CASE STUDY

Digital Transformation for a manufacturing enterprise on the Kintone platform

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PROJECT OVERVIEW

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Luvina Software partnered with a leading Japanese manufacturing company to **digitize their manual workflows** in equipment auctions, procurement, and inventory document control. These processes were previously slow, error-prone, and lacked transparency.

By leveraging **Kintone**, a flexible cloud-based database platform, Luvina designed and developed customized management applications that replaced paper and Excel-based workflows. Kintone is trusted by over 15,000 companies worldwide, especially in Japan, and enables enterprises to build tailored solutions without coding.

Through this project, Luvina helped the client achieve **greater efficiency, accuracy, and governance** across their operations, laying a solid foundation for their digital transformation journey.

Country: Japan
Industry: Manufacturing
Duration: Feb 2024 – Apr 2024
Scale: 6 MM
Service: Software Development
Key Technology: Kintone (DB Cloud), Plugin / JavaScript

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The primary objective was to design a digital transformation solution that optimizes manufacturing workflows, replacing manual, paper-based processes for managing auction records and equipment procurement.

Challenges

👉 Paper-based documentation and multi-step approvals across departments slowed down processes, consumed significant time, and reduced overall productivity.

👉 Most employees involved in the workflows had limited IT knowledge, making it difficult to adopt and use traditional enterprise software.

👉 Paper-based storage created major obstacles for reporting and decision-making, especially when retrieving or analyzing historical data for business insights.
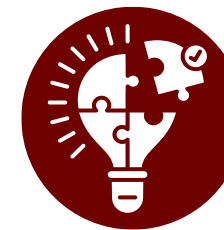
Luvina's Solution

- Designed **custom input forms** to digitize registration processes and automate data handling on the **Kintone** platform.

- Simplified user experience: employees only needed to work within Kintone's intuitive application interface, with no technical expertise required.

- Streamlined approvals and settlements using Kintone's **workflow management** features, with full **process visibility** for approval status.
- Improved data accessibility: all records could be easily visualized, filtered, and searched within Kintone for faster reporting and analytics.

30% Productivity Gain

Manual paperwork and approval bottlenecks were eliminated, enabling smoother workflows and faster decision-making across departments.

Agile & Fast Delivery

The project was completed within a short timeframe using an agile model, with continuous demos and client feedback driving rapid improvements.

Seamless User Adoption

With an intuitive Kintone interface, even non-technical staff could easily manage approvals, reports, and data queries without additional IT training.

Cost Efficiency in DX

By digitizing processes on Kintone, the client reduced operational costs and minimized risks associated with paper-based records and human error.

FEATURES & USE CASES

Users		Solution
Challenge	**Underlying Cause**	
• Difficulty tracking the current status of applications • High paper printing costs • Need for physical storage of paper records • Time-consuming to retrieve past application results • Repeatedly entering the same information	Approval management and document processing were handled entirely on paper.	• Developed **digital input forms** on Kintone for application submission. • Leveraged Kintone's **workflow management** to visualize approval status in real time.
Difficulty analyzing order performance (purchase volume, quantity changes, pricing, etc.)	Purchase information and supplier data were not standardized, and OR (Order Request) and PO (Purchase Order) were not created from a unified source.	• Established **master records for products and suppliers** in Kintone. • Automated the creation of OR/PO by **linking them with master data** at the point of entry.
When a PO was rejected and sent back, users had to manually recreate the Order Request, wasting time.	The existing process lacked department manager (GD) approval at the Order Request stage, so issues were only caught later during PO approval.	Modified the workflow so that GD approval occurs earlier at the OR stage. This was implemented using **Kintone's workflow management** functions.

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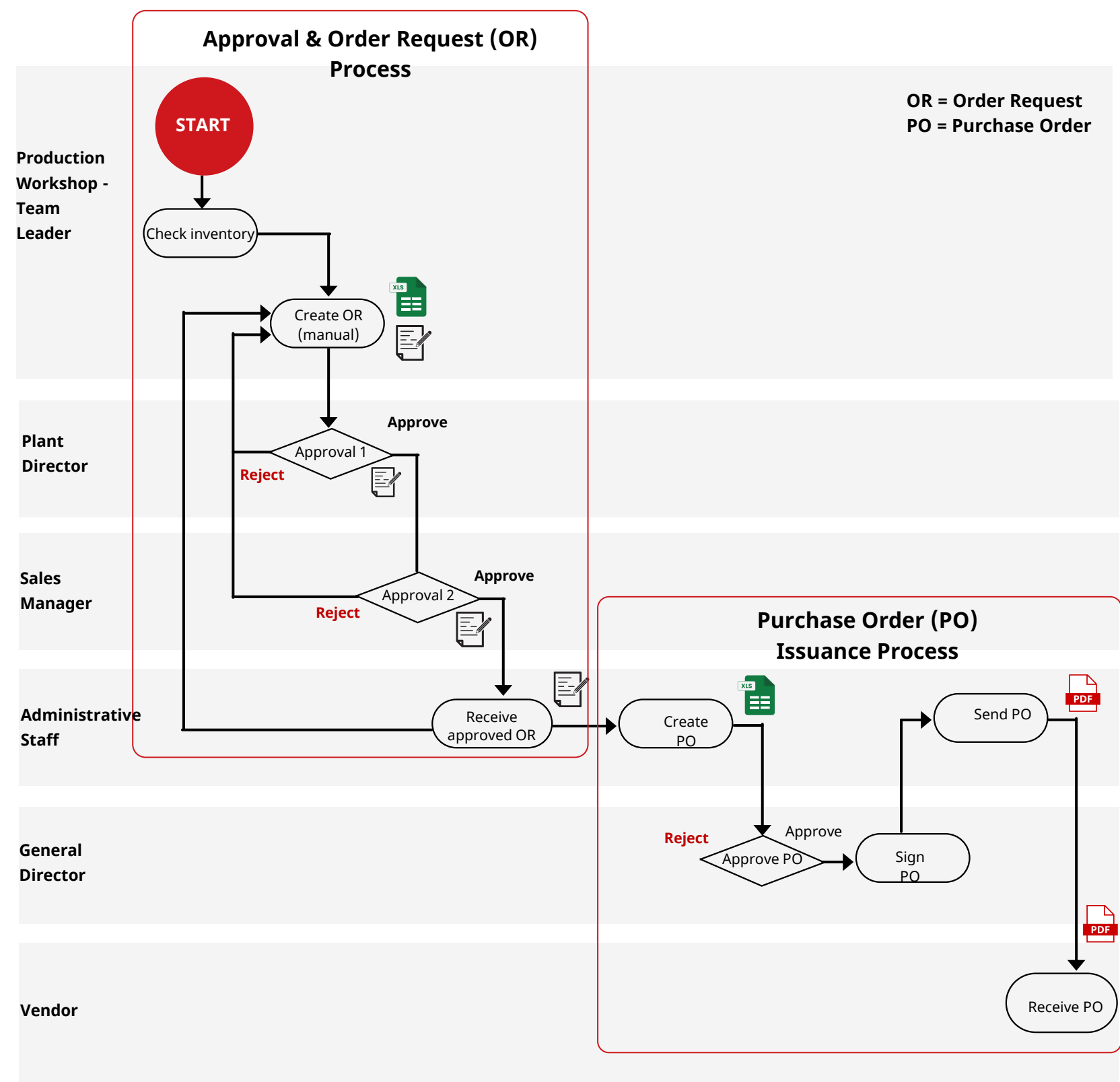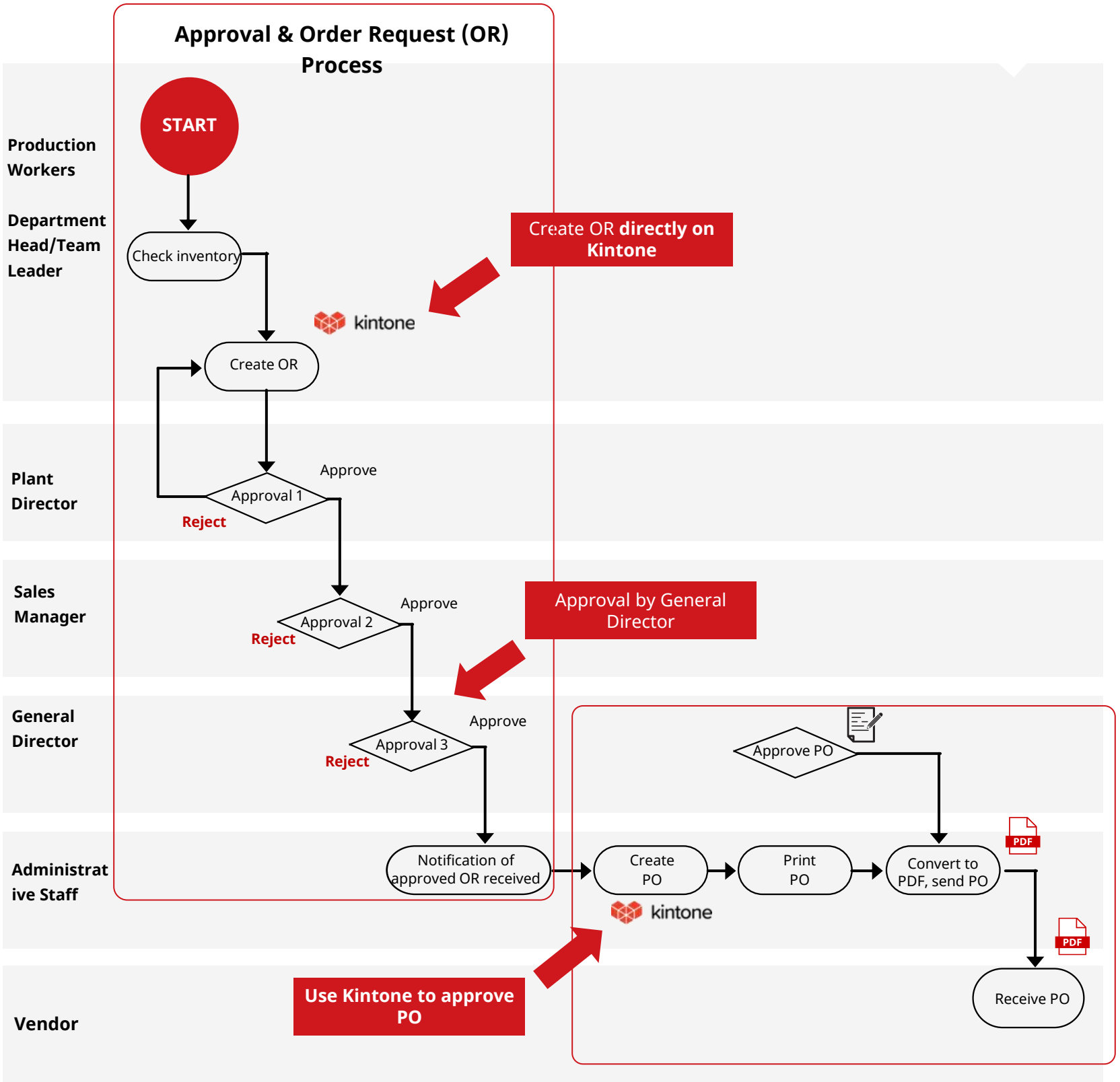
Project Execution Overview

COMMUNICATION FLOW

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End-User (Client)

Luvina team

Define project requirements, set development goals, provide feedback during testing, and support system launch.

Project Owner (Japanese)

Consultant (Japanese)

Manager (Japanese)

Support system design, manage the project, provide design consultation, and participate in project meetings.

Vietnamese BrSE

Act as interpreter and bridge between teams.

Collaborate to provide operational information, cooperate in adopting the new system, and report incidents.

Vietnamese Staff

Vietnamese Supporter

Vietnamese Engineer

Implement Kintone, develop and test JavaScript.

Front Team

Development Team

PHASES

| Project	What we do		Output	Duration	Resource
Agile Development (02/2024 - 04/2024)	Preparation Phase **Input:** Kickoff file, user requirement file	Design	• Basic design • Process design for Kintone • Approval authorization setup • Preparation of master data	2 weeks	1 PG
		Kintone	• Space and app design • Field definition	2 weeks	1 PG
	Product Development	Development	• Develop customized functions on Kintone • Auto-generate codes with department tags • Auto-retrieve approval status • Customize field editing features in subtables • Implement approval flows for Ringi, OR, PO • Enable PO export from Kintone • Update features based on client feedback	1 months	2 PG
		Test	• Testing on the development environment • Live demo with client for feedback	2 weeks	2 PG
	Trial Operation	Trial	• Installation on client environment • End-users test and provide change requests (CR)	2 weeks	
From 05/2024 - Ongoing (ODC)	ODC	Development Test	• Implement CR • Test to ensure CR quality • Deploy on client environment	-	2 PG

DB Platform: Kintone

Programing language: JavaScript

Use Kintone to design and reflect the client's business processes. Customize Kintone features not natively supported to meet the client's specific requirements.
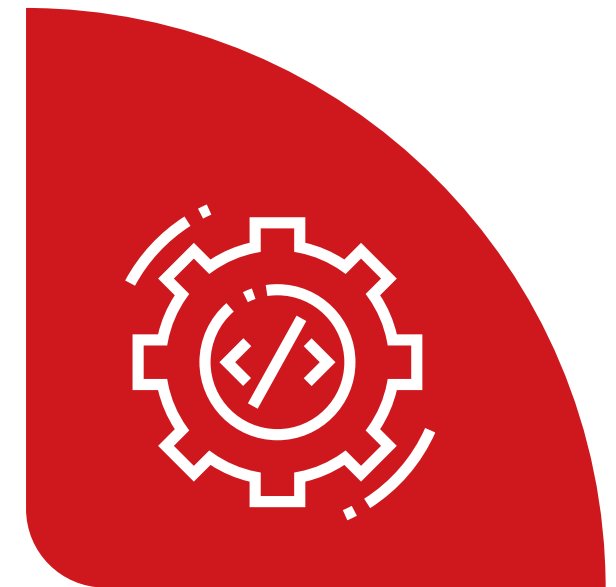
EXTRA POINTS

SECURITY

PROJECT WITH STRICT SECURITY REQUIREMENTS

Operated in compliance with **ISO 27001** standards, with annual inspections conducted by certification authorities.

Specific security control measures included:

Strict security regulations for project members

- Compliance with the Client's security policies
- All plugins created must undergo license checks for the libraries being used, since plugins are considered commercial products and must be handled with extreme caution to avoid copyright infringement

Strict security regulations for members leaving the project

- Delete all accounts, files, and documents related to the project
- Reset personal computers of project members
- Update the client on all personnel-related changes

QUALITY ASSURANCE

Thank You

CONTACT US

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