## **Rice Type Classification - Empathy Map**

## What is an Empathy Map?

An empathy map is a collaborative tool that helps teams develop a deeper understanding of stakeholders, particularly users or customers. For this rice type classification project, the empathy map will help understand the perspectives of farmers, rice processors, and quality control specialists who might use this technology.

# **Empathy Map - Rice Type Classification Project**

## Says

- "I need to quickly identify rice varieties to determine market value."
- "Manual classification is timeconsuming and prone to errors."
- "Different rice varieties require different processing methods."
- "I wish I had a tool that could help me differentiate between similarlooking rice types."
- "Price differences between rice varieties can be significant."

#### **Thinks**

- Concerned about the accuracy of automated classification.
- Wonders if the technology will be cost-effective for their operation.
- Considers how this technology might impact their workflow.
- Questions if the system can handle regional rice varieties.
- Worries about technical complexity and training requirements.

#### **Does**

- Currently relies on visual inspection or basic tools.
- Spends significant time sorting and classifying rice samples.

#### **Feels**

- Frustrated by the time required for manual classification.
- Anxious about making misclassifications that could

Untitled 1

- Makes decisions about processing methods based on rice type.
- Sets pricing based on rice variety and quality.
- Deals with disputes over rice type classification.

- affect profits.
- Excited about the potential of new technology to improve efficiency.
- Uncertain about adapting to new technological solutions.
- Hopeful that better classification will lead to better market prices.

#### **Needs**

- **Accuracy:** A highly accurate classification system that can distinguish between similar rice varieties.
- **Efficiency:** A solution that speeds up the classification process without sacrificing quality.
- **Ease of use:** A system that doesn't require extensive technical knowledge to operate.
- **Affordability:** A cost-effective solution that provides clear ROI for different scales of operation.
- **Reliability:** A robust system that works consistently in various environments (field, factory, etc.).

#### **Pain Points**

- Time consumption: Manual classification is labor-intensive and slow.
- **Human error:** Subjective judgments can lead to inconsistent classifications.
- Market disputes: Disagreements about rice types can lead to pricing conflicts.
- Knowledge gap: Not all workers have expert knowledge to distinguish varieties.
- **Process inefficiency:** Incorrect classification can lead to inappropriate processing methods.

#### **Gains**

Untitled 2

- **Time savings:** Automated classification reduces the time spent on manual sorting.
- Consistency: Standardized classification reduces variability and disputes.
- Market value: Accurate classification ensures proper pricing and market positioning.
- Processing optimization: Correct identification leads to appropriate processing methods.
- **Knowledge democratization:** Technology makes expert knowledge more accessible.

## **Key Insights**

Based on this empathy map, the rice type classification project should focus on developing a solution that balances accuracy with ease of use, provides clear economic benefits, and can be integrated into existing workflows with minimal disruption. The system should be designed with the specific needs of different stakeholders in mind, from farmers to processors to quality control specialists.

Untitled 3