



1. Airline information network.

Expected Outcomes:

All the staff across Vistara should be equipped with the device/app which will connect them in strong network. Airline staff is spreaded across counters, reservation office, baggage handling, security checks and back offices. Similar patterns exist across all stations.

We wanted to have system in place which will enable all the staff to get integrated in a strong information network where information from anyone will flow to relevant staffs.

App design / System design

2. Unleash Airport experience.

Expected Outcomes:

In Airport, experience for passengers is very varied, while frequent fliers may find the Airport experience very monotonous and at times cumbersome due to congestion and lengthy procedures, infrequent passengers are always fascinated with the airline travel. Passengers do experiences different activities within Airport, from Airport entry to counters to security queues shops to restaurants to lounges and terminals.

These distractions may even lead to the passengers missing their flights.

We wanted improve their airport experience and make it seamless.

App/Device/Concept

3. Hassle-free business travel

Expected Outcomes:

Business class passengers are generally frequent travellers. These are majorlyCxO of large companies, businessmen or VIPs. Hassle less travel, good service, zero error, real time information are primary concerns to them.

We wanted to have their travel experience hassle free and comfortable.

Facebook App or other solutions for Business passengers.

4. Inflight entertainment app

Expected Outcomes:

Domestic travel journey is between 1-3 hrs. Passenger travel time generally passes with folding, reading book-magazines etc. Overall there is no great provision for inflight entertainment in Air.

We wanted to unleash power of digital information in best way to build entertainment system inflight, in the absence of internet onboard.

Android App/ IOS app (wifi - offline mode)

5. Inflight services Management App

Expected Outcomes:

Inflight service team involved in catering, in flight checks, serving people onboard. Cabin Crew manages overall operations manually. All informations are kept on paper.

We wanted to digitize the complete inflight service management either with App or device.

Tablet App for crew on board

6. Safeguard all Airline staff.

Expected Outcomes:

Airline staff is spread across geographies. They work in shifts and odd hours. They work on extended hours during irregular flight operations. (like flight delays and diversions). Airport staff is located at base and don't travel across cities but crews and captions do travel across cities regularly. Having such vast movements of staff, it's of utmost importance to safeguard all our staff.

We want to deploy systems and solutions which can provide safety to all our staff on the go, irrespective of their duty hours and geographies.

Concept design / System Design

7. Safeguard city using Airline staff.

Expected Outcomes:

Airline industry across India has deployed massive workforce in different cities. In cities like Delhi, society is struggling against, crime against women. As responsible people, Airlines can provide great backbone and voluntary contributions towards safety of city and citizens.

We want to develop an Emergency and Safety response system for each city which will be operated with consortium of all Airlines within India.

Concept design / System design

8. Design 1000 nodes supercomputer using orange pi or other equivalent.

Expected Outcomes:

Airline always has massive data to crunch. Nature of data and problems are amazingly parallel. Analysis of problems of routes, customers, captains or aircrafts can be performed in parallel. Also advancement of Arms chips and their deployment in all mobile phones cost is significantly reduced for

small scale computing. The world is aware about strong communities which are working on raspberry pi and orange pi which provide completely connected computing node with limited storage at very low price point.

We want to design supercomputer based on nodes of orange pi to numerous airline problems.

Hardware design prototype

9. Airline nextGen data modelling and visualization on graphDB.

Expected Outcomes:

Airline industry is changed over time but industry is following the conventional relational ER model from long time. Considering nature of industry all the information sets and entities are connected to most of other entities. The nature and underlying data forms the massive graph.

We want to build data model for Airline for GraphDB across complete Airline information and visualization over it.

Modelling

10.5 years routes roadmap with visual simulation using social media.

Expected Outcomes:

Vistara is adding stations one by one, in each quarter. Speed of aircraft acquisition will accelerate with lot of new stations in span of next 5years. Identification of new station has to be done with long term traffic prediction over the cities using data metrics from social media.

We wanted to build mechanism to identify air traffic pattern across the regions monthly/yearly, based on the social media and visualize the 5 year network map of Vistara with Rich UI.

Business Analysis / Social media analytics

11. Airline dynamic pricing game for bidding

Expected Outcomes:

Air travel pricing patterns across different routes and different airlines and different times.

We wanted to develop game on top of airline ticket data.

Creativity / wireframe Design

12. Big Data analytics for identification of new Station.

Expected Outcomes:

Airline is dynamic industry. As Airline open stations, it also rationalizes network as per profitability patterns. Using social media trend analysis and general statistical data available and competition information openly across media should help in predicting new station in near future.

We want to develop/prototype the approach for opening new stations with predictive travel pattern purely using publically available data.

Big data Analytics.

13. Use of Chat Bots across Airlines.

Expected Outcomes:

Chatbots technology is becoming mature day by day. Adoptions of chatbots for most of the business processes is accelerating.

We want to identify and use chatbots across all possible communications in Airlines.

Concept design