Part 1: Analyzing the Current Inventory Management System

Project Worksheet Template

Note: *Do your best to complete this template using the information from the case study. At the end of this reading, you'll receive a detailed Part 1 solution document completed by a Systems Analyst. Compare your version with the provided solution to assess your understanding and performance.*

[1] Project scope

(Provide a clear and detailed project scope that outlines project boundaries, deliverables, and exclusions.)

The purpose of this project is to analyze the current manual inventory management system of an eco-friendly clothing store in San Francisco and identify inefficiencies that affect operational performance.
The project focuses on assessing the existing spreadsheet-based process, understanding stakeholder needs, and recommending improvements that will lead to the design of a scalable, cloud-based inventory management system.

In scope:

- Review of current inventory management processes and workflows
- Identification of key challenges and performance gaps
- Documentation of stakeholder roles, assumptions, and constraints
- Creation of context and data flow diagrams to visualize current-state processes

Out of scope:

- System implementation or coding activities
- Vendor selection or procurement process
- Staff training and post-implementation support

Deliverables:

- Completed Part 1 Worksheet
- Context Diagram and Level 1 DFD representing the current system
- Gap analysis report

[2] Stakeholders
(List all the stakeholders and describe their role.)

Juan Rodriguez (Store Owner)
Oversees all operations; initiator and sponsor of the project; decision-maker for technology adoption.

Sales Staff (3 employees)
Perform daily inventory updates, handle customer transactions, and report stock issues.

IT Vendor (External)
Provides technical support, software installation, and minimal staff training.

Customers
Purchase eco-friendly products; their satisfaction is affected by product availability and checkout efficiency.

Suppliers
Provide inventory stock and receive orders; depend on timely restocking requests.

[3] Assumptions
(Provide 3 clearly stated assumptions.)

- The current spreadsheet system is the only tool used for tracking inventory data.
- Staff members are familiar with basic computer operations but have limited technical expertise.
- The store's internet connection and existing desktop computer are sufficient to support a cloud-based solution.

[4] Constraints
(Provide 3 clearly stated project constraints.)

- The project budget is limited to **$2,500** for the first year.
- Implementation must be completed within **three months**.
- The new system must operate using **existing hardware** without requiring additional infrastructure.

[5] Stakeholder analysis *(Analyze all the stakeholders and populate all columns accurately.)*

Stakeholder	Role	Interest	Influence	Involvement
Juan Rodriguez	Owner / Project Sponsor	High – wants efficient operations and cost savings	High – final decision-maker	High – actively involved in planning and approval
Sales Staff	Daily Users	High – want easier inventory updates and less manual work	Medium – provide user feedback	High – use system daily
IT Vendor	External Technical Partner	Medium – responsible for setup and support	Medium – influences technical feasibility	Medium – engaged during implementation
Customers	End Users (Indirect)	High – expect product availability and faster checkout	Low – limited direct influence	Low – indirectly impacted

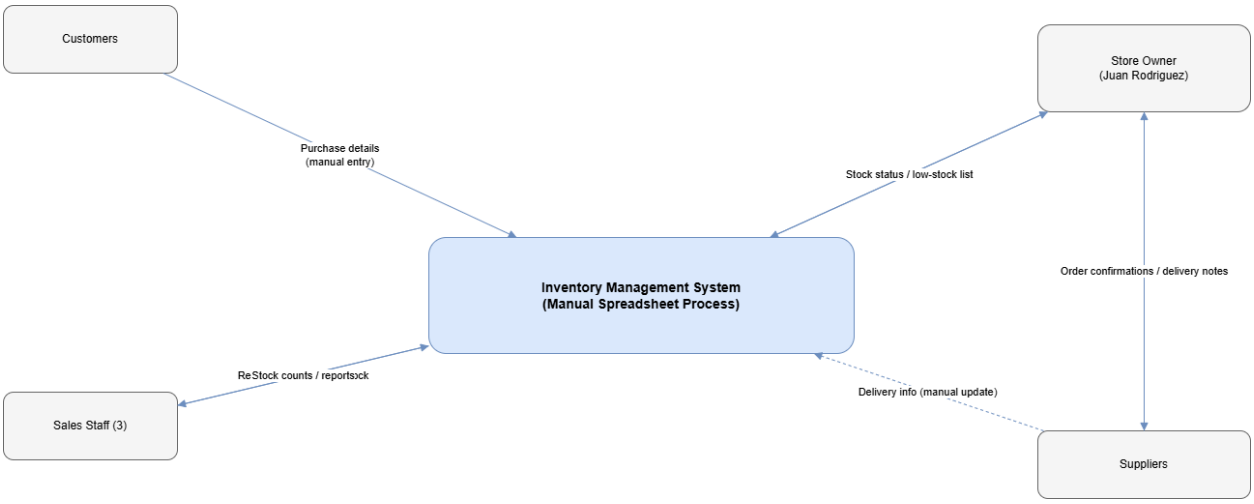
[6] Gap analysis *(Provide at least 4 requirements with all columns populated.)*

Current state	Desired future state	Gaps identified	Proposed solutions
Manual spreadsheet updates by staff	Automated, real-time inventory updates	High risk of human error and delays	Implement a cloud-based inventory management system

			with automated updates
No real-time stock visibility	Real-time tracking of inventory and sales	Inability to view stock levels instantly	Inability to view stock levels instantly
Inventory data stored locally	Centralized, cloud-based data storage	Risk of data loss or inaccessibility	Move all data to a secure cloud-based database accessible from any device
Frequent stockouts and overstocking	Optimized stock levels and alerts	No automated reorder or alert function	Configure low-stock notifications and reorder triggers

[7] Current state process flow diagram *(Create two fully detailed and clearly labeled future-state diagrams [Context Diagram and level 1 Data Flow Diagram (DFD)] using draw.io. Ensure to include all critical steps, decisions, and actors (entities), and show the end-to-end process accurately.)*

Context Diagram:



Level 1 Data Flow Diagram (DFD):