Business Problem

Ease of onboarding process can help improve the loyalty of passengers to particulate airlines. This means more trips and increases profits. The onboarding process generally involves:

- Identification of passenger using an official identity card
- Cross-referencing of passenger information
- Identification of banned items such as lighters

A manual onboarding process increases onboarding time and reduces the quality of travel for customers. Improving this process is key for airlines.

Solution

Our solution takes advantage of four Azure services:

- **Video Analyzer**: This service will work with **30-second videos of the passengers** saved to blob storage. It will extract face thumbnails from the video that will be matched against the face extracted from the passenger identification card. Additionally, it will extract the sentiment and emotions of passengers.
- **Face Analyzer**: This service will work with the **digitized identification cards** of customers stored in blob storage. It will identify and extract the faces in identify cards to be cross-referenced against the video snippets analyzed by the video analyzer. Together, these two services confirm that passengers are not falsifying their identities. Passengers matched with a confidence of at least 65% are passed.
- **Form Recognizer**: This service will work with **digitized identification cards** and **boarding passes** in blob storage. It will extract information such as passenger name and date of birth, boarding times, destination and flight number, etc. This information will be cross-referenced for additional

passenger identity validation and to ensure that the passengers board the right flights.

- **Custom Vision**: This service will flag any luggage identified to contain lighters with a confidence of 75%.

Together, these services will allow flight validation, passenger identity validation, luggage validation, and boarding experience monitoring as shown below.