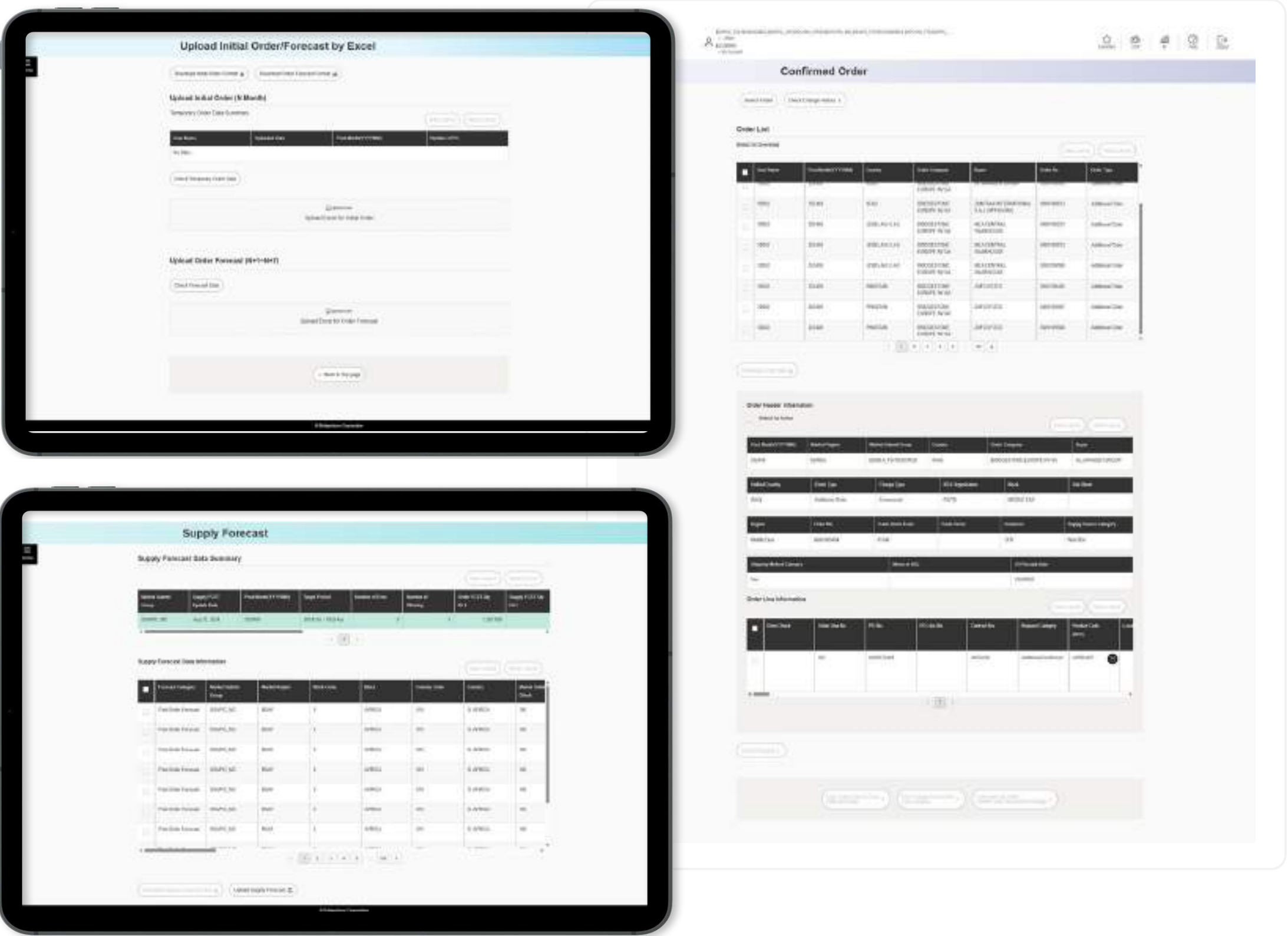
# KEY FEATURES

## Order Management

- Initial order creation
- Order submission & confirmation
- Order modification (Cancel/Additional)
- Order status updates (Change Order)

## Supply Chain Planning

- Demand forecasting
- Supply forecast response





# KEY FEATURES

## Inventory & Production Capacity

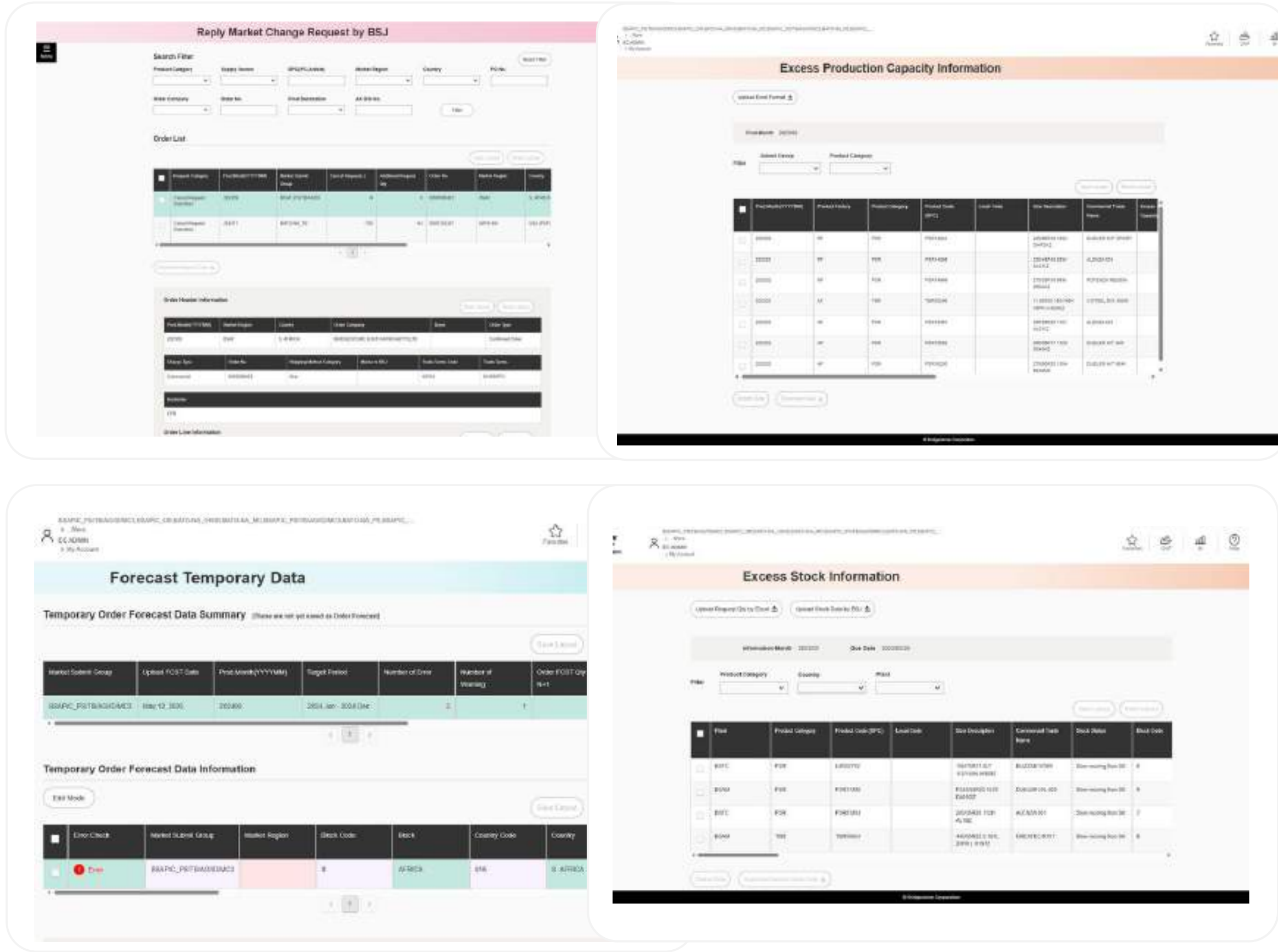
- Excess stock management
- Excess production capacity

## User Support & Interaction

- Chatbot/Customer support integration
- Automated notifications
- User role management

## Analytics & Reporting

- Order analytics & reporting



# USE CASES

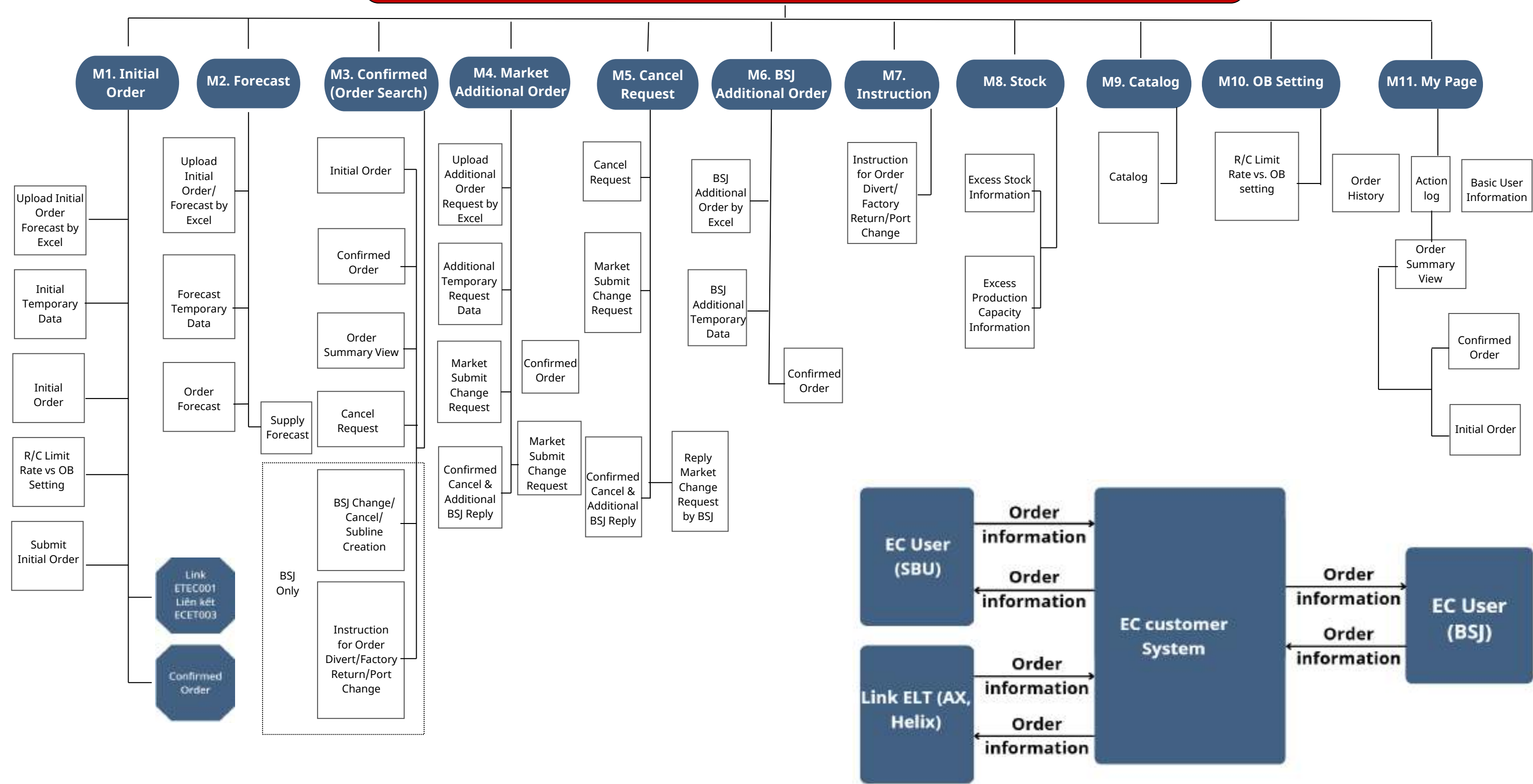
Role	Department	Initial Need	System Solution
Procurement Staff	Overseas Branch	Quickly create accurate orders, avoid manual errors	Upload order files or use ETL integration for precise order creation
Demand Planner	Branch Production Planning	Submit consumption forecasts for production planning	Forecast Order feature allows clear and easy forecast submission
Order Confirmation Staff	Internal Sales	View and confirm orders from multiple markets	Submit/Confirmed module enables real-time order confirmation
Operations / Logistics Staff	Inventory / Production	Monitor stock levels and adjust plans accordingly	Access Excess Stock and Excess Production Capacity to optimize resource allocation
Customer Service / Order Management Staff	Sales or Distributors	Cancel or add orders in response to market changes	Cancel/Additional Order feature allows quick, flexible adjustments
Production Coordinator	Factory	Update fulfillment capabilities based on forecasts	Supply Forecast function allows factories to respond directly to forecasts

Company Type	Industry	Key Needs	System Value
Global Corporation with Worldwide Branches	Automotive parts manufacturing and distribution	Internal ordering and supply chain coordination across global units	Synchronizes orders from 130+ factories and branches across 25 countries
OEM Manufacturers	Automotive Supporting Industries	Accurate demand forecasting for raw material and production planning	Minimizes inventory risk and improves production planning efficiency
Auto Parts Distributors	Auto Parts Distribution & Retail	Access to stock and supply data by market	Enables faster, more accurate ordering and proactive inventory control
Salesforce-Based Enterprises	Digital / E-commerce	Integrate ordering system into existing CRM platform	Customizes Salesforce to fit specialized order management needs



# SOLUTION – USER JOURNEY

## Client's International Order System (Web):



- 1.Initial Submitted
- 2.Cancel Request
- 3.Additional Request
- 4.Cancel Request Submitted
- 5.Additional Request Submitted
- 6.Cancel Confirmed
- 7.Additional Replied
- 8.Additional Confirmed
- 9.Cancel Request Rejected
- 10.Additional Request Rejected
- 11.C. IF Error



# Project Execution Overview





# PROJECT TIMELINE

Aug 2021 – Jun 2023  
Core Web App Development

[Jan 2023 – Jul 2024]  
ETL System Development

[Jul 2024 – Present]  
Enhancement (Ongoing)

Design

Solution consulting

System architecture design

Detailed feature design

Architecture &  
detailed design

Development of key  
features

Initial Order

Forecast Order

Cancel/Additional Order

BSJ Change Order

Submit/Confirm Order

Excess Production  
Capacity Information

ETL service implementation

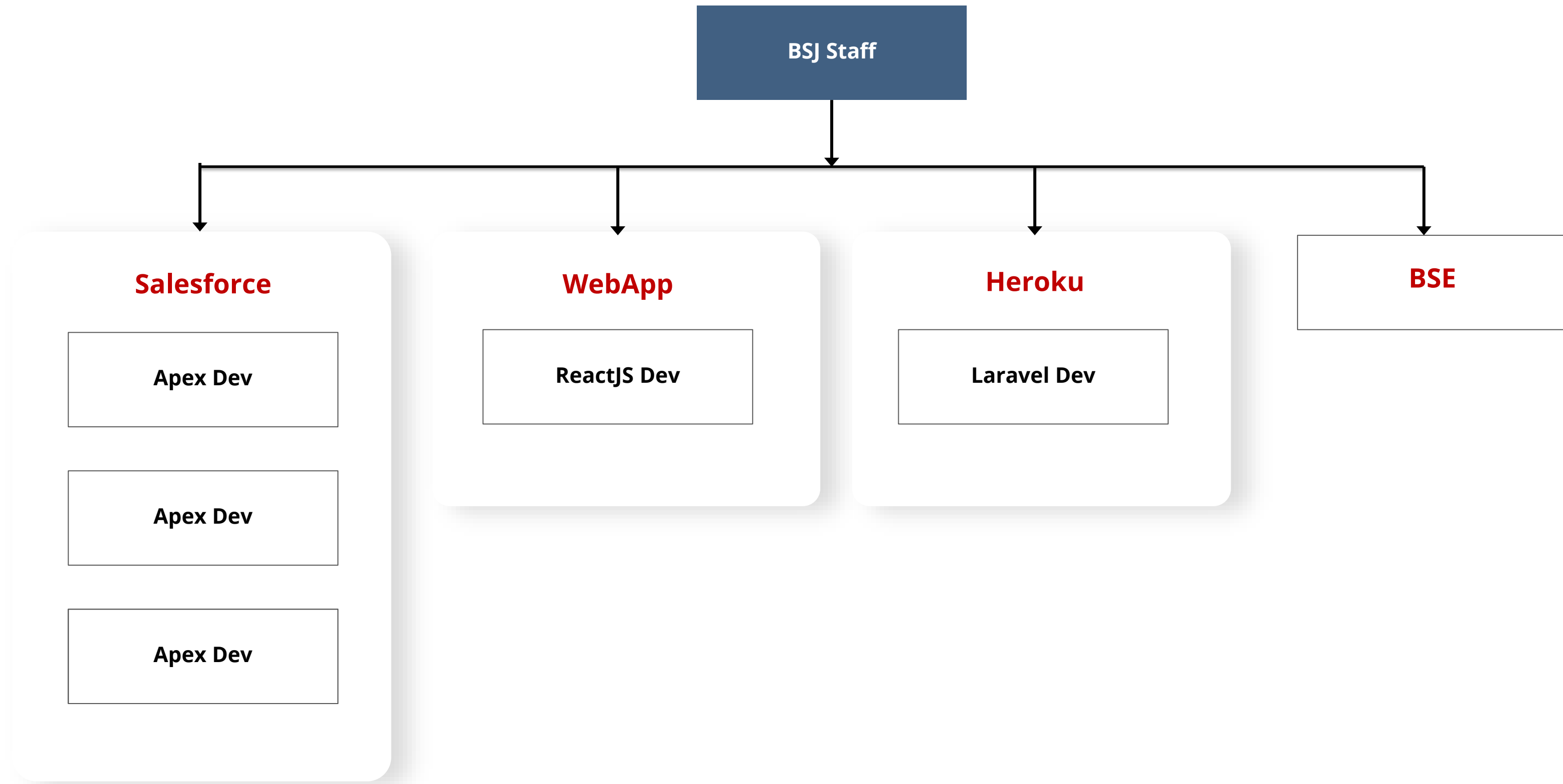
Performance tuning for  
big data processing

Integrating chatbot

Maintain

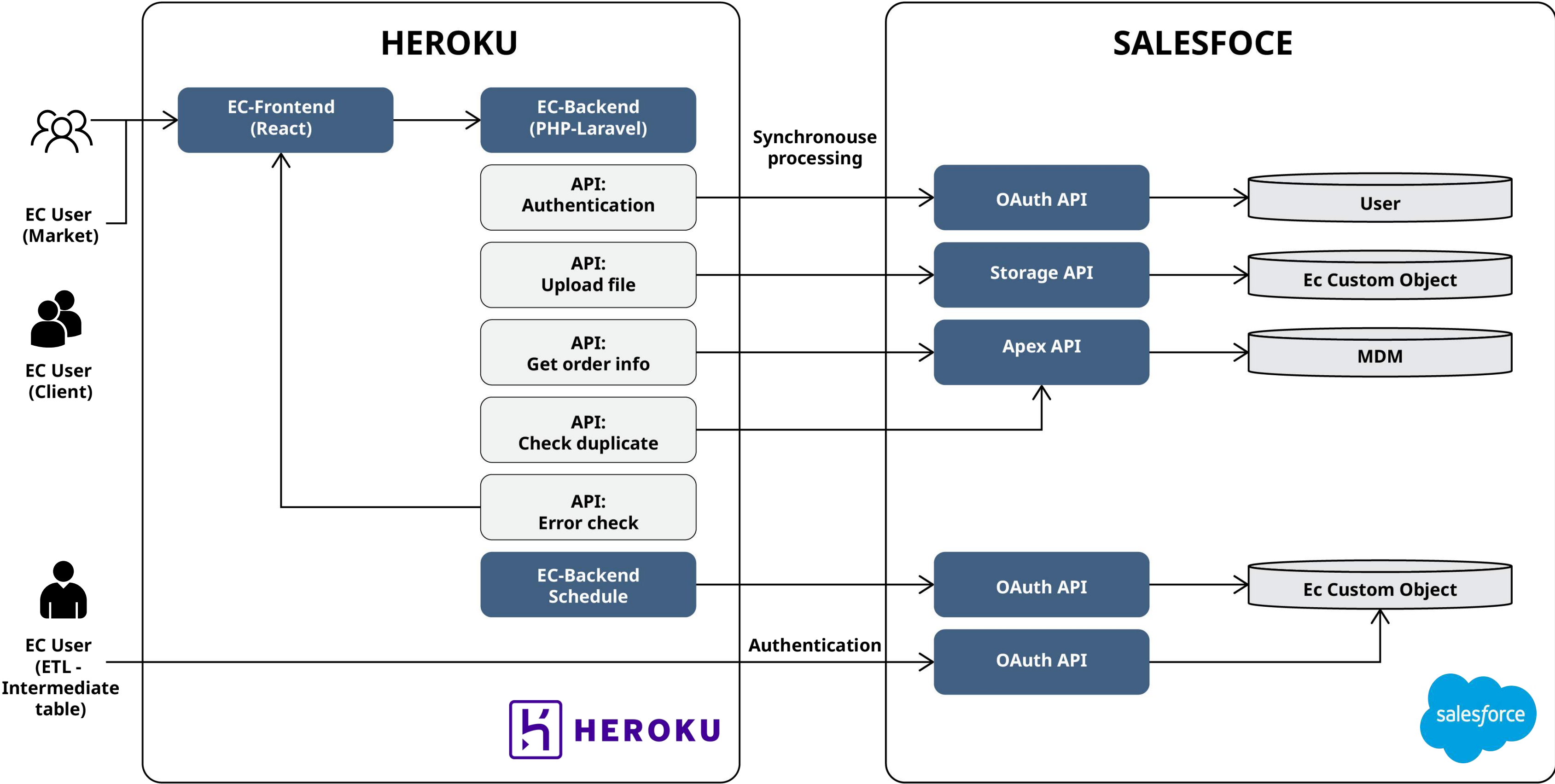
Ongoing system maintenance

# TEAM STRUCTURE


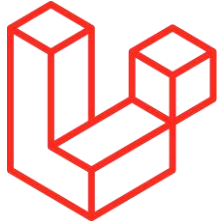
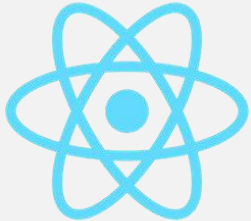





# TECHNICAL DETAILS



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Name		Description	Version	Licenses
	Salesforce Apex	Custom business logic in Salesforce	60	
	Laravel	Bridge service between Front End (ReactJS) and Backend (Salesforce)	8.83.27	MIT
	React.js	Create interface	17.0.2	MIT
	SOQL	Query language in salesforce		





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# EXTRA POINTS



# CHALLENGES WE'VE OVERCOME



## **Complex Logic & High Data Volume**

Handled intricate business rules and workflows under the pressure of processing large-scale, real-time global transactions.

## **Changing Needs During Maintenance**

Frequent scope changes post-launch led to rework, as the original system design no longer aligned with evolving business goals.

## **Unclear Requirements at Start**

Initial business needs were often vague, requiring close coordination with stakeholders and continuous validation.

## **Global Operation, Local Challenges**

Delivered a centralized solution adaptable to 130+ factories across 25 countries, balancing scalability, localization, and time-zone complexity.

# QUALITY ASSURANCE & SECURITY PRACTICES

## QUALITY ASSURANCE PROCESS

### Skilled & Responsible Team

- High ownership and accountability
- Regular, structured training
- Strong technical expertise

### Robust QA Methodology

- Aligned with Luvina's standard process
- Thorough in coding, testing, and reviewing perspectives
- Automated testing integrated in workflow
- Auto tools used for build and release
- Clear, prompt requirement clarification
- Every deliverable rigorously reviewed

## SECURITY PRACTICES FOR HIGHLY SENSITIVE PROJECTS

### Certified Compliance

- Operated under ISO 27001
- Annual audits by authorized certification bodies

### Strict Access Control

- Only PM authorized to execute build/release
- Project members follow strict security guidelines
- Mandatory security awareness training

### Platform-Level Protection

- Deployed on Heroku & Salesforce
- 2FA enabled, access restricted to Luvina devices
- Role-based account access management

### Offboarding Protocols

- Immediate removal of all accounts and files
- Personal laptops reset post-project
- Timely communication of personnel changes to client



# Thank You

## CONTACT US



<https://luvina.net/>



[info@luvina.net](mailto:info@luvina.net)



Tel: (84) (24) 3793 1103 (ext 0)

Fax: (84) (24) 3793 1106

## OUR OFFICES

**Headquarter in Hanoi, Vietnam:** 4F, Hoa Binh Tower, 106 Hoang Quoc Viet Str., Ha Noi, Viet Nam.

**Branch in Da Nang, Vietnam:** 18F, Da Nang Software Park, 2 Quang Trung, Hai Chau Dist., Da Nang, Vietnam.

**Branch in HCM City, Vietnam:** Zeta Building, 38/1 Nguyen Van Troi Str., Ward 15, Phu Nhuan Dist., Ho Chi Minh City, Vietnam.

**Branch in Japan:** R612, Kanagawa Science Park (KSP), 3-2-1 Sakado, Takatsu-ku, Kawasaki-shi.

**Representative office:** 138N Almaden Blvd, Unit 125, San Jose, California 95110-2720, United States.

**Representative office:** 1464 E Whitestone Blvd, Cedar Park, TX 78613, United States.