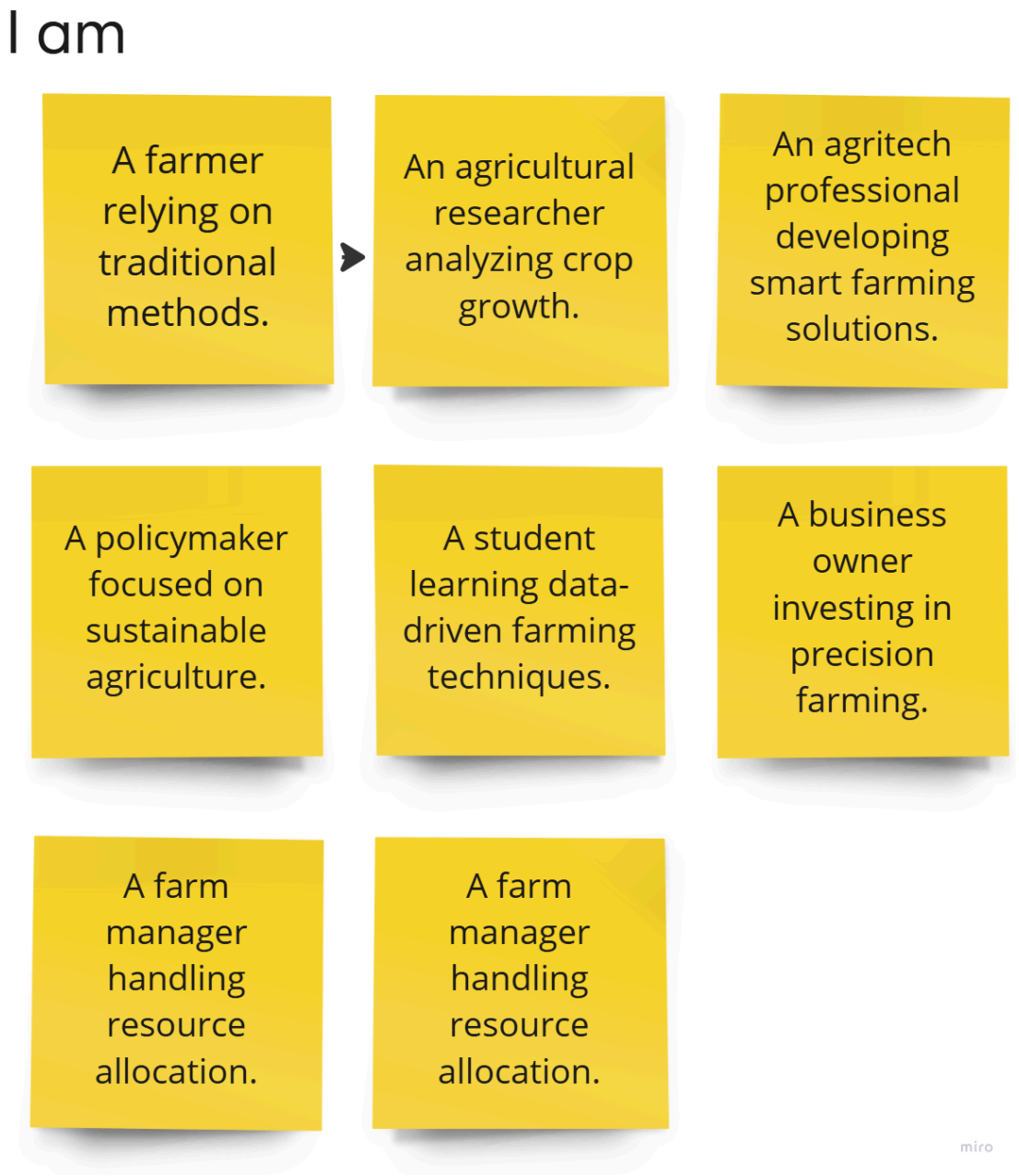
Ideation Phase
Define the Problem Statements

Date	31 January 2025
Team ID	PNT2025TMID01163
Project Name	Predicting Plant Growth Stages with Environmental and Management Data Using Power BI
Maximum Marks	2 Marks

Problem Statement

Farmers face challenges in predicting plant growth stages due to changing environmental factors and inconsistent management practices. Existing models are often outdated, lack real-time adaptability, and fail to provide actionable insights. This results in inefficient resource allocation and potential yield loss. A Power BI-based solution can address this issue by collecting live data from sensors and weather sources, analyzing growth patterns, and offering data-driven recommendations. This approach enhances decision-making, improves efficiency, and supports sustainable agriculture.



I'm trying to

Improve crop yield with better predictions.

Optimize water and fertilizer usage.

Reduce crop loss due to unpredictable weather.

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Implement advanced analytics in farming.

Make agriculture more sustainable and profitable.

Integrate smart technologies into farming practices.

Educate others on data-driven agriculture.

But

I lack real-time environmental data.

Traditional farming methods are inefficient.

I struggle with unpredictable weather patterns.

My resources are often wasted due to poor planning.

Existing solutions are too complex or expensive.

I don't have access to advanced predictive tools.

There's limited awareness of smart farming solutions.

Data is difficult to interpret and apply effectively.

Because


Current methods rely on outdated, static data.
There's no easy access to real-time insights.
Climate change affects farming unpredictably.
Many farmers lack technical knowledge of analytics.
Adoption of new technology is slow and expensive.
Small-scale farmers don't have access to big data.
There's resistance to change in traditional farming.
Integrating new tools into existing systems is challenging.

Which makes me feel

Frustrated by inefficiency and resource wastage.

Anxious about unpredictable yields and income.

Overwhelmed by complex data and technology.

Uncertain about which farming decisions to make.

Limited by the lack of modern farming tools.

Eager to learn better agricultural solutions.

Hopeful that technology can improve farming.

Motivated to explore data-driven decision-making.