1

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 design our virtual helper so that it can either reduces the delay and forecast the reasons ?

Key rules of brainstorming
To run an smooth and productive session

- Stay in topic.
- Defer judgment.
- Go for volume.
- Encourage wild ideas.
- Listen to others.
- If possible, be visual.

2

Brainstorm

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

⏱ 10 minutes

TIP
You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!
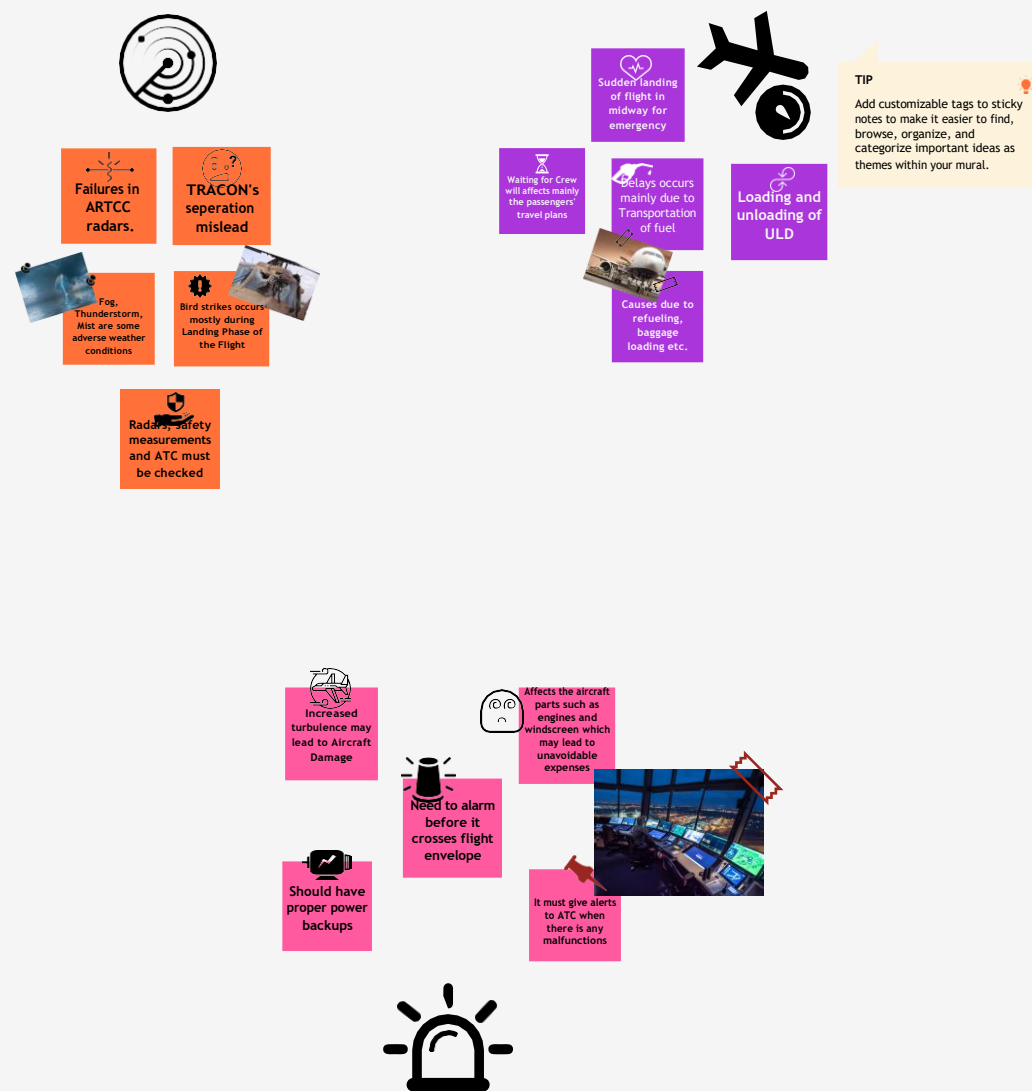
Baskaran

- Communication loss due to poor connection
- Needed when there is heavy mist condition
- Failures in ARTCC radars
- TRACON's seperation mislead
- It affects mostly on Pilot
- Scured level of boundry
- It affects mostly on passengers
- Hospitality is greatly involved
- Sudden landing of flight in midway for emergency
- It occurs occasionally in emergency
- During Takeoff and Descent
- Sometimes it may lead to time delay for passengers
- Business class may get affected by this
- Management is involved
- Connecting passengers may take excess time
- It is usually seen during business hour or festives
- In the midway of travel
- It needs to be fixed as it takes much time

Adluru

- Increased turbulence may lead to Aircraft Damage
- Passengers' lives are at risk
- Fog, Thunderstorm, Mist are some adverse weather conditions
- Results in Delayed Take-off
- Affects both Pilot and Passengers.
- Flights must be scheduled according to meteorological conditions.
- Affects the Pilot's Vision
- Impacts include Shattered windscreens, jet engine ingestion, engine failure.
- Have severe impacts on passengers' who have health problems
- Bird strikes occurs mainly during Landing Phase of the Flight
- Affects the aircraft parts such as engines and windscreen which may lead to unavoidable expenses
- Airplane colors and jet engine spinner markings help to repel birds
- Waiting for Crew will affects mainly the passengers' travel plans
- May leads to ticket cancellation by customers
- A Backup Crew must be employed during the delay.
- Crew hold up in Traffic and Crew reported sick.
- Delayed arrival of crew will affects the reputation of the Airline Company.
- Resting periods for crew must be employed by planned appropriately.

Harish

- Delayed Catering results in unwanted expenses to airlines
- Results in Financial impact on airlines
- Proper Schedule must be planned to avoid delays
- Happens because of late arrival of catering trucks
- Best Catering firm must be employed by the airlines
- Have severe impacts on passengers' who have health problems
- Prolonged Security checks will results in Dissatisfaction of customers
- Affects mainly the passengers
- Does not affects the airlines in any manner
- Occurs mainly due to security breach and terminal evacuation
- Occurs in airports which follows strict checking procedures
- Impacts Travelers' plans
- Causes due to refueling, baggage loading etc.
- Delays occurs mainly due to Transportation of fuel
- Proper maintenance and Cargo handling
- Increased efficient of aircraft engines
- Ideal Cleaning crew must be employed during the delay.
- Will affects the trustworthiness of the airlines

Javid

- Cargo affects mostly on passengers
- Transportation department
- Loading and unloading of ULD
- May get delayed by Customs
- Crew members are affected
- To balance the delay crew has to work on extra flights
- When there is need of immediate flight
- They could be over stressed due to this
- Technical supporters are questioned
- Fuel tank capacity need to be ensured
- Landing gear functions must be checked
- Radars, safety measurements and ATC must be checked
- Overweight must be avoided
- Need to alarm before it crosses flight envelope
- Should have proper power backups
- Bomb have been map for proper flight function when there is mechanical problem
- It must recognize the problem and to work without any permission
- It must give alerts to ATC when there is any malfunctions

3

Group ideas

Take turns sharing your ideas while clustering similar or related notes as you go. In the last 10 minutes, 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.

⏱ 20 minutes

- Failures in ARTCC radars.
- TRACON's seperation mislead
- Sudden landing of flight in midway for emergency
- Waiting for Crew will affects mainly the passengers' travel plans
- Delays occurs mainly due to Transportation of fuel
- Loading and unloading of ULD
- Fog, Thunderstorm, Mist are some adverse weather conditions
- Bird strikes occurs mostly during Landing Phase of the Flight
- Causes due to refueling, baggage loading etc.
- Radars, safety measurements and ATC must be checked

TIP
Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

- Increased turbulence may lead to Aircraft Damage
- Affects the aircraft parts such as engines and windscreen which may lead to unavoidable expenses
- Need to alarm before it crosses flight envelope
- Should have proper power backups
- It must give alerts to ATC when there is any malfunctions

4

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.

⏱ 20 minutes

Importance
If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

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.

Feasibility
Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)

Grid items:
- Should have proper power backups
- Radars, safety measurements and ATC must be checked
- Fog, Thunderstorm, Mist are some adverse weather conditions
- Increased turbulence may lead to Aircraft Damage
- It must give alerts to ATC when there is any malfunctions
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