



## 1 INTRODUCTION

### 1.1 Overview

An airplane crash analysis is a detailed investigation into the causes of an aviation accident. The goal of an airplane crash analysis is to identify any factors that contributed to the accident with ultimate goal of improving safety and preventing future accident, the process of conducting an airplane crash analysis typically involves the collection and analysis of a wide range of data, including information about the aircraft and its system, the operators, and any other relevant factors.

### 1.2 Purpose

Whilst flying is extremely safe, the typical reasons as to why planes crash include pilot error, technical failures, bad weather, terrorism, and pilot fatigue. There is never one single cause attributed to pilot an aircraft crash.

## 2.Problem definition and design thinking

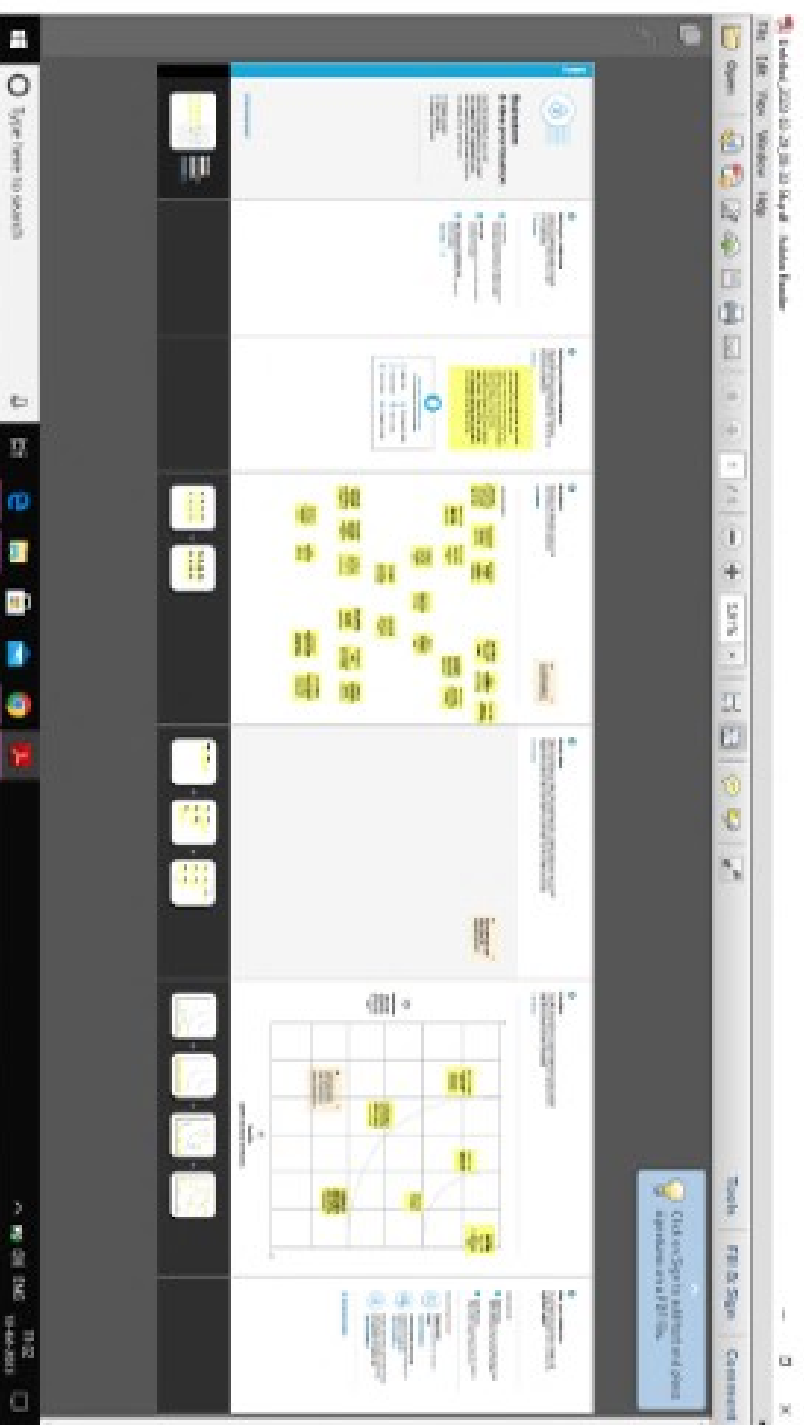
### 2.1emphy map

The screenshot shows a Miro board titled "Empathy map". On the left, a sidebar contains the title "Empathy map" and a brief description: "Use this framework to develop a deep understanding of your users. An empathy map helps describe the user's experience, what they think, feel, and do. It's a tool to help you understand your users better." Below this is a small thumbnail of the empathy map diagram.

The main workspace displays the "Empathy map" diagram. It is a central circle labeled "User" with four quadrants: "What they think", "What they feel", "What they say", and "What they do". Each quadrant contains several sticky notes with text. For example, under "What they think", there are notes like "I'm not sure if I can do this" and "I'm not sure if I can do this". Under "What they feel", there are notes like "I'm not sure if I can do this" and "I'm not sure if I can do this". Under "What they say", there are notes like "I'm not sure if I can do this" and "I'm not sure if I can do this". Under "What they do", there are notes like "I'm not sure if I can do this" and "I'm not sure if I can do this".

At the bottom of the board, there is a toolbar with four icons: a circle, a square, a triangle, and a diamond. The bottom of the screen shows a Windows taskbar with various application icons and a system clock indicating 11:07 on 11-06-2023.

## 2.2 Identification and brainstorming map



### 3 RESULT

Robinson R44 Helicopter Crash in Texas Kills Two | March 25, 2022.

China Eastern Airlines Flight 5735 Crash in Guangxi | March 21, 2022.

Helicopter Crash in Sevierville, Tennessee Kills Two | December 29, 2021.

India Express Flight 1344 Crash | August 7, 2020.

## **Benefits of Air Travel**This ease of movement of

goods by air has a number of possibilities but also some drawbacks.

- It is more expensive than other types of transport because fuel is expensive. ...
- It has capacity limits. ...
- It is more polluting than other more sustainable means of transport such as electric vehicles.
- 

An aircraft can fly to any location without seeing any natural obstacles or barriers. Since customs formalities are easily compiled. It eliminates the need for more time to seek clearance. Air travel is used for relief operations during earthquakes, floods,

# 6 CONCLUSION

This analysis revealed that among the pilots that caused the targeted accidents, 22 had flight experience for 301 to 1000 hours and 20 had 1001 or more hours of experience. By age, those in their 50s and 60s combined were 34, accounting for nearly 60% of the total. Pilots with the total flight time of 301 to 1000 hours may have accumulated experience in familiarization flights and recreational flights after obtaining a license and may have become confident in their skills. On the other hand, the analysis of causal factors shows the involvement of human factors, such as wrong assumptions carelessness and negligence, as well as a gap between perceptions and reality concerning skills, in many of the accidents. There was also a case where a pilot's excessive self-confidence triggered the accident.

## 7 FUTURE SCOPE

### Safest form of travel

Despite the recent tragic loss activity, flying is often said to be the safest form of transport, and this is at least true in terms of fatalities per distance travelled. According to the Civil Aviation Authority, the fatality rate per billion metres travelled by plane is **0.003** compared to **0.27** by rail and **2.57** by

tically, you have more chance of being killed riding a bicycle than driving. The chances of dying in an air crash in the US or EU are estimated to be 29 million to one.

When I started in the business almost 30 years ago, my boss gave me the following message: You have to expect an average of 20 jetliner losses in the world every year," recalls **Josef Schweighart, Head of Operations at Lufthansa, AGCS**. "Thankfully, such statistics are now history,"



There has been a staggering reduction in the number of fatalities in the intervening decades, the result of improvements in air traffic control and pilot training.

## APPENDIX