

Warehouse Management System (WMS)

Company: Ecludx LLC.

Project Name: Warehouse Management System (WMS)

1. Project Overview

Ecludx LLC intends to develop a comprehensive Warehouse Management System (WMS) that integrates Enterprise Resource Planning (ERP), Customer Relationship Management (CRM), and Third-Party Logistics (3PL) functionalities. This system will serve as a centralized platform to manage warehouse operations efficiently, including inventory tracking, order management, shipping, billing, stock transfers, product returns, and customer interactions. The system will operate as a Software-as-a-Service (SaaS) platform to enable scalability and accessibility for clients.

The goal is to reduce human error, streamline processes, and enhance the user experience for employees, clients, and overseas team members while supporting advanced logistics and customer management.

2. Objectives

The primary objectives of the Warehouse Management System are:

- Automate inventory tracking to minimize errors and improve accuracy.
- Provide real-time order management integrated with clients' Amazon stores.
- Enable billing automation with the ability to add extra service charges.
- Offer centralized management of multiple clients with unique SKUs for identical products.
- Provide integrated CRM functionalities to manage client relationships and interactions.
- Streamline 3PL processes, including order fulfillment and shipping coordination.
- Facilitate seamless stock transfers between stores or from warehouse to stores.
- Manage inbound and outbound inventory using scanning technology.
- Allow inbound inventory to be tracked and managed under individual stores.
- Handle product returns and integrate return tracking into billing.
- Provide support for return shipping labels in the future.

3. Functional Requirements

The following features and functionalities are required:

Inbound Inventory:

- Offshore teams or warehouse staff will update inbound inventory records.
- Update details such as supplier name, store name, product quantity, product picture, and tracking number.
- Include an option to add multiple product variants for the same store if needed.
- Use scanning technology to log inventory accurately upon arrival.

Outbound Inventory:

- Provide details such as customer name, tracking number, product name, quantity, and shipment date.
- Ensure tracking numbers are real-time and clickable for status updates.
- Use scanning technology during picking and packing to minimize errors.

Warehouse:

- Serve as the central hub for storing inventory on behalf of individual clients.
- Manage processes for picking, packing, and shipping products.
- Handle inventory for clients with multiple e-commerce stores (Amazon, Walmart, etc.).

Stores:

- Represent individual clients' e-commerce platforms (e.g., Amazon, Walmart).
- Facilitate the management of inventory sent by clients for fulfillment services.

Inventory Management:

- Track incoming and outgoing inventory in real-time.
- Assign unique identifiers to products to simplify tracking within the warehouse.
- Manage products with different SKUs for different stores under a single warehouse identifier.
- Use scanning technology to ensure accuracy and consistency.

Orders:

- Fulfill orders received by individual stores based on inventory levels in the warehouse.
- Allow store managers to upload orders manually or integrate via API for live order synchronization.
- Display order details such as order date, customer name, product name, product picture, quantity, and tracking information.
- Allow users to hover over product pictures to view an enlarged image for detailed inspection.

Billing:

- Generate weekly or monthly invoices for clients.
- Charge based on product dimensions, flat rates, or additional services provided.
- Provide the option to add store management percentages for select clients based on their net profits.
- Integrate product return handling and tracking into billing to ensure accurate cost reconciliation.
- Include the cost of bulk or individual shipping labels into the billing.

Shipping Integration:

- Facilitate shipping label uploads by store managers for each order.
- Integrate with third-party shipping services for automated label generation in the future.
- Allow CSV or bulk file uploads to generate multiple labels.
- Provide manual input options for generating one or two shipping labels

CRM:

- Manage client accounts, track communication history, and monitor relationships.
- Store client preferences and generate performance reports.

3PL Workflow Management:

- Streamline order routing for third-party logistics clients.
- Track fulfillment stages, including picking, packing, and shipping.
- Optimize warehouse capacity and allocation.

SaaS Functionality:

- Enable cloud-based access for all users.
- Allow subscription-based pricing for clients.

4. Technical Requirements

Hosting:

- Cloud-based solution with high availability and scalability.

Integration:

- Amazon API for real-time order synchronization.
- Shipping services like USPS for label generation and tracking.
- CRM integration for managing client data.
- Support for 3PL workflows and client-specific configurations.

Security:

- Encrypt sensitive client and inventory information.

User Interface:

- Modern, luxurious design with a dark color scheme.

5. Timeline

The target timeline for project completion is TBD months from the project initiation date.

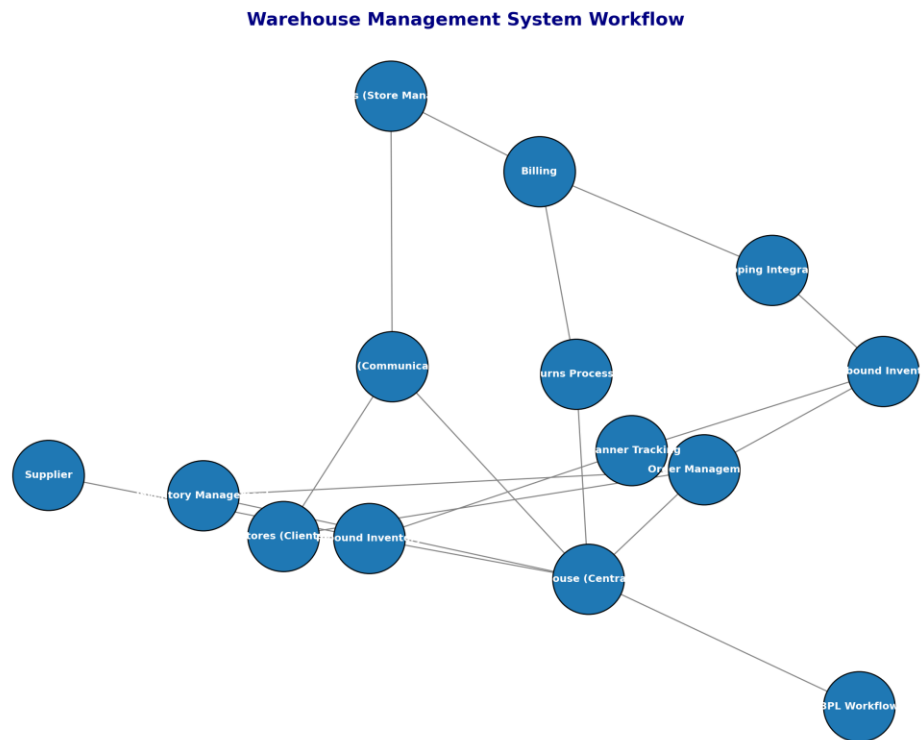
6. Budget

The estimated budget for this project is TBD. This includes design, development, testing, and initial training for employees.

7. Deliverables

- Fully functional, QA-tested, and bug-free Warehouse Management System with specified features.
- Integration with Amazon and USPS APIs.
- SaaS platform deployment.
- Training sessions for warehouse and overseas employees.
- Minimum 3 months of support for system maintenance and updates.
- Detailed documentation for system maintenance and usage.

Workflow Diagram



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