

Group 10



NISACO Furniture

**PROCESS RE-ENGINEERING
& KEY INSIGHTS**

IS-2114 - Business Process Re-engineering



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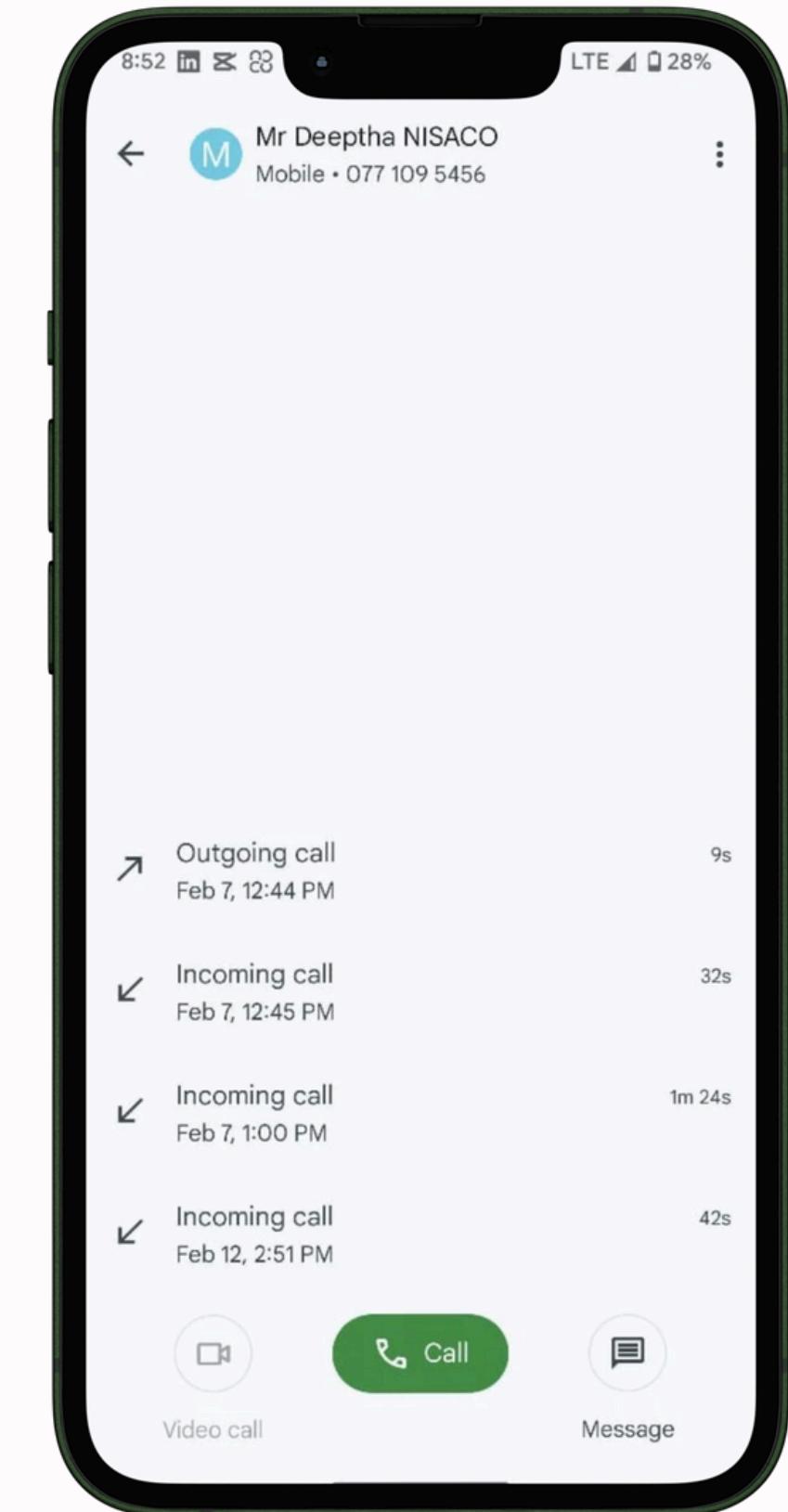


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EVIDENCE FOR PROCESS DISCOVERY

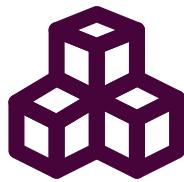


Company profile

Nisaco Furniture, founded in 1997, is a trusted provider of high-quality furniture and household equipment made from wood, metal, plastics, marble, glass, and fabrics. Offering both office and home furnishings, Nisaco ensures durability and aesthetic appeal. Beyond furniture, the company sells and rents scaffolding for construction projects. With six showrooms across Colombo and Nisaco Mall as its lifestyle hub, Nisaco remains a market leader, delivering stylish, practical, and long-lasting solutions.



EXISTING BUSINESS PROCESSES



Manufacturing

Nisaco manufactures steel furniture, ensuring quality through strict checks and a centralized tracking system for finished products.



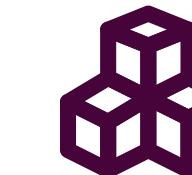
Warehouse

Nisaco ensures accurate inventory management, enabling efficient stock control for smooth production and timely deliveries.



Sales

Sales representatives handle inquiries, pricing, and orders, which are processed, manufactured, packed, dispatched, and supported post-sale.



Marketing

Nisaco markets its products via TV ads, leaflets, and government tenders to reach a broad audience.



Procurement

Nisaco collaborates with 200 suppliers and manages 3,000 items, ensuring a steady supply of materials for production.

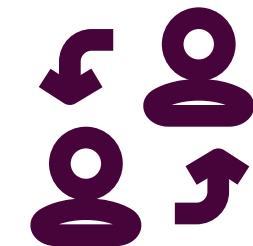
SELECTED BUSINESS PROCESSES

Manufacturing



Nisaco produces steel furniture through cutting, shaping, and welding. Quality inspections ensure durability before assembly, storage, and integration of externally sourced components.

Sales



Customers engage with sales representatives for inquiries, pricing, and orders. Confirmed orders are processed, manufactured, packed, and dispatched, with post-sale support available.

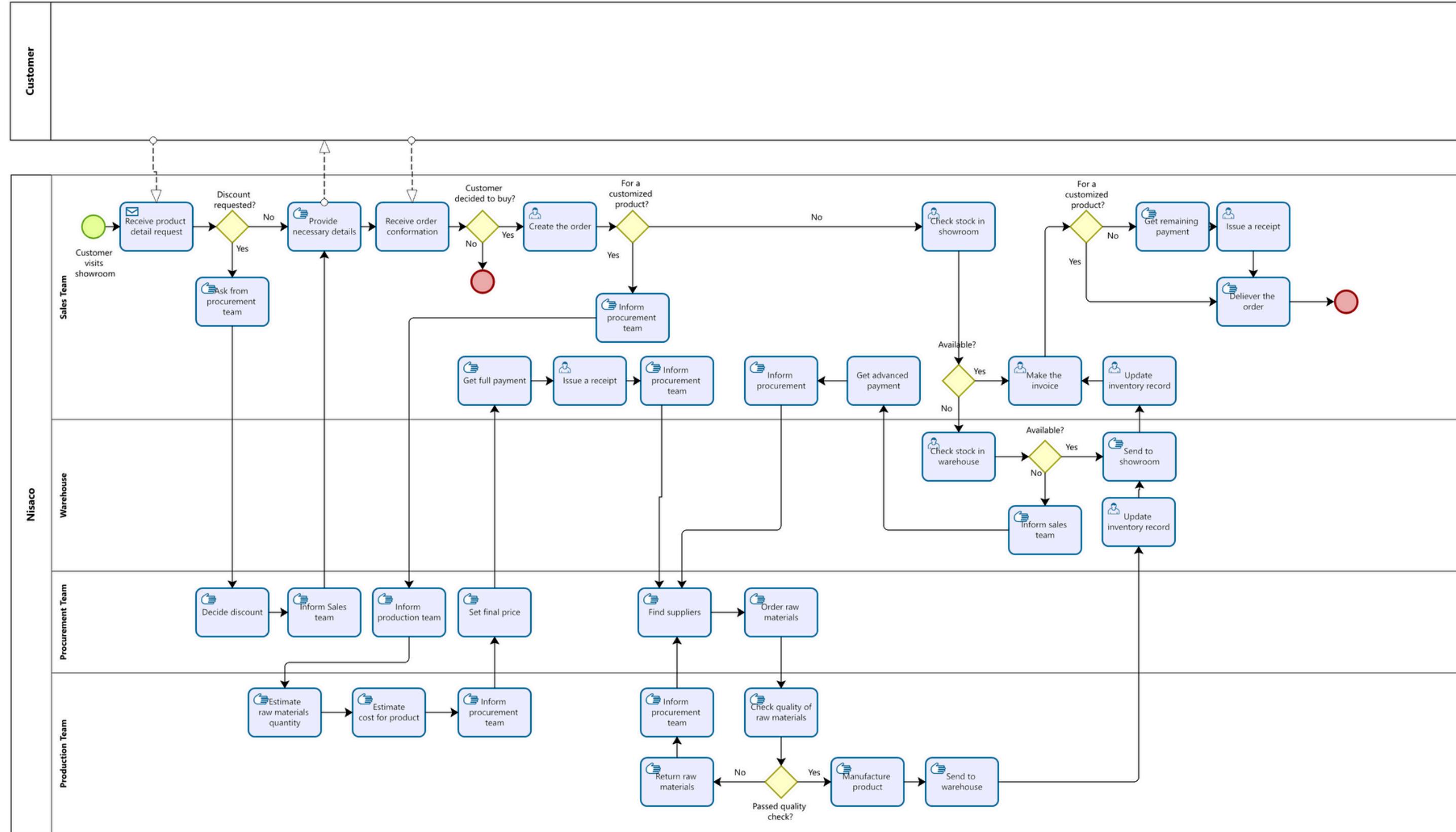
Warehouse



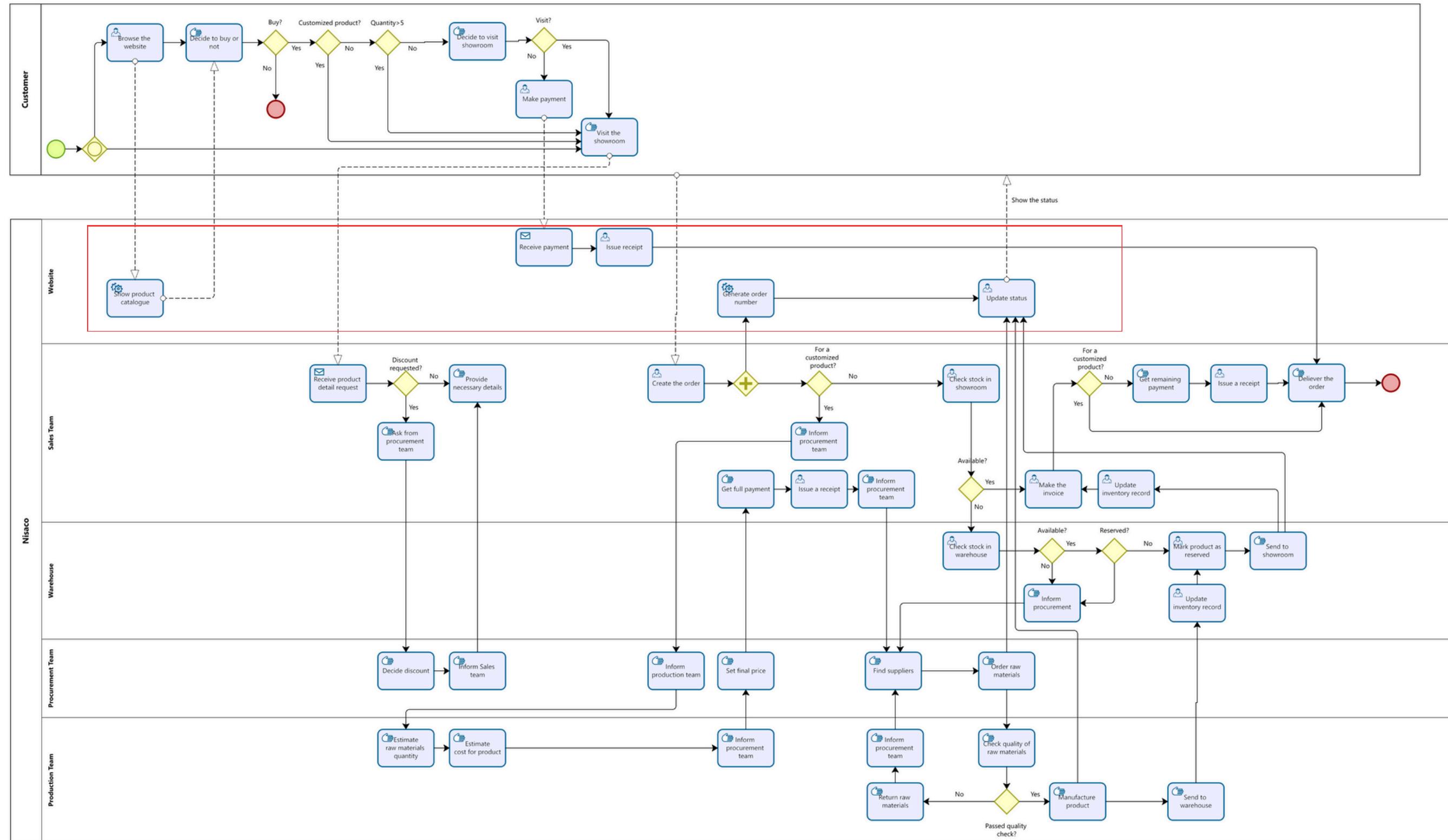
Nisaco tracks finished products while raw materials are recorded manually. Employees check records to locate materials needed for manufacturing and restocking.

SALES PROCESS

AS-IS DIAGRAM



TO-BE DIAGRAM



Improvements Achieved by the Process Redesign

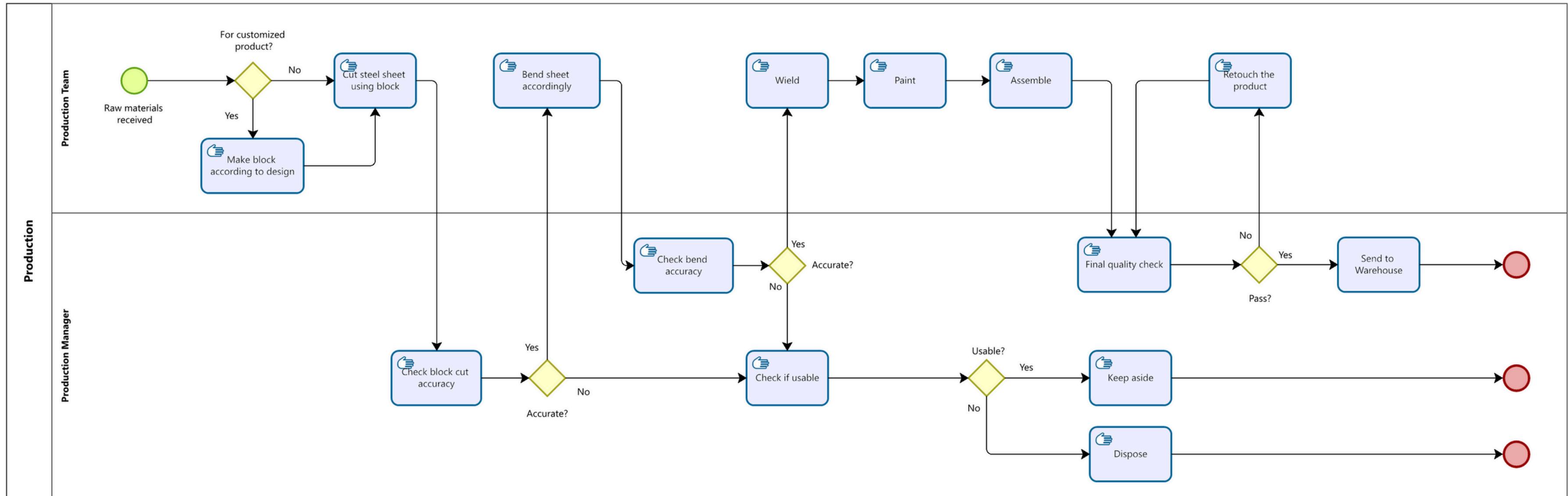
- **Online Shopping Option** – Customers can now browse and purchase products online, reducing showroom dependency.
- **Automated Order Processing** – Order numbers are generated automatically, improving tracking and efficiency.
- **Real-Time Order Status Updates** – Customers can track their orders, reducing manual inquiries.
- **Stock Reservation System** – Prevents overselling by allowing customers to reserve available products.

Possible Changes to Organization Due to the Redesign

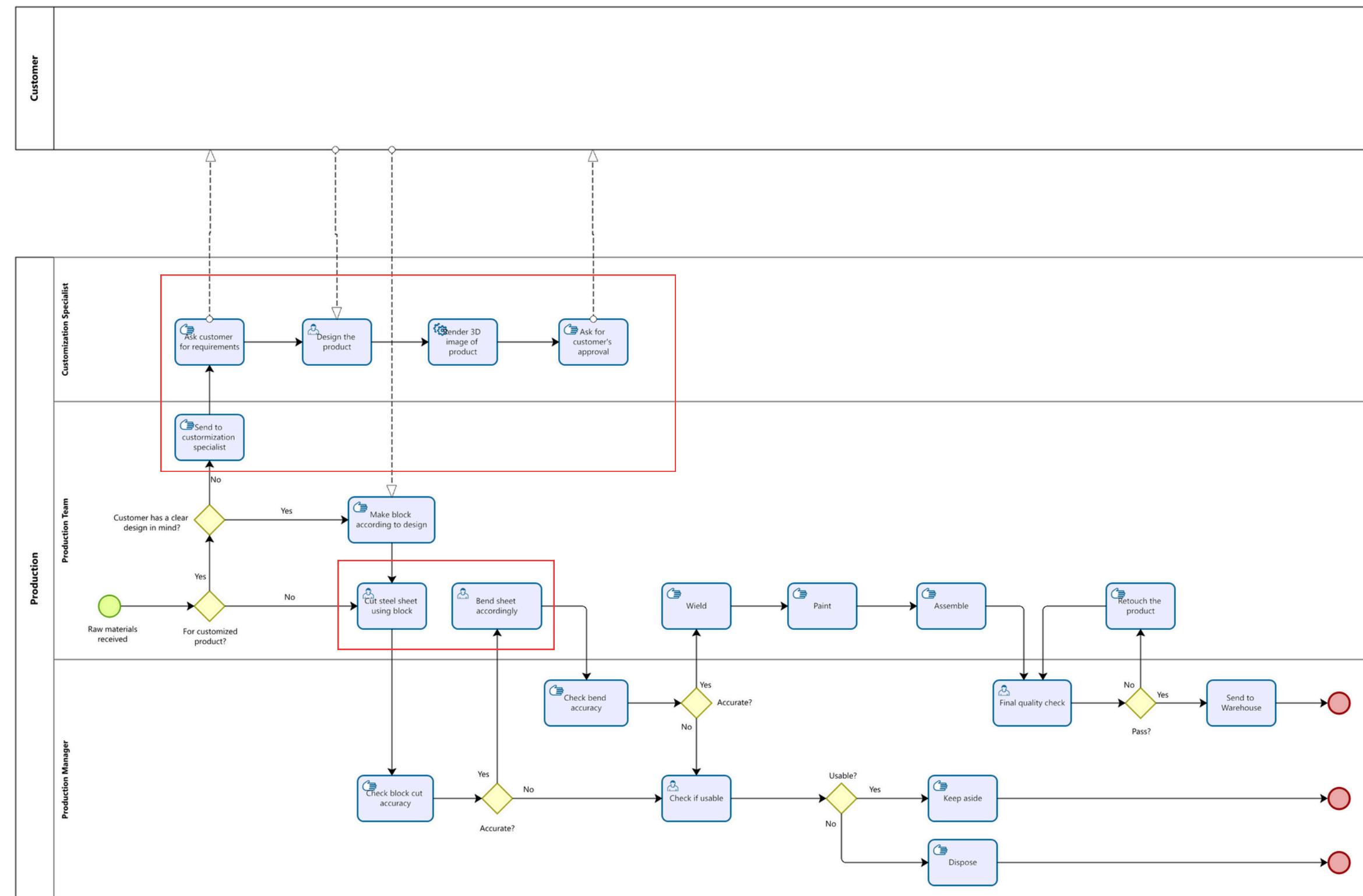
- **Digital System Implementation** – Adoption of ERP or inventory management software for automation and real-time tracking.
- **Process Automation** – Reduction in manual tasks, leading to faster order processing and procurement.
- **Workforce Role Adjustments** – Shift from administrative work to data-driven decision-making and strategic roles.
- **Improved Inventory Management** – Better coordination between sales, warehouse, and procurement teams for stock updates and reservations.
- **Enhanced Customer Experience** – Faster order fulfillment, accurate stock availability, and improved service efficiency.

MANUFACTURING PROCESS

AS-IS DIAGRAM



TO-BE DIAGRAM



Improvements Achieved by the Process Redesign

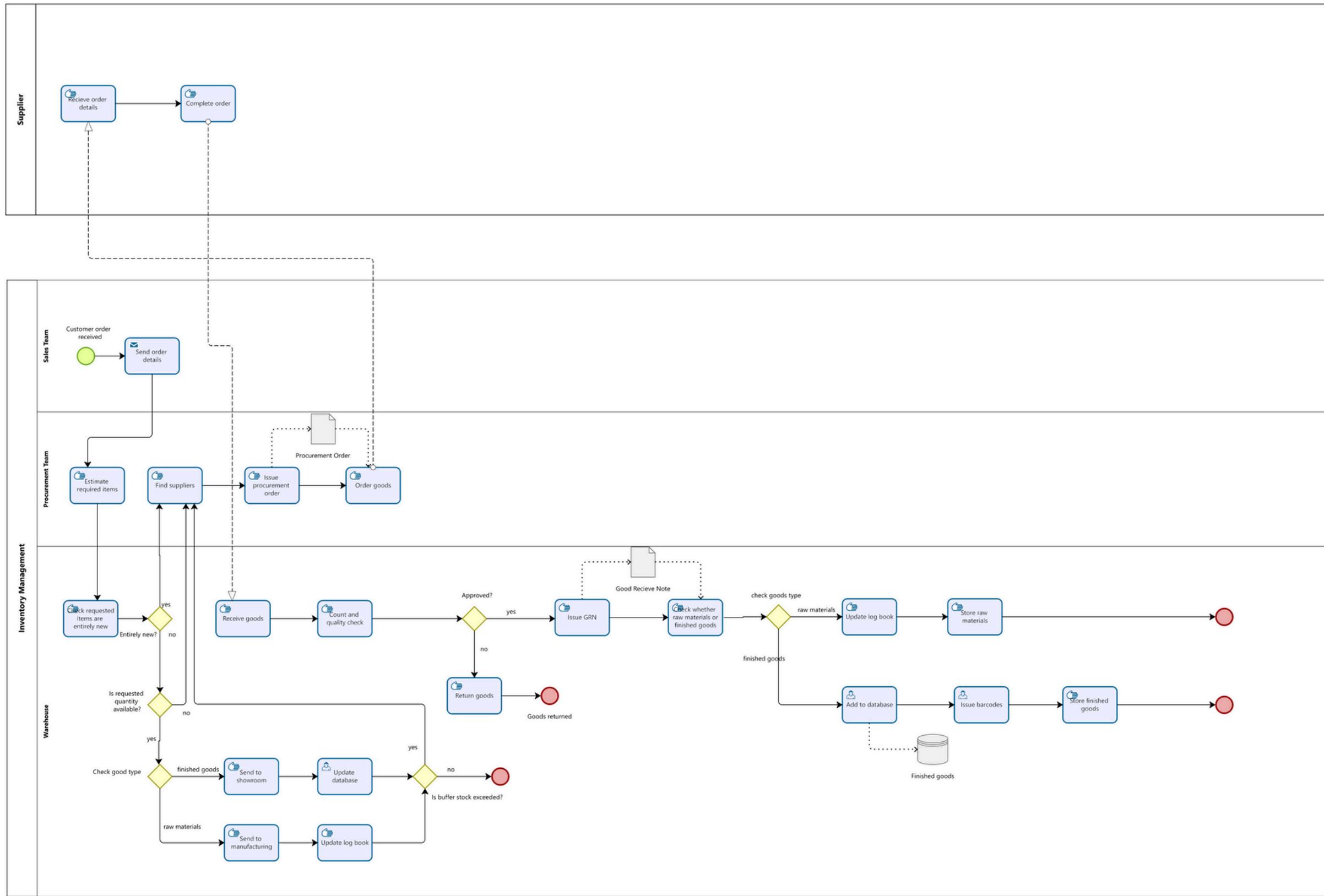
- **Customization Specialist Role** - A dedicated Customization Specialist designs products and creates 3D images, ensuring accuracy.
- **Front-Loaded Design Validation:** The 3D image is presented early for customer validation before production begins.
- **Laser Cutting Implementation:** Replacing manual steel sheet cutting with laser cutting for increased precision and efficiency.
- **Clear Customization Decisions:** The "To-Be" diagram includes a decision point: "Customer has a clear design in mind?"

Possible Changes to Organization Due to the Redesign

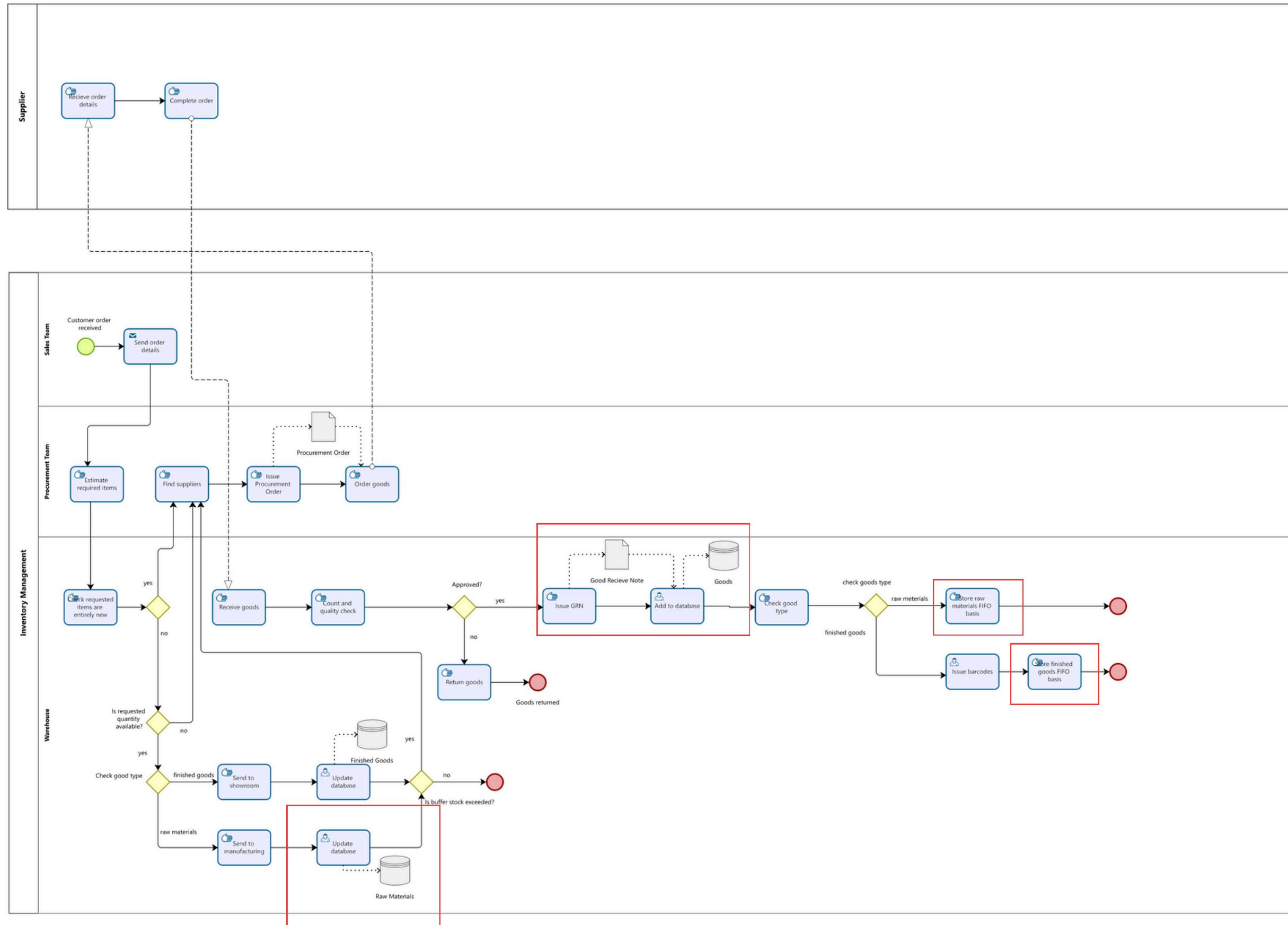
- **New Role Creation** – Introduction of the Customization Specialist role to oversee product customization and 3D design validation.
- **Workflow Adjustment** – Earlier customer involvement in design validation, requiring changes in communication and approval processes.
- **Technology Adoption** – Implementation of laser cutting technology, leading to new equipment procurement, training, and integration into production.
- **Skillset Shift** – Need for employees skilled in 3D modeling, laser cutting operations, and customer collaboration.
- **Reduced Manual Labor** – Possible restructuring of teams handling manual steel cutting, with retraining or reassignment.
- **Quality Control Enhancements** – New checkpoints in the process to ensure 3D design accuracy before production.

WAREHOUSE PROCESS

AS-IS DIAGRAM



TO-BE DIAGRAM



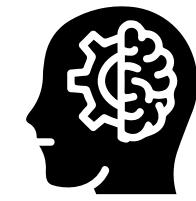
Improvements Achieved by the Process Redesign

- **Accurate Inventory Tracking** – Raw materials are systematically recorded in a database, reducing misplacements and stock discrepancies.
- **Enhanced Production Efficiency** – Automated stock retrieval and FIFO implementation streamline material access, minimizing delays and disruptions.
- **Better Quality Control** – FIFO ensures timely usage of materials, reducing waste and preventing expired or degraded raw materials from affecting production.
- **Cost Reduction** – Eliminating manual errors, overstocking, and spoilage lowers operational costs and improves resource utilization.
- **Automated Buffer Stock Management** – The system calculates buffer stock automatically, ensuring timely restocking and preventing shortages.

Possible Changes to Organization Due to the Redesign

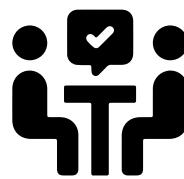
- **Digitized Inventory Management** – Transition from manual record-keeping to a centralized database for real-time tracking of raw materials.
- **Optimized Warehouse Operations** – Implementation of FIFO streamlines stock movement, reducing waste and improving storage efficiency.
- **Improved Workforce Productivity** – Employees spend less time on manual inventory checks, allowing them to focus on higher-value tasks.
- **Enhance Decision-Making** – Automated stock monitoring enables better forecasting, procurement planning, and resource allocation.
- **Enhanced Manufacturing Workflow** – Timely material availability minimizes production disruptions, leading to a more efficient and reliable manufacturing process.

LEARNING OUTCOMES



Understanding BPR Principles

Learn the core principles of Business Process Reengineering, which helps in optimizing business processes to achieve efficiency and effectiveness.



Process Mapping and Analysis

Gain the ability to analyze current processes ("As-Is") and design improved future processes ("To-Be") for better productivity and reduced waste.



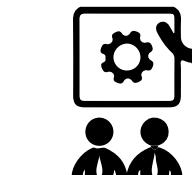
Efficiency and Cost Reduction

Master techniques for streamlining operations, eliminating non-value-added activities, and reducing costs, leading to more efficient workflows.



Technology Integration

Understand how adopting new technologies like automation and advanced machinery (e.g., laser cutting) enhances precision, speed, and cost savings.



Organizational Change Management

Learn how to manage and guide employees through the changes that come with BPR, ensuring smooth transitions and minimizing resistance.

THANK YOU