


Ideation Phase

Brainstorm & Idea Prioritization Template

Date	18 October 2022
Team ID	PNT2022TMID01325
Project Name	Airlines Data Analytics for Aviation Industry
Maximum Marks	4 Marks

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



Brainstorm & idea prioritization

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.

🕒 10 minutes to prepare
🕒 1 hour to collaborate
👤 2-8 people recommended

➔

Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

🕒 10 minutes

A Team gathering
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B Set the goal
Think about the problem you'll be focusing on solving in the brainstorming session.

C Learn how to use the facilitation tools
Use the Facilitation Superpowers to run a happy and productive session.

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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

The airport codes may refer to either the IATA airport code, a three-letter code that is used in passenger reservation, ticketing and baggage-handling systems, or the ICAO airport code which is a four-letter code used by ATC systems and for airports that do not have an IATA airport code.



Key rules of brainstorming

To run an smooth and productive session

🗣️ Stay in topic.

💡 Encourage wild ideas.

⏸️ Defer judgment.

👂 Listen to others.

🗣️ Go for volume.

👁️ If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

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

10 minutes

3

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 can break it up into smaller sub-groups.

20 minutes

R. GAANASHREE

Increase in airline revenue	Smart Maintenance	Cost Reduction
Customer Satisfaction	Digital Transformation	Performance measurements
Risk Management	Control and verification	Load Forecasting

ABINAYASAKTHI R S

Reservation Analytics	Social Distance Analytics	Departures Analytics
Revenue and Cost Analytics	Flight Operation Analytics	Customer Service Analytics
Flight Turnaround Analytics	Planning and Schedule Analytics	MRO Analytics

KEERTHANA R U

Boarding flight with face recognition	Checking bags with facial recognition	Preparation of flight for next flight
Flight Tracking	Passenger Information	Quality Check
Demand Forecasting	Optimize Flight Route	Customer Segmentation

NIVESHAA R

In-Airport self service	Fuel efficiency optimization	Airline Food supply
Feedback analysis	Message automation	Fraud detection
Flight management	In-flight sales	Crew management

GRACE NESAM R

Demand Forecasting	Weather Management	Track and Radar Data
Embedded Analytics	Commercial information	Planned Operations
Air Traffic Control	Network Operators	Ground Handling

Data analytics helps the industry to understand customers' preferences and other maintenance issues. For instance, analysis of ticket booking helps the industry to target the customers with personalised offers while optimising the price in real-time using predictive analysis techniques.

Airlines use AI systems with built-in machine learning algorithms to collect and analyze flight data regarding each route distance and altitudes, aircraft type and weight, weather, etc. Based on findings from data, systems estimate the optimal amount of fuel needed for a flight.

Due to the use of smart data analytics, passengers will avoid many issues with baggage tracking. While radio-frequency identification prevents mishandling the baggage, predictive analysis assists in improving the predictability of fleet reliability.

With the airport traffic increasing day by day, big data analytics will enable the airlines to keep on working on the optimization of the airspace use, especially when it comes to runway bandwidth, flight routes, types of aircraft, etc.

Step-3: Idea Prioritization

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 any of these ideas could get done within a year, which one would you think it has the most positive impact?

Feasibility
Regardless of their importance, which ideas are more likely to be successful? (Cost, time, effort, complexity, etc.)

With a purpose to deliver higher standard services to the passengers. Some solutions have been launched to provide the perfect platform for the custom-made technology suppliers to showcase their products and services to airlines and airports in order to offer the passengers a more connected travel experience.

Airlines require the development of an effective and holistic forecasting model to regularly assess the impact of options, such as increasing aircraft seats available, adjusting fares, introducing new routes, etc. Forecasts should also take account of actual statistical trends and results.

One should seriously consider revenue management based on the idea that customers perceive product value differently, so the price they are ready to pay for it depends on target groups they belong to and purchase time.

With the help of predictive analysis, sentiment analysis, and travel journey analysis, the airline industry keeps its customers up-to-date in real-time, promoting special offers based on their needs, habits, and unique experiences.