

Requirements, Scope & NFRs (IIBA / BABOK-style)

Project: Retail Operations Backoffice (Hệ thống quản lý bán hàng) — Multi-branch (nhiều chi nhánh)

Source docs: UC Descriptions (DOCX, Vietnamese — “VI source”) + module diagrams (UC / Sequence / Activity)

Version: 0.1 (English-first)

Owner: Business Analyst

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1) Purpose

Define a clear, testable set of requirements and boundaries for the system, in a recruiter-friendly BABOK/IIBA documentation style.

2) Business context

A multi-branch retail organization needs a backoffice system to standardize:

- Sales processing, pricing and promotions
- Inventory movements across branches (receiving, stocktake, transfers, write-off)
- Cashbook recording and daily reconciliation
- Role-based access control and governance
- Summary reporting for branch managers and HQ operations

3) Stakeholders (summary)

Primary user roles (aligned to VI source actors):

- Cashier (Nhân viên bán hàng)
- Inventory staff (Nhân viên kho)
- Warehouse staff (Thủ kho)

- Branch manager (Quản lý chi nhánh)
- Cashbook clerk (Sổ quỹ / Kế toán cửa hàng)
- System admin (Quản trị hệ thống)
- HQ operations (Quản lý vận hành)

4) Goals & success criteria

4.1 Goals

- G1: Reduce errors and fraud risk via approvals, reason codes, audit logs.
- G2: Improve inventory accuracy per branch through structured stocktake + adjustments.
- G3: Make transfers trackable end-to-end (dispatch → receive) with discrepancy handling.
- G4: Enable consistent promotions with deterministic conflict resolution.
- G5: Provide branch and HQ reporting for operational visibility.

4.2 Success criteria (examples)

- SC1: 100% inventory movements are traceable to branch, user, timestamp.
- SC2: Transfers cannot be “lost”: every dispatch has a receiving outcome.
- SC3: Promotions applied at POS are explainable (why selected).

5) Scope

5.1 In scope modules (traceable to VI source UC DOCX)

- Sales — Bán hàng
- Receiving — Nhập hàng
- Stocktake — Kiểm kho
- Inter-branch transfer — Chuyển hàng
- Receive transfer — Nhận hàng từ chi nhánh khác
- Return to supplier — Trả hàng nhập
- Write-off — Xuất hủy
- Product catalog — Quản lý hàng hóa
- Promotions — Quản lý khuyến mại
- User accounts — Quản lý tài khoản người dùng
- Staff management — Quản lý nhân viên
- Branch management — Quản lý chi nhánh
- Cashbook — Sổ quỹ
- Reporting — Thống kê tổng quan

5.2 Out of scope

- Accounting integration (ERP), e-invoice, payment gateway integration
- Supplier EDI and automated procurement workflows
- Advanced analytics/BI data warehouse

6) Assumptions & constraints

6.1 Assumptions

- A1: Each transaction belongs to one branch.
- A2: A user is assigned to one or more branches and one role.
- A3: Certain high-risk actions require branch manager approval.

6.2 Constraints

- C1: Must support Vietnamese labels and local workflows (course artifacts are Vietnamese).
- C2: Must support multi-branch reporting and role separation (Branch vs HQ).

7) Functional requirements (FR)

Format: FR-ID, statement, priority, rationale, acceptance notes.

7.1 Sales (Bán hàng)

FR ID	Requirement	Priority	Acceptance notes
FR-SALES-001	The system shall create a sales invoice with branch, cashier, timestamp, line items, totals, and payment method.	High	Invoice is uniquely identifiable and auditable.
FR-SALES-002	The system shall apply eligible promotions to a basket and record which promotion(s) were applied.	High	Receipt/audit shows “why applied”.
FR-SALES-003	The system shall support	High	Return requires reason code; manager

	cancellation/return flows according to permissions and policy.		approval if configured.
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7.2 Promotions (Quản lý khuyến mại)

FR ID	Requirement	Priority	Acceptance notes
FR-PROMO-001	The system shall create and maintain promotions with date range, branch scope, and product scope.	High	Validation prevents invalid date ranges.
FR-PROMO-002	The system shall resolve promotion conflicts deterministically (e.g., priority then tie-break).	High	Same inputs produce same result.

7.3 Inventory & stock movements

FR ID	Requirement	Priority	Acceptance notes
FR-INV-001	The system shall record receiving (Nhập hàng) to increase stock at a branch.	High	Receiving requires supplier reference or reason.
FR-INV-002	The system shall support stocktake sessions and capture counted quantities per SKU.	High	Stocktake has lifecycle: Draft → Submitted → Approved.
FR-INV-003	The system shall support stock adjustments after stocktake with reason codes and approval.	High	Adjustment is linked to a stocktake session.
FR-INV-004	The system shall record write-off (Xuất hủy) with reason codes and approvals per policy.	High	Audit log required.

7.4 Inter-branch transfer

FR ID	Requirement	Priority	Acceptance notes
FR-TRF-001	The system shall create a transfer order from source branch to destination branch with items and quantities.	High	Transfer ID is unique.
FR-TRF-002	The system shall support dispatch at source branch and decrease stock accordingly.	High	Dispatch recorded with user + timestamp.
FR-TRF-003	The system shall support receiving at destination branch and increase stock accordingly.	High	Receiving confirms quantities.
FR-TRF-004	The system shall capture discrepancies (short/over/damaged) and require approval per policy.	Medium	Discrepancy record created.

7.5 Administration (accounts, staff, branches)

FR ID	Requirement	Priority	Acceptance notes
FR-ADM-001	The system shall manage user accounts and assign roles/permissions.	High	Least-privilege defaults.
FR-ADM-002	The system shall manage staff records and link them to user accounts (if applicable).	Medium	Staff status = active/inactive.
FR-ADM-003	The system shall manage branches and branch configuration for multi-branch operations.	High	Branch code is unique.

7.6 Cashbook & reporting

FR ID	Requirement	Priority	Acceptance notes
FR-CASH-001	The system shall	High	Balanced/Short/Over

	record cashbook entries and reconcile end-of-day cash status.		captured with reason.
FR-REP-001	The system shall provide summary reporting for sales, inventory, and cash by branch and date.	Medium	Filters include branch/date range.

8) Non-functional requirements (NFR)

NFR ID	Category	Requirement
NFR-001	Usability	POS flows must support fast operation: common sale flow ≤ 5 primary steps on-screen.
NFR-002	Auditability	All critical actions (adjustment, write-off, promotion change, permission change) must have audit logs: who/what/when/before-after.
NFR-003	Security	Enforce role-based access control; approvals must be attributable to a user.
NFR-004	Availability	System should be available during store operating hours; graceful handling for network issues.
NFR-005	Performance	Sale invoice creation should complete within an acceptable response time for busy periods.
NFR-006	Data integrity	Branch stock cannot be corrupted by partial updates (transactions must be consistent).

9) Glossary / Terminology mapping

Vietnamese (VI source)	English (used in this doc)
Chi nhánh	Branch

Bán hàng	Sales
Kiểm kho	Stocktake
Chuyển hàng	Inter-branch transfer
Nhập hàng	Receiving
Xuất hủy	Write-off
Sổ quỹ	Cashbook
Khuyến mại	Promotions

Abbreviations:

- FR = Functional Requirement
- NFR = Non-functional Requirement
- HQ = Headquarter