

Ideation Phase

Empathize & Discover

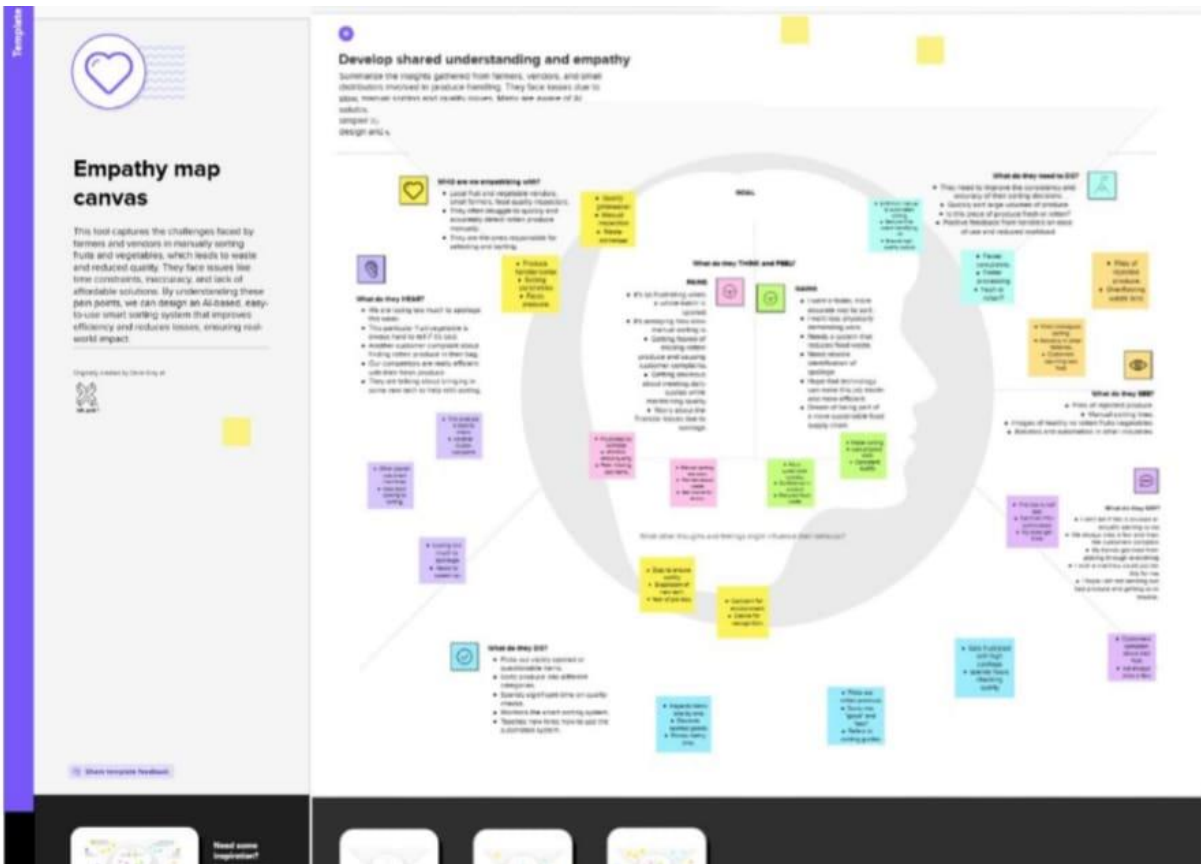
Date	24 June 2025
Team ID	LTVIP2025TMID58662
Project Name	Learnhub: Your Center For Skill Enhancement
Maximum Marks	4 Marks

Empathy Map Canvas:

The Empathy Map for the Smart Sorting project plays a crucial role in understanding the real users affected by the problem of detecting rotten fruits and vegetables. By mapping out what users think, feel, see, say, do, and experience, we gained insights that shaped the user-centered design of our system.

This project addresses the needs of three major user groups: workers in food processing plants, supermarket quality inspectors, and home users managing fresh produce. Each of these groups faces daily challenges with identifying spoilage accurately and efficiently, leading to food waste, customer dissatisfaction, or extra labor costs.

Example:



This Empathy Map captures the lived experiences, expectations, and pain points of these users who currently depend on manual produce inspection methods. It informs the development of an intelligent, AI-powered sorting system that leverages transfer learning to automatically detect spoilage across diverse environments.

At Learn Hub, our approach emphasizes not only technological competence but also human-centered design. Through empathy mapping, we discovered:

Factory workers often feel overwhelmed and under pressure to sort large quantities quickly, leading to errors and burnout.

Supermarket staff are worried about reputation and customer complaints due to missed rotten items.

Home users frequently forget produce in their refrigerators, resulting in unnecessary waste and feelings of guilt.

These groups consistently voiced the need for a reliable, automated solution that:

Reduces human error

Enhances operational efficiency

Offers real-time alerts and early spoilage detection

Delivers actionable insights to help reduce food waste

Whether on a factory floor, in a retail loading bay, or inside a smart home kitchen, the expectations were clear: accuracy, simplicity, and trustworthiness.

The findings from this empathy map directly influenced the architecture of our Smart Sorting system. By applying transfer learning to pre-trained deep learning models, we created a solution that not only detects rotten produce across industrial and domestic contexts, but also addresses emotional triggers such as stress, responsibility, and waste-related guilt—particularly prevalent in household settings.

Ultimately, the Empathy Map Canvas enabled us to step into our users' shoes, aligning our innovation with their real-world needs. At Learn Hub, we are committed to building solutions that are not only technically excellent but also genuinely empowering, supporting learners, professionals, and everyday users in their journey toward smarter, more sustainable systems.