Ideation Phase Empathize & Discover

| Date | 4 March 2025 |
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| Team ID | PNT2025TMID00864 |
| Project Name | GrainPalette A Deep Learning Odyssey In Rice |
| | Type Classification Through Transfer Learning |
| Maximum Marks | 4 Marks |

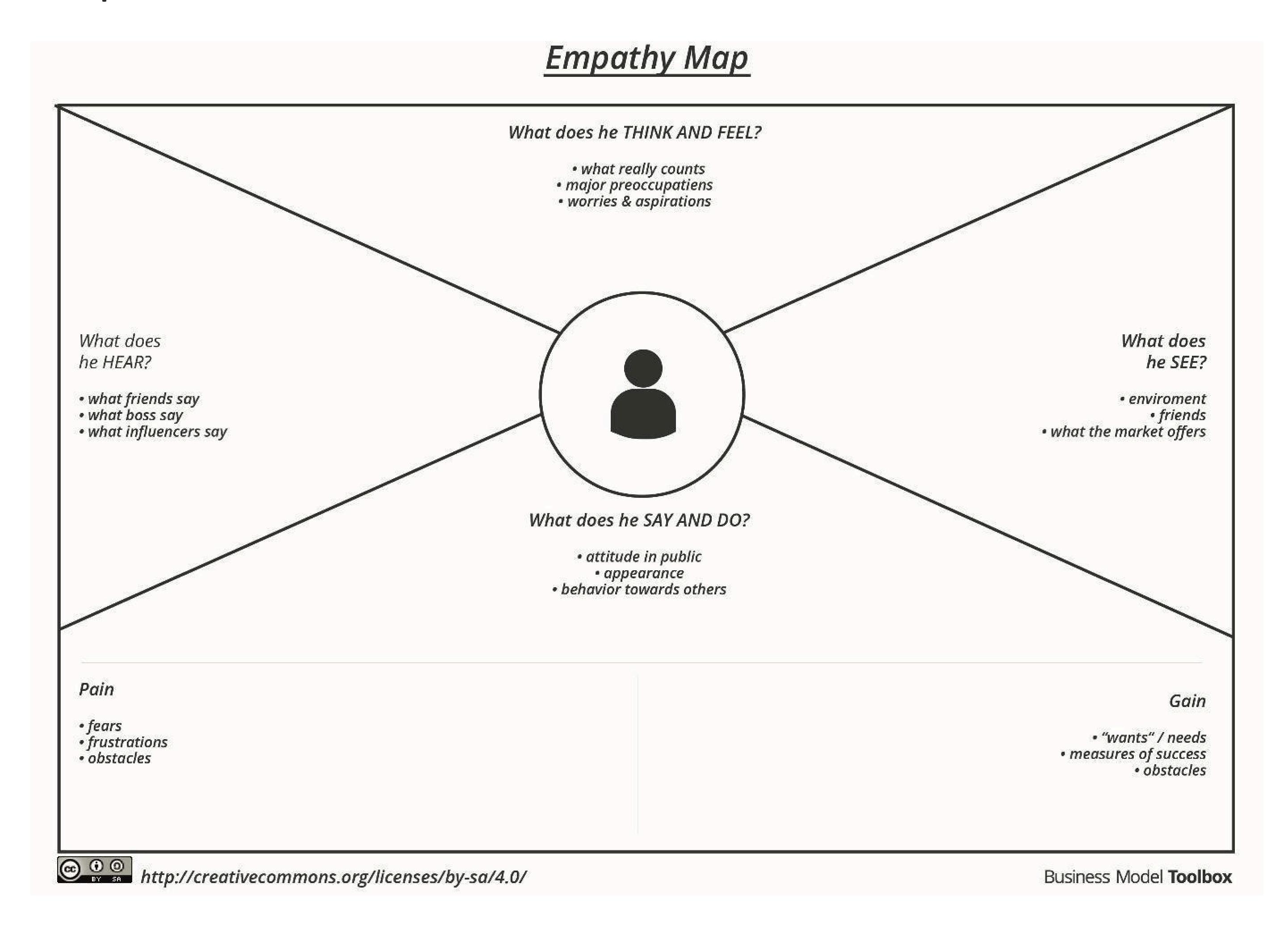
Empathy Map Canvas:

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:

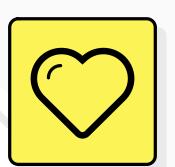


Reference: https://www.mural.co/templates/empathy-map-canvas



Develop shared understanding and empathy

Summarize the data you have gathered related to the people that are impacted by your work. It will help you generate ideas, prioritize features, or discuss decisions.



WHO are we empathizing with?

W e want to understand farmers needing to identify rice types, and also agriculture scientists and home gardeners.

They need to identify rice types for proper cultivation but lack affordable expert help and quick methods.

Their role is to successfully grow rice or study it, and rice type identification is a key step for them.



What do they HEAR?

They hear that accurate rice identification is key for good harvests, but expert help is costly.

- Friends share experiences on rice types, farming challenges, and
- sometimes costly expert advice.
- Colleagues discuss the importance of rice classification, and explore new tech like AI in agriculture.
- They hear about AI in farming, new rice varieties, and the need for modern agriculture solutions.



What do they THINK and FEEL?

(UAU)

What do they need to DO?

They need to move away from slow manual checks and costly expert consultations for rice identification.

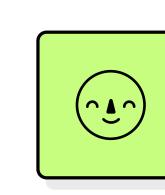
They need to accurately and quickly identify rice types to optimize farming and research practices. They need to decide on the correct rice type to determine water, manure, and

cultivation methods. Success is seen in improved yields, efficient research, reduced costs, and easy rice type identification.



PAINS They fear crop failure due to incorrect rice type

identification, are frustrated by costly expert fees and slow manual methods, and feel anxious about yield and income.



GAINS

They want easy, affordable, and accurate rice type identification to improve yields, reduce costs, and achieve better harvests and research outcomes.





What do they SEE?

They see various rice types, fluctuating prices, expensive expert services, and emerging tech in agriculture. They see different rice paddies/fields, varying rice grain appearances, and

maybe plant diseases or growth issues. They see other farmers using traditional methods, some adopting new

tech, and experts giving costly consultations. They watch agriculture programs, read farming magazines/websites, and

maybe research papers on rice and Al.

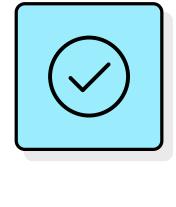


What do they SAY?

"Identifying rice types is crucial but expensive," "Expert advice is hard to access," "Manual checks are time-consuming." "This GrainPalette app is a game-changer!", "Finally, rice ID is easy and affordable!", "My yields will improve!".



They might feel hopeful about technology improving their work, yet also skeptical about AI accuracy and concerned about the initial learning curve and tech access.



What do they DO?

Today, they manually inspect rice grains, consult experts, or use traditional, timeconsuming methods for rice identification.

We observe them seeking advice, spending time on manual checks, and

sometimes facing uncertainty about rice types. We imagine them quickly uploading rice images to GrainPalette, getting instant

rice type predictions, and optimizing their practices.

