# Ideation Phase Brainstorm & Idea Prioritization Template

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

Brainstorm & Idea Prioritization Template: Brainstorming provides a free and open

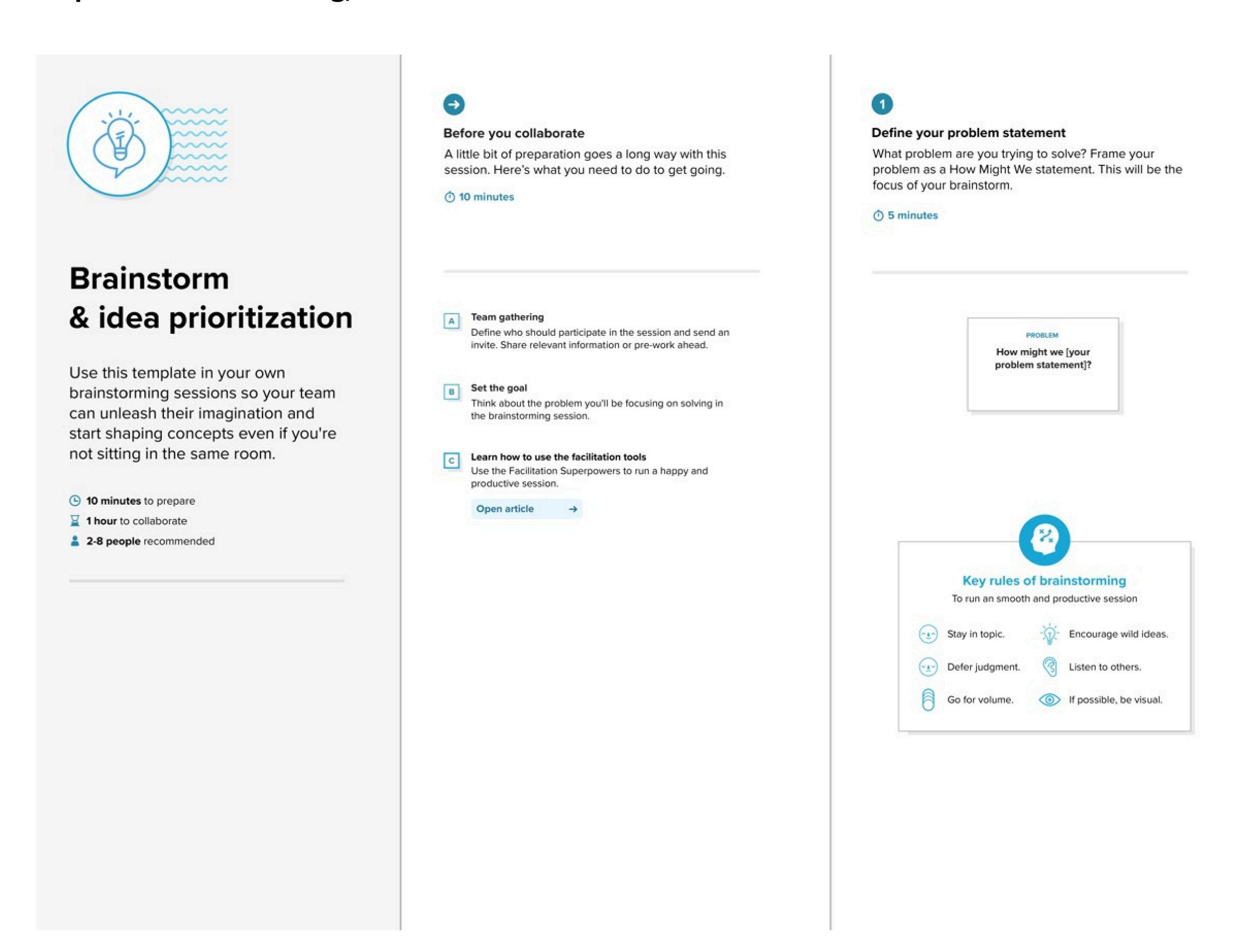
environment that encourages everyone within a

team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Reference: https://www.mural.co/templates/brainstorm-and-idea-prioritization

Step-1: Team Gathering, Collaboration and Select the Problem Statement



# Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

5 minutes

#### **PROBLEM**

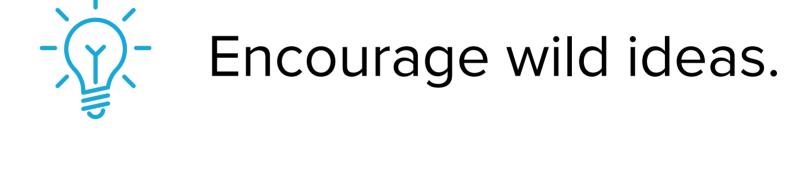
How might we make accurate rice type identification affordable and accessible to all farmers, regardless of their resources?



# Key rules of brainstorming

To run an smooth and productive session











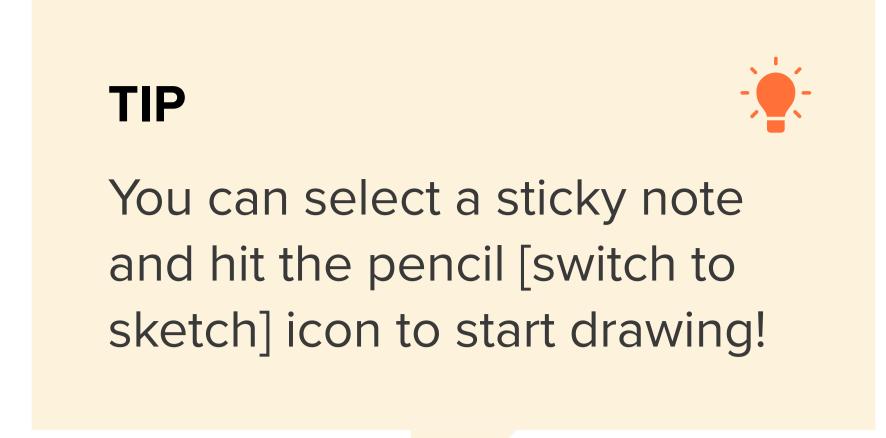




#### Brainstorm

Write down any ideas that come to mind that address your problem statement.

(†) 10 minutes



### Kunal Goel

Improve the offline mode so it can do more processing locally, even if the initial model download needs internet.

Allow farmers to
anonymously
contribute rice grain
images to a
community dataset
to improve model
accuracy over time.

Add support for more local languages beyond just the most common ones.

Include short
videos or guides
within the app
explaining rice
types and
farming practices.

Make the image capture process a little game to teach farmers how to take good pictures for accurate Al analysis.

Allow farmers to
anonymously
contribute rice grain
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community dataset
to improve model
accuracy over time.

# Ayush Mishra

After rice type prediction, show current market prices for that rice type in local markets.

Investigate if there are even more efficient, open-source transfer learning models we could use to reduce app size and processing needs.

Make the app interface extremely basic with large icons, minimal text — think grandpafriendly!

Explore partnerships with mobile network providers to offer discounted data packs specifically for agricultural apps like ours.

Create a simplified, smaller app version that uses less data and works better on basic smartphones.

Collect and share success stories from farmers who have used GrainPalette and seen positive results to build trust and encourage adoption.

# **Aashish Kumar Chetan**

Offer a basic free version with limited daily predictions, and a premium subscription for unlimited use and extra features.

Actively pursue
government grants or
subsidies for
agricultural technology
initiatives to make the
app free or heavily
discounted for farmers.

Partner with local agricultural content creators (YouTubers, bloggers, etc.) to promote the app in regional languages and styles.

In very resourcepoor areas, explore
partnerships to offer
extremely basic, lowcost smartphones
pre-loaded with the
GrainPalette app.

Set up a system for automatically retraining the Al model with new farmer-contributed data to keep improving accuracy over time.

Make the app show a "confidence score" for each prediction, so farmers know how certain the Al is.

# Abhijeet Singh Adhikari

Partner with agricultural NGOs who work directly with farmers to distribute the app and provide training.

Direct button in the app to connect to a human agricultural expert for more complex questions (maybe a paid premium feature, or limited free initial consultations).

Instead of just
MobileNetV4, experiment
with combining multiple
transfer learning models
for potentially higher
accuracy (but might
increase complexity).

Easy way for farmers
to report if the
prediction was wrong
and ideally, provide
the correct rice type,
to use as error
correction data.

Provide
downloadable guides
(PDF or video) on
how to collect and
photograph rice
grains for best Al
analysis.

Collaborate with fertilizer/seed companies to bundle app access with their products.

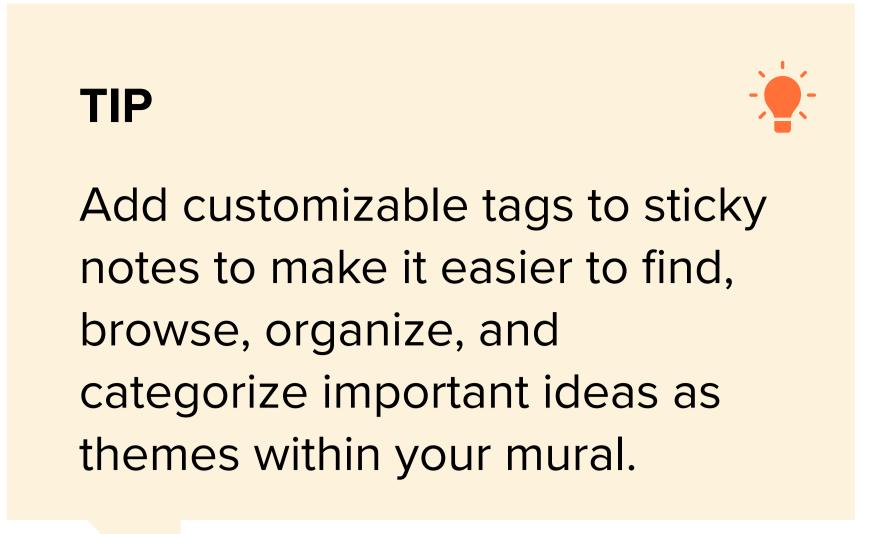




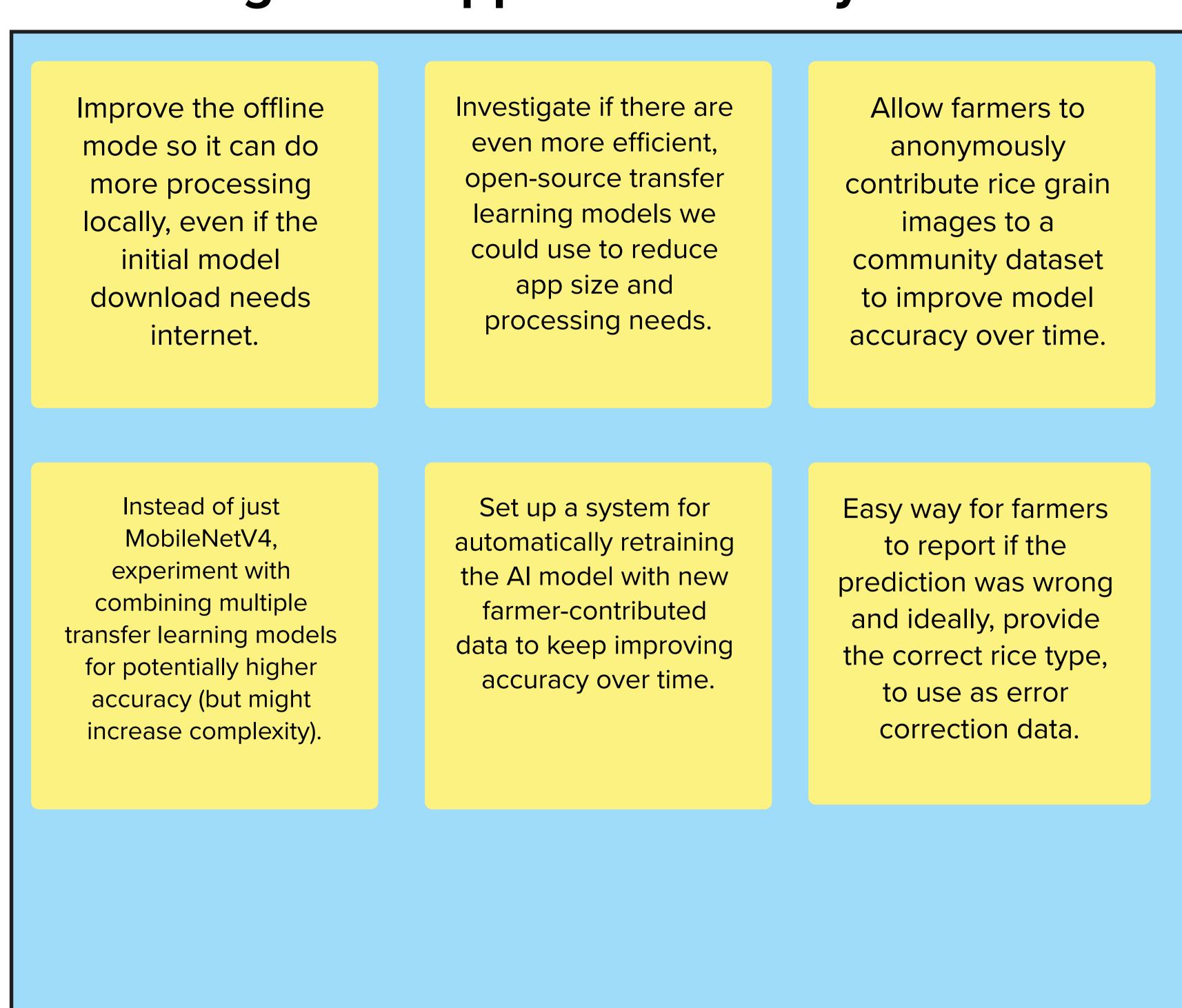
# Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

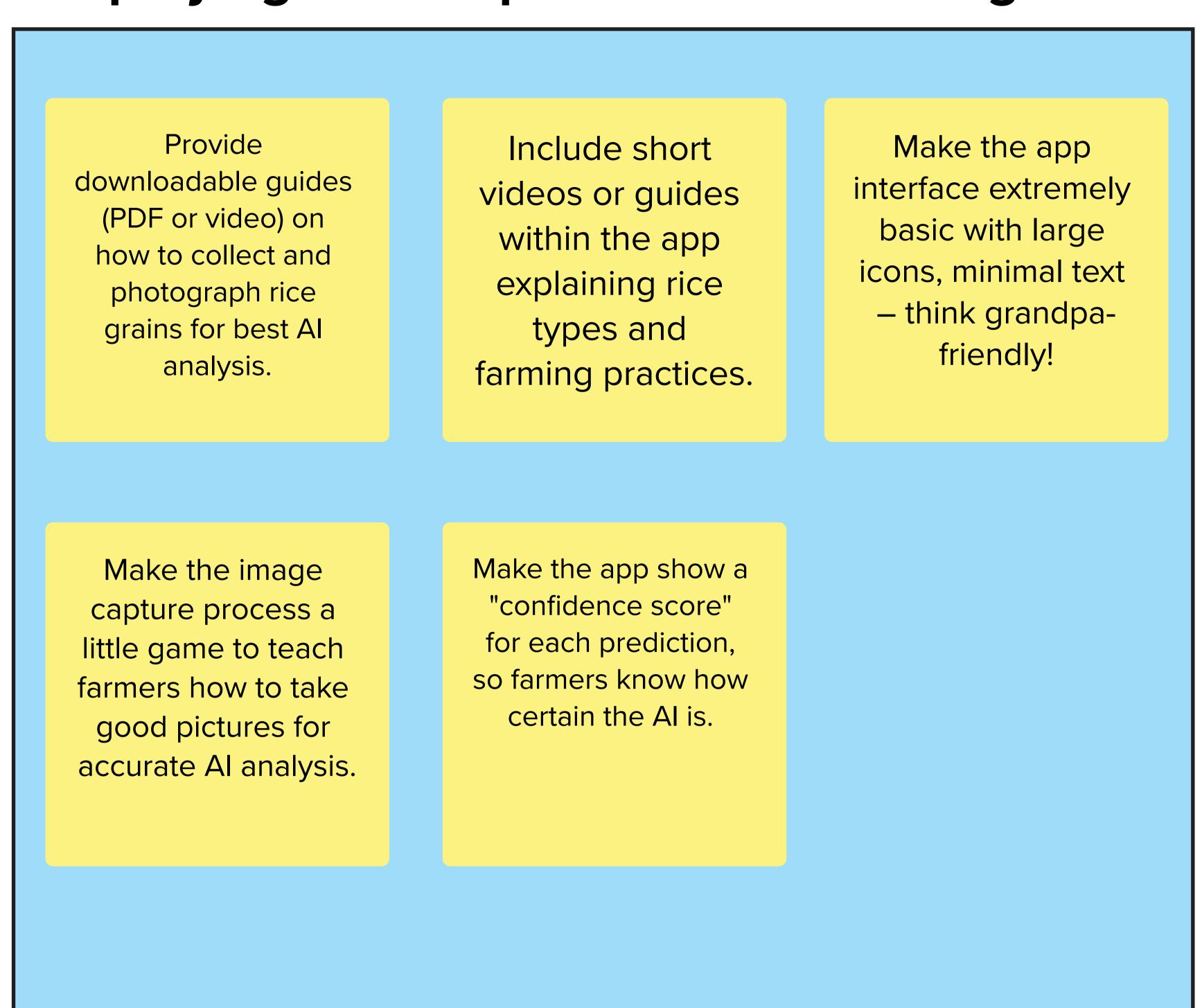
① 20 minutes



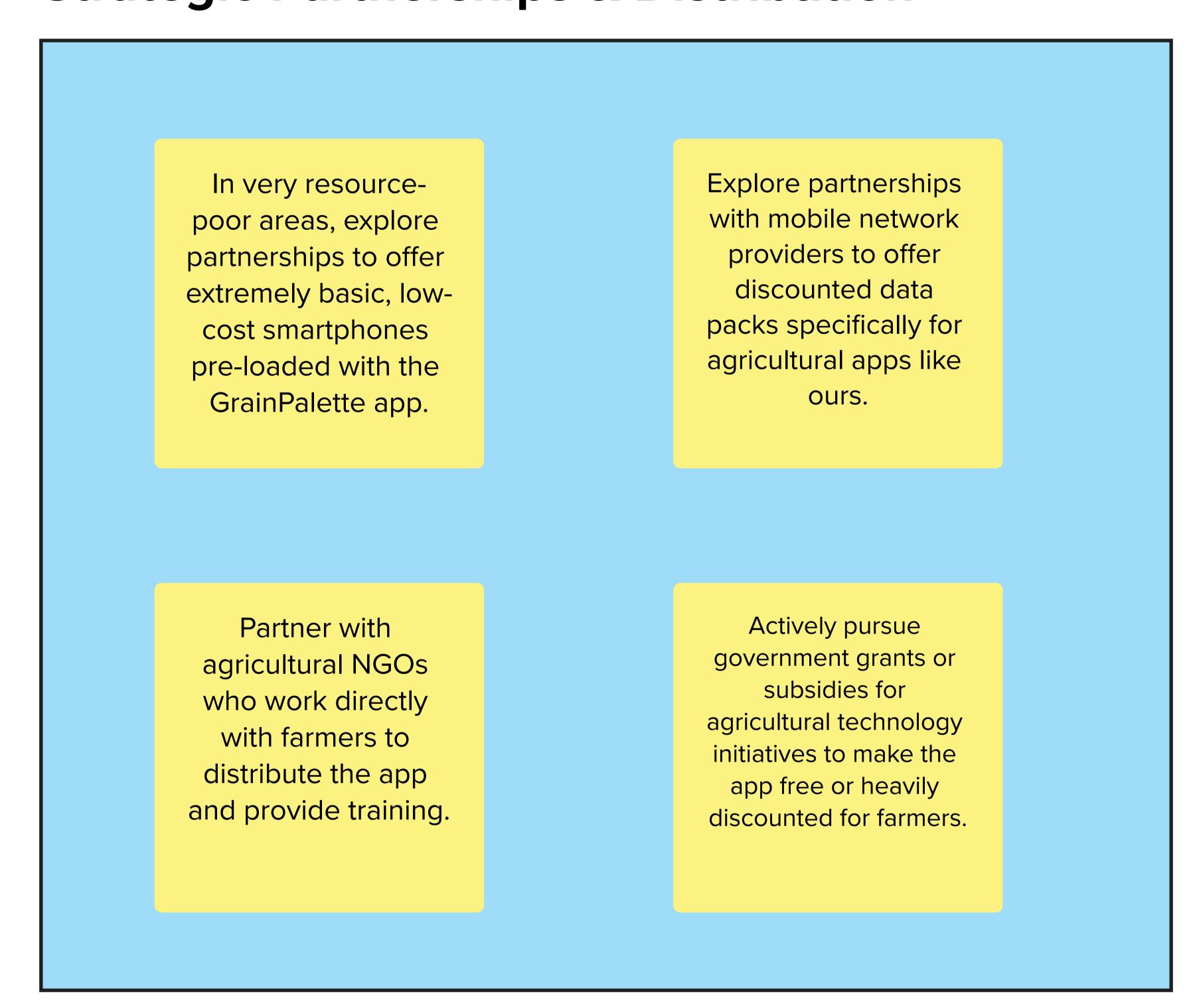
#### **Enhancing Core App Functionality & Al**



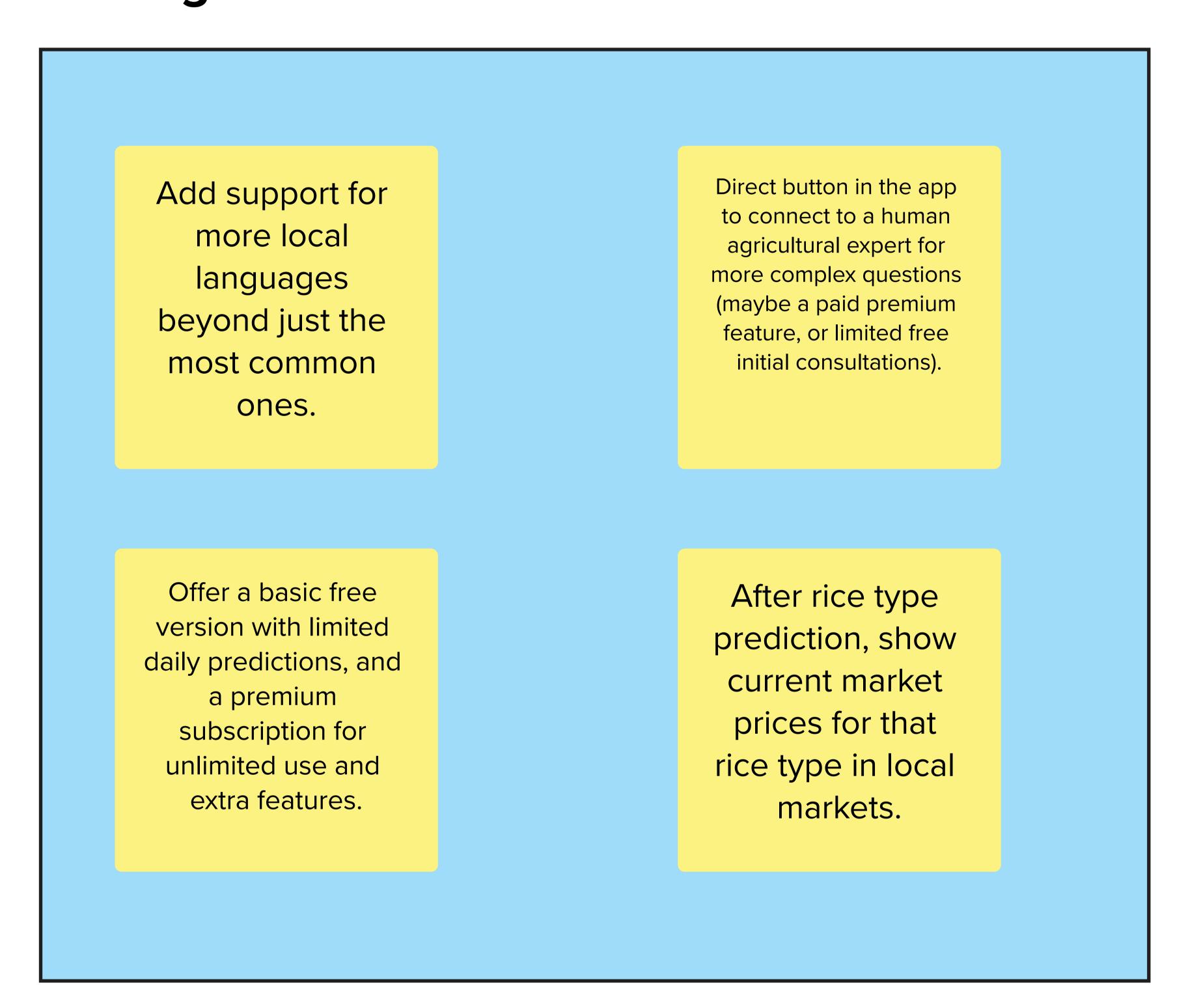
### Simplifying User Experience & Providing Guidance

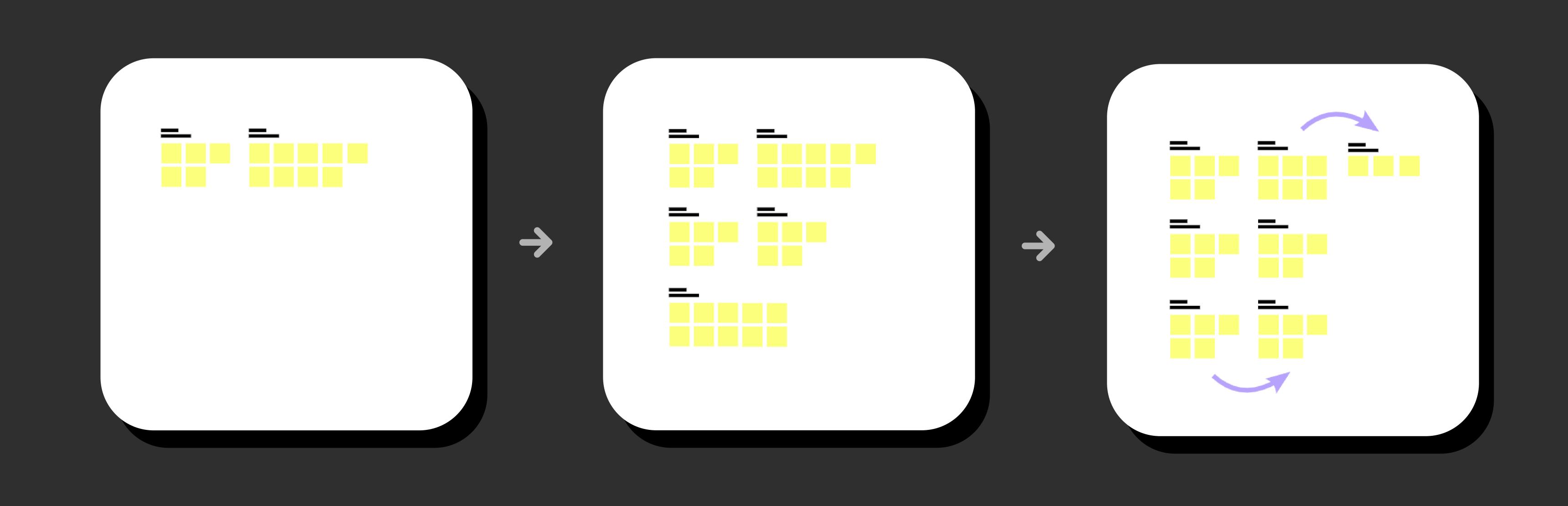


# Strategic Partnerships & Distribution



### Adding Farmer Value & Practical Features







### Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

① 20 minutes

#### TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.





