Problem Definition
At Airport, queuing for passenger boarding is day to day operation given tremendous amount of passenger inflow and outflow. It takes 2 to 3 employee to assist passenger for onboarding and given this frequent activity, what if we can automate the onboarding process for passenger. Our objective is to speed up the process and achieve smooth onboarding of passenger for checking their IDs, boarding passes. Automated AI based Kiosk will facilitate with pre-flight boarding procedures.

Business Consideration
1. Safety of passenger
2. Smooth onboarding
3. Automation
4. Reduce presence of personal

Technical Consideration
1. Cloud Technology
2. Reliability of model and criticality of depending on AI based technology
3. Face recognition
4. Spatial Analysis
5. Secure and sensitive data transmission
6. Text extraction
7. Local government requirement such as data storage within country
8. Scalability
9. Data governance

Ethical Consideration
1. Avoiding Biases
2. Security of data
3. How to protect against unintended consequences
4. How to stay in control of complex algorithm

Solution strategy
● When passenger wants to board the flight he will go through automated Kiosk setup installed near flight gate
● After a passenger comes near kiosk, camera will scan for face and ID to verify whether given person and his Id matches or not (Identity Veirfication)
● After establishing passengers identity, boarding pass will be scanned and match passenger id with flight details.
● While passengers are heading towards kiosk, camera can be used to identify emotions of passenger.
● Once above processes are over then passenger is ready to go onboard.