

## Ideation Phase

### Brainstorm&Idea Prioritization Template

Team ID	PNT2022TMID44437
Project Name	Smart Farming IOT Enabled Smart Farming Application

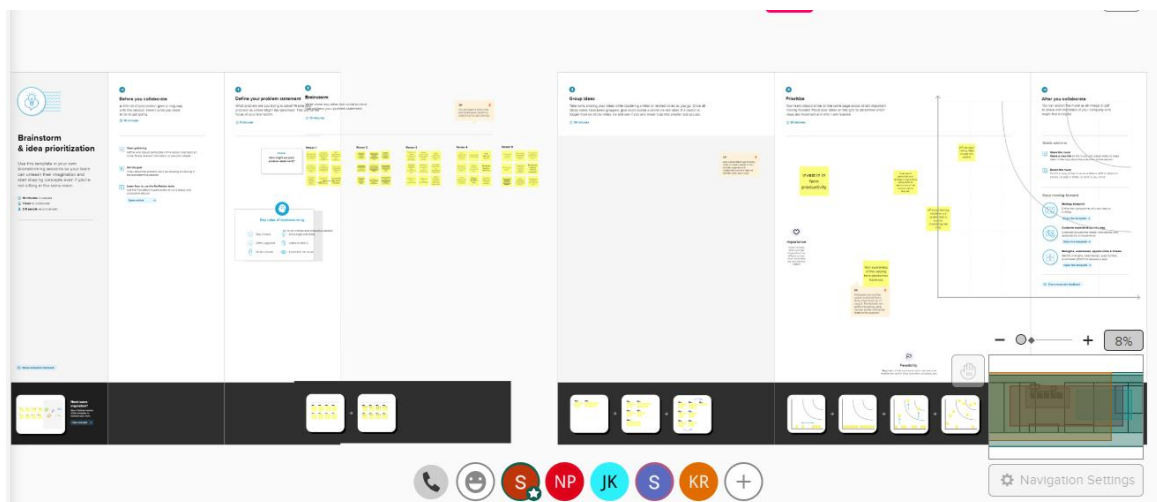
#### Brainstorm & Idea Prioritization Template:

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/empathy-map-canvas>

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



#### Step-2: Brainstorm, Idea Listing and Grouping

## Person 1

Maintaining  
Idea Storage  
Condition.

Soil Health  
Parameters Are  
Essential of  
Organic  
Cultivation.

IOT  
Application  
,Provision For  
Live  
Guidance.

It Collect the  
Data Regarding  
the Location and  
health of their  
Cattle.

Greenhouse  
Farming is a  
Methodology Helps  
in enhancing the  
yield fruits,crops  
etc

IOT has been  
making deep  
inroads into  
sectors

If we can get  
Important  
Parameters  
during different  
stages of  
collections

Storage abd  
Transport  
practices can  
be improved.

Improve the  
Self life of  
Produce

## Person 2

Large farm owners can  
benefit from IoT  
applications to collect  
data regarding the  
location,  
well-being, and health of  
their cattle.

.IoT applications can  
immensely benefit the  
farmers using  
greenhouse  
technology and make  
their work simple &  
easy

With use of IoT  
applications,  
storage and transport  
practices can be  
improved while  
improving the shelf life  
of produce.

Develop affordable  
app based solution for  
Soil health monitoring  
and  
suggest which crop to  
be sown based on it.

Develop system for  
predicting potential pest  
disease, insect attacks  
(before at least 15-day &  
more) on Cotton crop and  
yield prediction of  
cotton.

Greenhouse farming is  
a methodology that  
helps in enhancing the  
yield of vegetables,  
fruits,  
crops etc.

IoT applications can  
provide solutions in  
maintaining  
the quality of food  
products and over all  
safety of the  
consumers.

IoT  
applications may be used  
to update the farmer user  
about type & quantity of  
pesticides required by the crop.

IoT applications may assist  
in controlling the irrigation  
pump,  
opening and closing water  
flowing gates and also date  
logging the soil health  
conditions for  
present and future purpose

## Person 3

Farmers are  
under  
pressure to  
produce  
more food

Remote  
monitoring and  
control system  
will help  
farmers

under  
watering  
causes crop  
stress

agricultural  
operations  
waste 60%  
water  
consumed each  
year

only 10% of  
irrigated farms  
use advanced  
water  
management  
decision tools

it is a very  
short return  
on investment  
time period

invest in in  
farm  
productivity

adapt and  
new  
technologies

satisfy  
consumer  
changing  
tastes and  
expectation

## Person 4

Lack of  
information ,high  
adoption costs,  
and security  
concerns

connectivity  
in rural areas

The  
learning  
curve

Non awareness  
of the varying  
farm production  
functions

size and  
individual  
management  
zones

Barriers to  
entry for  
new firms

Lack of  
scalability and  
configuration  
problems

Energy  
depletion  
risks

Technical  
failures and  
resultant  
damages

## Person 5

interoperability  
of different  
standards

IOT has been  
making deep  
inroads into  
sectors

Overuse of pesticides  
and fertilizer in  
agriculture fields leads  
to destruction of the  
crop as well as  
reduces.

the security  
factor

it requires an  
unlimited or  
continuous  
internet  
connection

farmers are  
under to  
product  
more food

the main objective to  
create a problem  
statement is to  
improve the smart  
farming application  
everywhere.

smart  
agriculture  
farming system  
is a new idea of  
farming

IoT smart farming  
solutions is a  
system that is built  
for monitoring the  
crop.

### Step-3: Idea Prioritization

