IMS

Business requirements doc

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By me
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1. Executive Summary

The purpose of this document is to define the business requirements for the development of an Inventory Management System (IMS). The system will streamline the process of managing stock, tracking inventory levels, and ensuring accurate and timely availability of products across multiple locations.

2. Business Objectives

- **Objective 1**: Enhance efficiency in managing and tracking inventory in perpetually.
- **Objective 2**: Reduce instances of stockouts and overstocking.
- **Objective 3**: Improve order processing, fulfillment, and tracking.
- **Objective 4**: Ensure accurate forecasting of inventory needs.
- **Objective 5**: Automate key processes to reduce manual efforts and errors.

3. Current State

The organization is currently managing inventory through manual processes or outdated systems, resulting in inefficiencies such as:

- Inconsistent inventory tracking.
- Delays in stock replenishment.
- A single data entry or formula error can lead to significant inaccuracies in the data output.
- Recording, updating, and reconciling inventory data manually can be inefficient.
- Errors in recording quantities, product codes, or locations can impact accuracy.
- The Manual systems does not provide real-time visibility into inventory levels.
- Can't easily share info across the company
- Limited reporting capabilities, leading to inaccurate forecasting.

4. Target State

The desired state is an automated Inventory Management System that offers:

- Perpetual inventory visibility in the business.
- Automated restocking and reorder points.
- Comprehensive reporting and analytics for forecasting.
- A user-friendly interface that reduces manual intervention.

5. Success Criteria

The project will be considered successful if:

- The system provides perpetual inventory management with a 95% accuracy rate.

- Stockout events are reduced by 40%.
- Inventory levels across are synchronized with no manual adjustments needed.
- The system reduces manual data entry efforts by 50%.
- Forecasting accuracy improves by 30%, reducing excess inventory by at least 20%.

6. Scope of Work

6.1 In-Scope

- Real-time tracking of inventory levels.
- Automated reordering of items when stock falls below threshold levels.
- Reporting and analytics (e.g., stock movement, stock age).
- User access control and role management.
- Integration with sales and purchasing systems.

6.2 Out-of-Scope

- Customer relationship management (CRM) system.
- Advanced machine learning forecasting.

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7. Major Business Requirements

Requirement ID	Description	Priority
MBR-1	The system must provide real-time visibility into inventory levels	**High**
MBR-2	The system must generate alerts when stock is below reorder levels.	**High**
MBR-3	The system must provide reporting on stock age, movement, and reorder points.	**Medium**
MBR-4	The system must be able to upload images of receipts and other necessary items	**High**
MBR-5	The system must provide audit logs for any inventory changes made by users.	**Medium**

Requirement ID	Description	Priority
MBR-6	The system must allow authorized users to adjust reorder points for items.	**Medium**
MBR-7	The system must allow integration with existing sales and purchasing systems to sync data.	low
MBR-8	The system must provide user access control and role-based permissions.	**High**
MBR-9	The system must provide automated stock transfers between warehouses based on predefined rules. If need be	**Low**
MBR-10	The system must allow custom report generation based on user-defined criteria.	**Low**

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8. Business Rules

- **BR-1**: Each inventory item must be assigned a unique SKU.
- **BR-2**: Reorder points for items will be predefined but adjustable by users with appropriate permissions.
- **BR-3**: Stock transfers between warehouses must be tracked and approved by a manager.
- **BR-4**: Only authorized users can add or modify inventory data.
- **BR-5**: Stock that remains unsold for 90 days will automatically be flagged for review.
- **BR**-6: All orders are made out of this system. This system allows only order recording

9. RAID (Risks, Assumptions, Issues, Dependencies)

9.1 Risks

Risk	Description	Mitigation Strategy
Data Loss	Potential data loss during migration from the current system.	Perform regular backups and implement a validation process post-migration.

Risk	Description	Mitigation Strategy
User Adoption	Users may resist adopting the new system.	Provide comprehensive training and post-launch support.

9.2 Assumptions

- The system will integrate with existing sales and purchasing systems.
- Data quality from the current system will be sufficient for migration.

9.3 Issues

- Limited IT resources may cause delays in implementation.
- Integration with external systems may require additional customization.

9.4 Dependencies

- The system relies on accurate data from sales and purchasing systems for inventory reconciliation.
- Integration with third-party logistics systems may affect real-time tracking.

10. Functional Requirements

10.1 Inventory Management

- **FR-1**: The system shall allow users to add, update, and delete items from the inventory.
- **FR-2**: The system shall track inventory levels in real-time.
- **FR-3**: The system shall categorize inventory by item type, location, and status (e.g., available, on-hold).
- **FR-4**: The system shall automatically flag items when stock levels fall below reorder points.

10.2 Warehouse and Location Management

- **FR-5**: The system shall support multiple warehouses or storage locations.
- **FR-6**: The system shall track the movement of inventory between locations.

10.3 Ordering and Restocking

- **FR-7**: The system shall generate automated purchase orders when stock falls below predefined levels.
- **FR-8**: The system shall allow manual entry and management of purchase orders.

10.4 Reporting and Analytics

- **FR-9**: The system shall generate reports on stock levels, stock age, reorder needs, and other key performance indicators.
- **FR-10**: The system shall allow custom report generation based on user-defined criteria.

10.5 User Access and Security

- **FR-11**: The system shall provide role-based access control, with permissions for viewing, editing, and managing inventory.
- **FR-12**: The system shall provide audit logs of all user actions.

11. Non-Functional Requirements

11.1 Performance

- The system shall handle up to [X] concurrent users without degradation in performance.
- The system shall process transactions within [Y] seconds.

11.2 Scalability

- The system shall scale to accommodate future growth in the number of inventory items and locations.

11.3 Security

- The system shall comply with [Security Standard] to protect sensitive business data.

12. Project Schedule

Milestone	Description	Date
Project Kickoff	Initial project meeting with stakeholders.	[Date]
Requirement Gathering	Complete gathering of functional and technical requirements.	[Date]
Development Start	Begin development of core modules.	[Date]
Testing Phase	Begin user acceptance testing (UAT).	[Date]
Go-Live	System deployment and go-live.	[Date]

13. Budgeting

Budget Item	Cost Estimate	Notes
Software Development	50,000	Includes design, development, and testing.
Hardware/Infrastructure	5000	Additional servers, hardware upgrades, etc.
Licensing	N/A	Licensing for any required third-party tools.
Training	N/A	User training costs.
Contingency	5000	Buffer for unforeseen expenses.

14. Approval

Name	Title	Signature	Date
[Stakeholder 1]	Sponsor		
[Stakeholder 2]	Project Manager		

15. Project Constraints

Constraint	Description
Time	The project must be completed within 2 months due to business urgency and planned launch schedules.
Budget	The project budget is limited to [Insert Amount], and all features must be delivered within this cost.
Resources	Limited availability of IT and development staff may impact project timelines.
Technology	The system must be compatible with existing hardware and third-party systems, including [sales system], [purchasing system], and [logistics system].
Regulations	The system must comply with [applicable regulations or industry standards] to ensure data security and operational legality.