



BIOMETRY

AIR TRAVEL – MUCH MORE CONVENIENT WITH BIOMETRY

In future, checking in at the airport will run even more smoothly with the help of biometric recognition. In an interview, biometry expert Michael Overkämping from Materna tells us just why that is and how advanced the technology already is today.



What sort of passenger handling environments can biometry be used in?

Biometric solutions aim to make passenger handling procedures flow better and faster. Biometric features such as the face, iris or fingerprints can be used for this. But other biometric features like the veins in people's hands, their voices or how someone writes or walks are all being tested as well. These methods can all be used differently in practice. For example, some people are wary of touching anything when it comes to checking fingerprints. And this method is rather impractical as passengers are often carrying luggage, a jacket or laptop bag and have to put them down to free up a hand for the test. So, the trend is really heading towards features which can work without any physical contact taking place such as is the case with face and iris recognition.

How does biometric face recognition work?

Biometry works by first measuring the face. This creates a dataset which can be compared with existing information. It is necessary for the passenger to cooperate by looking into a camera to make face recognition possible.

So-called enrolment – creating the biometric feature digitally – is an important step. It has to be linked up to all the passenger's other recognition features such as their boarding card and ID. This set of data is then created and recorded just once so it can then be called up and used at every step throughout the journey, which means the passenger can be clearly identified at all times.

At the Passenger Terminal Expo in March 2017 in Amsterdam, we showed how this works in practice. During the check-in process, the passenger is first photographed and then the image is linked to the boarding card which is issued at check-in. When the passenger arrives at the gate, a camera installed there recognizes the passenger's face and the biometry application knows that this face has the right boarding card. The application then registers it as if the passenger had actually shown their boarding card at the gate. Passengers can also carry out this enrolment themselves while they are checking in at home or on their phone or with a notebook camera, and add it into the check-in process.

What do passengers think about biometry?

We have already carried out several tests at airports, for example for a German airline at Munich Airport. In this case we simulated touch-free fingerprint recognition. The passengers were all prepared to try it out, particularly when they found out about the advantages of speeding up and simplifying the processes.

Where does Materna come in?

We integrate biometry in existing procedures for our customers. We link up different biometric solutions and use different biometric tokens. At fairs we have already showcased how face recognition can be integrated in all the different steps of a passenger's journey: from check-in and baggage drop to accessing the departure area and boarding. Our solutions enable us to serve different touchpoints along the passenger handling procedure so we can use biometric processes anywhere throughout that process.

In your experience, what are the biggest challenges we face here?

Today, passengers have to use several forms of identity during the course of their journey, such as the identity on their boarding card, luggage label and their own passport. The idea is for passengers to only have one form of identity in future. The sector association IATA is pushing this idea with the One Identity initiative. It would be great if each passenger only needed to have one single recognition feature and, ideally, if that was a biometric one.

Deploying biometry is still a question of data protection. How can we make it possible for everyone involved in handling passengers to access the data, from the airport and airline to customs officials and other suppliers? This also raises the question of who owns the data and who is allowed to work with it. Are the owners the airport, the operating company or the airline? And are the participants prepared for their data to be made available to other market stakeholders?

A new standard is needed, just like the one we created years ago with CUSS (common-use-self-service) for check-in kiosks, which, among other things, comprises a standardised interface for transferring passenger information. We need an agreement for biometry as well, so that passenger handling can be made even easier and faster, while simultaneously increasing security. ●

Christine Siepe