

IDEATION PHASE – DOCUMENT 3: EMPATHY MAP CANVAS

Field	Details
Date	05 November 2025
Team ID	NM2025TMID07730
Project Name	Medical Inventory Management System
Maximum Marks	4 Marks

Title: Empathy Mapping for “Medical Inventory Management System”

1. Objective

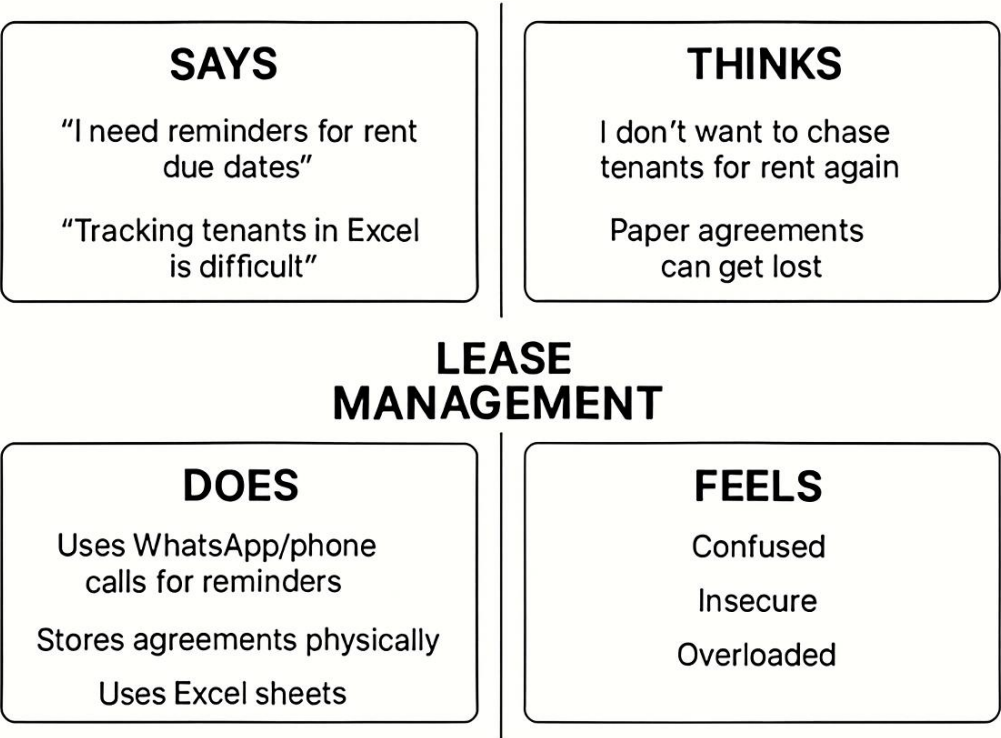
The goal of this empathy mapping phase is to understand the emotions, motivations, and challenges of every stakeholder involved in the Medical Inventory Management System including store staff, purchase officers, doctors, nurses, and administrators. By mapping what each user Says, Thinks, Does, and Feels, we can design a human-centered inventory solution that solves real operational problems instead of just tracking stock numbers.

2. Stakeholders Identified

The empathy map focuses on four key user personas in the Medical Inventory Management System:

Persona	Role	Goal	Pain Points
Store Staff / Inventory Clerk	Maintains daily stock records	Ensure medicines and supplies are always available	Manual entries, expiry confusion, lack of real-time stock view
Purchase Officer / Inventory Manager	Manages procurement and vendor relations	Track purchase orders, approvals, and receipts efficiently	No alert for reorder, missing PO follow-up, manual status tracking
Doctor / Nurse / Department Head	Consumes inventory items	Get timely access to medicines and equipment	Shortage of critical items, manual request delays
Administrator / Finance Officer	Oversees budget, compliance, and audit	Ensure accountability and transparency in inventory usage	Missing bills, poor reporting, hard-to-trace consumption history

EMPATHY MAP



3. Empathy Map Canvas Layout

Below is the empathy mapping framework applied to all four personas.

Quadrant	Description	Key Insights
SAYS	What users express verbally during interaction or feedback sessions	“We run out of gloves frequently.” / “I don’t know stock levels until I check manually.”
THINKS	What users think but may not express openly	“We need alerts before items expire.” / “I wish reordering was automatic.”
DOES	Actions or behaviors users perform	Keeps handwritten logs, calls vendors manually, updates Excel sheets post-usage
FEELS	Emotional state, frustrations, and aspirations	Staff feel stressed during shortages; managers feel pressure to justify stock; admins worry about audit failures

4. Empathy Map Analysis

Key observations:

- Emotional Connection:
Storekeepers and doctors both feel anxious when medical stock runs out or expires unexpectedly.

- **Behavioral Pattern:**

Most processes depend on manual records, phone updates, and spreadsheets.

- **Cognitive Gap:**

Stakeholders know automation tools exist but find them complex or inaccessible.

- **Pain Point Highlight:**

Admins struggle with real-time tracking, reorder planning, and compliance documentation.

5. Insights Derived

From the empathy mapping exercise, five actionable insights were identified:

1. **Automation reduces workload** – Users need automatic reorder and expiry alerts.
2. **Transparency builds trust** – Everyone should see live stock status and PO history.
3. **Centralization improves efficiency** – One dashboard for PO, GRN, and stock levels.
4. **Digital documentation reduces risk** – GRNs, POs, and batch details must be stored digitally.
5. **Alerts = peace of mind** – Automated reminders minimize errors and shortages.

6. Design Implications for Lease Management

Insight	Design Decision
Frequent stockouts	Add automated low-stock and reorder alert system
Expired item usage	Enable batch-wise expiry tracking and validation rules
High manual workload	Use Flows for PO creation, GRN entry, and Issue logging
Poor visibility	Create dashboards showing stock status, expiry, and consumption trends
Compliance and audit risk	Maintain digital logs and field history tracking

7. Empathy Map Canvas Summary

The empathy map revealed that the success of a Medical Inventory Management System depends not only on recording inventory data, but on reducing stress, increasing clarity, and ensuring accountability across all hospital departments.

A well-designed system will:

- Automate reorders, GRN, and expiry alerts
- Provide real-time visibility into item stock and movement
- Reduce manual dependency for staff
- Enhance collaboration between departments and purchasing
- Ensure compliance and audit readiness
- In short, empathy mapping transformed the Medical Inventory Management project from a basic tracking system into a user-driven, reliable, and proactive solution that keeps healthcare operations running smoothly.