

Empathy Map Canvas

Ideation Phase: Empathize & Discover

Date	31 October 2025
Team ID	NM2025TMID06633
Project Name	Medical Inventory Management
Maximum Marks	4 Marks

Empathy Map Canvas: Medical Inventory System

In the Empathize & Discover phase, the team observed how hospital pharmacists, store managers, and suppliers handle medical inventory. Through observation and interviews, they identified challenges such as manual record-keeping, untracked expiry dates, and difficulty maintaining real-time stock visibility. Staff members often faced issues with overstocking or shortages due to the lack of proper alert systems. These challenges affected operational efficiency and patient safety.

Example: Hospital Pharmacy Scenario

In a hospital pharmacy, staff manage thousands of medicines daily. Manual updates often lead to mismatches between actual and recorded stock. During emergencies, finding the right medicines quickly becomes difficult. Automating this process using barcode scanning and cloud databases enables real-time updates, accurate tracking, and timely restocking.

Insights & Findings

User Type	Observed Problem	Suggested Improvement
Pharmacist	Manual entry errors and stock mismatches	Barcode-based entry system
Store Manager	Untracked expiry dates	Expiry alert notifications
Hospital Admin	Difficulty in real-time tracking	Cloud-based dashboard
Supplier	Delayed restock communication	Automated reorder alerts

Conclusion

By empathizing with pharmacists and healthcare staff, the team identified inefficiencies in medical inventory handling. Implementing an automated system with barcode scanning, expiry alerts, and real-time dashboards enhances hospital workflow, reduces waste, and improves patient safety. The proposed solution focuses on usability, automation, and operational efficiency.

References

1. [Mural Empathy Map Canvas Template](#)
2. [ScienceDirect: Medical Inventory Management](#)
3. [ResearchGate: Medical Inventory Management System Using Barcode](#)