**IDEATION PHASE**

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| --- | --- |
| Date | 29-05-2025 |
| Team ID | LTVIP2025TMID28829 |
| Project Name | Medical Inventory Management |
| Maximum Marks | 4 Marks |

**2.2 Empathy Map Canvas – Hospital Inventory Manager**

**Introduction**

To develop a meaningful and user-centric Medical Inventory Management System, it is essential to understand the experiences, challenges, and expectations of the key stakeholders involved. One of the most critical roles in this ecosystem is that of the **Hospital Inventory Manager**. This person is responsible for monitoring the flow of medical supplies, maintaining stock levels, coordinating with vendors, and ensuring that the hospital’s inventory operates smoothly and efficiently.

The **Empathy Map Canvas** is a valuable tool used in the design thinking process to visually articulate what a user **says, thinks, does, and feels**. It helps teams step into the shoes of the user and build solutions that align with real-world needs. This section presents the Empathy Map Canvas for the Hospital Inventory Manager based on observations, interviews, and scenario-based analysis.

**Empathy Map Canvas for Hospital Inventory Manager**

| **SAYS** | **THINKS** |
| --- | --- |
| “We’re always running out of key supplies at the wrong time.” | “I wish I had a system that alerts me in advance before we run out.” |
| “Tracking expiry dates manually is a nightmare.” | “If expired items are used accidentally, I could be held responsible.” |
| “Vendors delay delivery, and I have no way to monitor delays easily.” | “If the audit happens today, we’re not ready at all.” |
| “Doctors complain if even a single item is unavailable.” | “I need to justify every purchase but don’t always have the data.” |
| “It takes too long to get approval for restocking.” | “Why can’t we have an automated approval workflow for small items?” |

| **DOES** | **FEELS** |
| --- | --- |
| Maintains Excel sheets for stock, expiry, and reorder quantities. | Constantly under pressure to avoid errors. |
| Calls and emails vendors manually for quotes and delivery status. | Frustrated with repetitive manual tasks. |
| Cross-checks physical stock every week to match records. | Anxious about audits and compliance checks. |
| Prepares reorder lists and seeks approval from finance/management. | Feels undervalued despite critical responsibilities. |
| Works late during shortages to arrange emergency stock. | Worried about the impact of poor inventory on patient care. |

**Key Challenges Identified**

1. **Manual Stock Tracking**: Inventory managers often use spreadsheets or handwritten logs, which are prone to human error and difficult to update in real-time.
2. **No Expiry Date Alerts**: Expiry tracking is rarely automated, leading to the accumulation of expired drugs or last-minute disposal.
3. **Inefficient Procurement Process**: Approval chains are often lengthy and fragmented, causing delays in critical item replenishment.
4. **Vendor Coordination Gaps**: Follow-ups with suppliers happen over phone calls or email, and there’s no centralized system to track past orders, complaints, or performance.
5. **Audit Stress**: Due to decentralized and inconsistent records, audits are stressful and time-consuming.
6. **Reactive Planning**: Inventory managers operate in a reactive mode, responding to shortages rather than planning based on forecasts or data insights.

**Empathy Map Visualization**

A graphical version of the Empathy Map is typically structured in quadrants. Here's a breakdown you can use in your report as a visual (you may include a designed version):

+----------------+----------------+

| SAYS | THINKS |

|----------------|----------------|

| "We’re always | "What if I miss|

| short on stock"| an expiry date?"|

+----------------+----------------+

| DOES | FEELS |

|----------------|----------------|

| Checks stock | Stressed about |

| manually, | shortages, |

| emails vendors | audits |

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**Insights & Design Implications**

Based on the empathy map analysis, we extract actionable insights that will influence system design:

| **Insight** | **Design Implication** |
| --- | --- |
| The user needs **real-time visibility** of stock levels. | Design a dashboard that reflects live stock updates across categories and locations. |
| Expiry management is **manual and error-prone**. | Introduce expiry date alerts with automatic highlighting of nearing-expiry items. |
| The procurement process is **slow and inconsistent**. | Automate reorder requests and approvals using Salesforce Flows and Process Builder. |
| Vendor follow-up is **unorganized**. | Include a vendor module to log interactions, delivery SLAs, and past issues. |
| Audit preparation is **stressful**. | Maintain digital logs of inventory changes, user actions, and reorder history. |
| The user works **reactively** instead of proactively. | Enable forecasting tools based on historical usage data and future appointments. |

**Persona Summary: Hospital Inventory Manager**

| **Attribute** | **Description** |
| --- | --- |
| **Role** | Mid-level Hospital Staff, reports to Operations or Admin Manager |
| **Responsibilities** | Maintain stock, reorder supplies, handle vendor communication |
| **Pain Points** | Stockouts, manual data entry, expiry tracking, approval delays |
| **Goals** | Ensure no disruption in care due to missing inventory |
| **Technical Skill** | Intermediate – Can use spreadsheets and basic software tools |
| **Preferred Solution** | Cloud-based system with automation and alerts |

**Conclusion**

The Hospital Inventory Manager is a key player in ensuring the smooth operation of healthcare services. However, their challenges stem from a lack of digital tools and centralized systems, leaving them overworked and vulnerable to error. The insights from this empathy map will directly inform our system features, user flows, and interface design.

Our Salesforce-based solution aims to **empower inventory managers** with automation, real-time visibility, and smart alerts – transforming a reactive process into a proactive and predictive inventory system that supports the larger mission of healthcare delivery.