Ideation Phase
Empathize & Discover

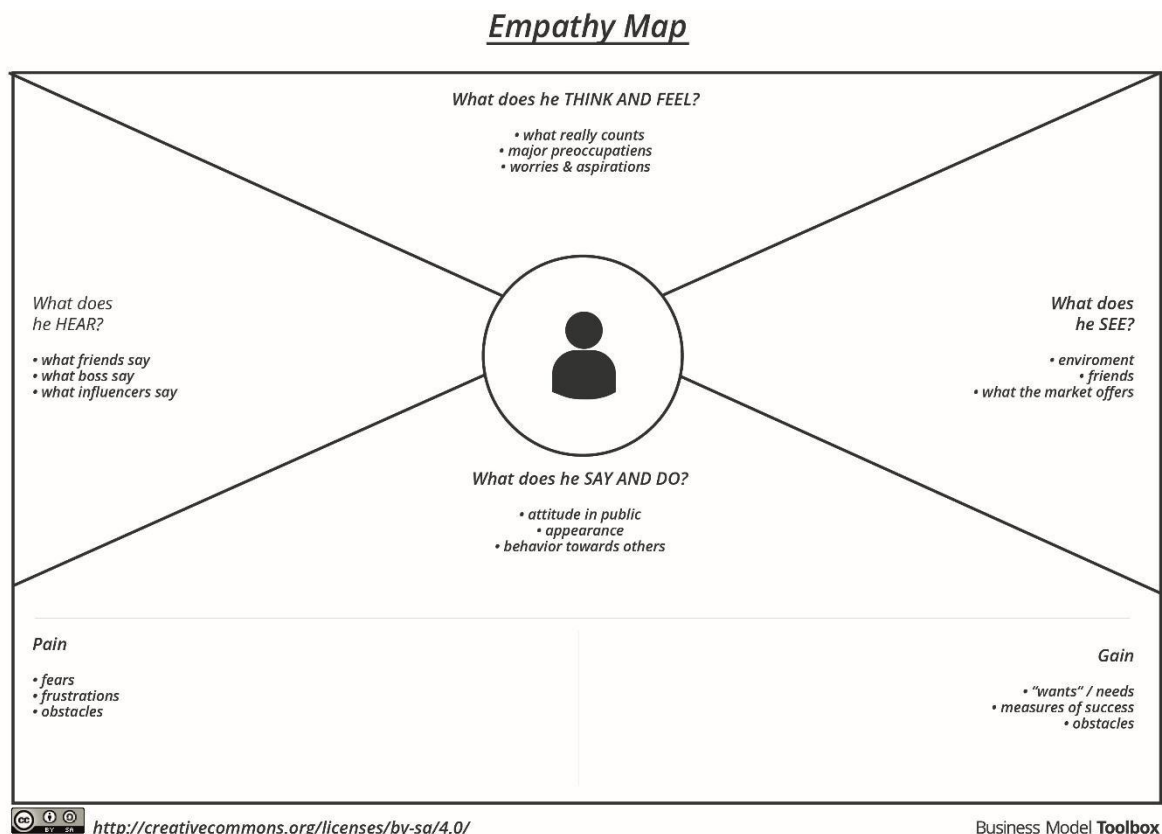| Date	02/02/2026
Team ID	LTVIP2026TMIDS83275
Project Name	Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy
Maximum Marks	4 Marks

Empathy Map Canvas:

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.

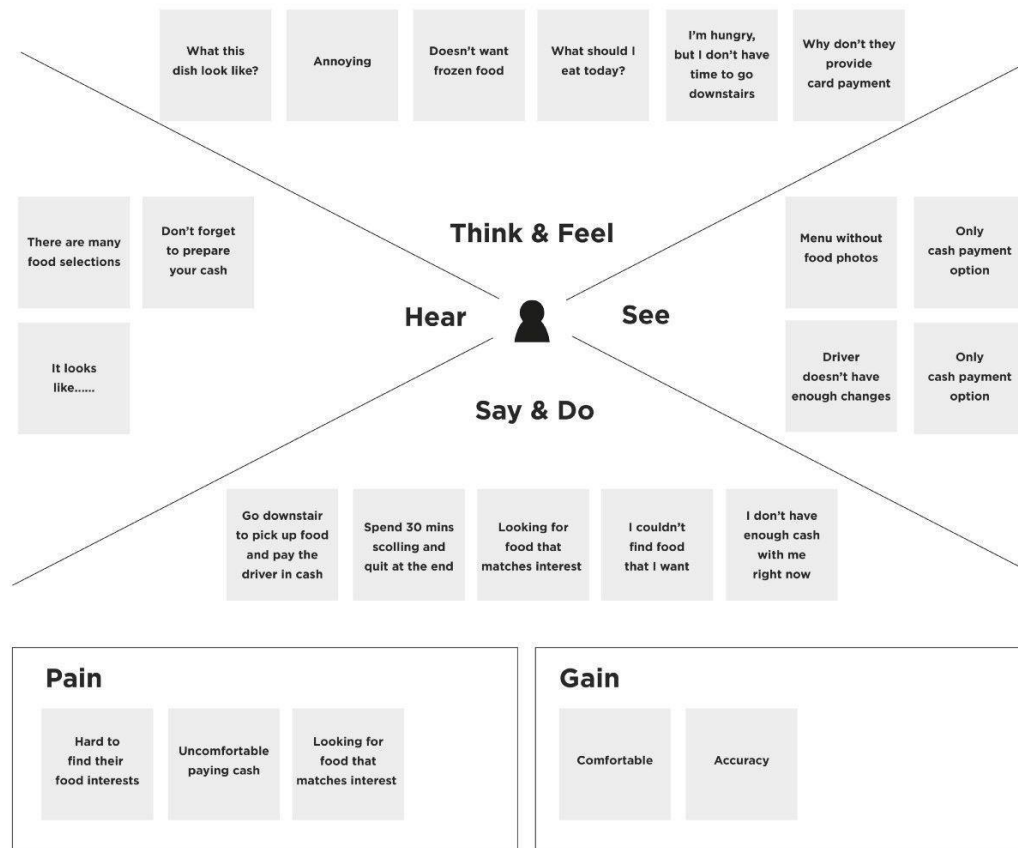It is a useful tool to helps teams better understand their users.
Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

Example:

Empathy Map

What does he THINK AND FEEL?
• what really counts
• major preoccupations
• worries & aspirations

What does he HEAR?
• what friends say
• what boss say
• what influencers say

What does he SEE?
• enviroment
• friends
• what the market offers

What does he SAY AND DO?
• attitude in public
• appearance
• behavior towards others

Pain
• fears
• frustrations
• obstacles

Gain
• "wants" / needs
• measures of success
• obstacles

Business Model **Toolbox**

Reference: https://www.mural.co/templates/empathy-map-canvas

Example: Food Ordering & Delivery Application

Think & Feel

- What this dish look like?
- Annoying
- Doesn't want frozen food
- What should I eat today?
- I'm hungry, but I don't have time to go downstairs
- Why don't they provide card payment

Hear

- There are many food selections
- Don't forget to prepare your cash
- It looks like......

See

- Menu without food photos
- Only cash payment option
- Driver doesn't have enough changes
- Only cash payment option

Say & Do

- Go downstair to pick up food and pay the driver in cash
- Spend 30 mins scolling and quit at the end
- Looking for food that matches interest
- I couldn't find food that I want
- I don't have enough cash with me right now

Pain

- Hard to find their food interests
- Uncomfortable paying cash
- Looking for food that matches interest

Gain

- Comfortable
- Accuracy

Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy

User Type:

- Diabetic patients
- Ophthalmologists
- Hospitals & Clinics

What Does the User SAY?

- "I want early detection to avoid blindness."
- "Screening takes too long."
- "Access to specialists is limited."

What Does the User THINK?

- "Is my vision getting worse?"

- "I need a quick diagnosis."

- "Medical tests are expensive."

What Does the User DO?

- Visit hospital for eye screening

- Wait for specialist review

- Undergo retinal imaging

What Does the User FEEL?

- Worried about vision loss

- Anxious about diagnosis

- Frustrated with delays

Pain Points

- Long waiting time

- High consultation cost

- Late-stage diagnosis

- Limited access in rural areas

Gains

- Early detection

- Quick results

- Affordable screening

- Support for doctors