

GLOBAL

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SECURITY MAGAZINE

IN OR OUT?
YOU DECIDE!

*Top entrance
security tips from
the experts*

+ PUBLIC BUILDINGS

Access regulation
– what not to do

+ STEP-BY-STEP GUIDE

How to choose the right
interlocking door

+ RETAIL

Speed gates: safer,
smaller, smarter

+ BIOMETRICS

Get to grips
with the basics

Whether you are an



office, bank, factory, shop



airport, metro system, harbour, stadium



power plant, petrol station, jewellers or pharmacy...

**YOUR SITE SECURITY
IS OUR PRIORITY**

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Entrance security is about identification and authorisation, flow and control, function and design. There are many parameters to consider and getting the right mix is not always easy.

In this edition of *Global*, a series of entrance security experts gives you their tips, from how to best protect a public access site to the secrets behind interlocking doors – and we share the latest trend in store gates from Sweden.

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MEET THE EXPERTS



MIKAEL SUNDEBÄCK

Nordic market specialist with 15 years of security expertise.



TIM WARD

Security expert specialising in entrance security for commercial buildings and high-risk sites.



THIERRY GUTH

Physical security specialist with over 25 years of industry experience.

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5 Entrance Security Mistakes Public Buildings Should Avoid

Effective entrance security for public access buildings isn't as simple as it sounds. Whether it's a library or a museum, a transport hub or a town hall, there's a wide range of risk factors to think about from theft, vandalism and civil unrest to terrorism.

Global picked the brains of Tim Ward, a security expert who deals with finding security solutions for all types of locations, from public buildings to high-risk sites.

“Unlike office blocks and government facilities, public access buildings are open to pretty much anybody who has a valid reason to be there - often a staggeringly large and diverse group of people!

“The architects and security managers of these buildings have to think very carefully about how to

effectively manage the flow of people in and out of their doors. Should they fail to do so, they risk putting in place a solution that confuses or even excludes some members of the public. Worse still, they could unintentionally leave gaps in their security that invite unwanted and dangerous interlopers onto the premises.”

Here are Tim's top five entrance security mistakes that all public access buildings should strive to avoid.





1. Rolling out the entrance security solution too quickly

Imagine you're responsible for the security of a building like a library, where there's a heavy flow of semi-regular visitors on a daily basis. One day, those visitors turn up to find that a complex and scary-looking turnstile system has been installed overnight. It's an obstacle they weren't expecting, and they're not 100 per cent sure how they're supposed to use it.

So, they do the sensible thing and ask your staff for guidance. Unfortunately, the staff don't know either – they weren't involved in setting up the new system, have had little to no training and don't fully understand the problem the entrance system is intended to solve.

How could you have prevented this state of affairs? By adopting a phased delivery process, which would have ensured that members of the public were gradually made comfortable with the new system and that members of staff were trained to use it from day one. You could have installed parts of the solution earlier but left them inactive, for example, allowing visitors to get used to walking through them.

2. Failing to apply different levels of security to different parts of the building

Almost all so-called public access buildings will have areas that aren't intended for public access at all. In some buildings, such as hospitals, they may even outnumber the areas that are open to the public by a significant margin. Think of back offices and meeting rooms, supply closets and lost-property departments, for example.

These areas should have the same level of protection as their counterparts in office blocks and other buildings that aren't open to the public. This could mean installing locks, card readers, alarms – whatever is proportionate to the risk. In public access buildings, it's never safe to assume everyone who comes in through the front gates has good intentions.





5 Entrance Security Mistakes Public Buildings Should Avoid

- 1** Rolling out the entrance security solution too quickly
- 2** Failing to apply different levels of security to different parts of the building
- 3** Ignoring the balance between speed and the anticipated volume of visitors
- 4** Installing an overly intimidating entrance solution
- 5** Allowing members of staff to ignore or bypass security rules

3. Ignoring the balance between speed and the anticipated volume of visitors

For reasons that should be self-explanatory, the speed of an entrance security solution is an issue that very much comes to the fore in public access buildings. We've all seen how long the queues can get in airports or outside of tourist attractions like museums and galleries. If your system can only manage four or five transactions per minute and you're looking at a peak flow of two dozen people within that same timeframe, there's going to be a bottleneck.

Bear in mind that in public access buildings, there's a bigger chance you'll encounter visitors who need staff assistance to use, what is to them, an unfamiliar entrance system. These hold-ups have to be factored into your speed of entry too.

4. Installing an overly intimidating entrance solution

As mentioned above, some entrance security solutions aren't exactly friendly in appearance. In fact, some top-of-the-line turnstile and airlock systems are downright intimidating in their size and complexity, and it can take a while for people to feel comfortable using them.

This isn't necessarily a bad thing in some high-security facilities, but it's generally not desirable in public access buildings. Not only will a scary-looking solution slow down visitor flow, but it might also imply a higher level of risk than is really present. This can make members of the public feel uncomfortable for the duration of their visit, not just while entering the building, and therefore detracts from their experience as a whole.



5. Allowing members of staff to ignore or bypass security rules

Finally, it's a mistake to think that entrance security solutions for public access buildings are only intended for members of the public and nobody else. If you allow your employees or management to bypass an automated or manual system freely and with no valid reason, you're only going to degrade your overall level of security and leave a crack in the door for more severe infractions.

When you're rolling out a new solution, explain to your staff that they're part of the security strategy, too. They're obliged to ensure the system is used correctly, to report any instances of suspicious activity and to abide by the same rules as everybody else.

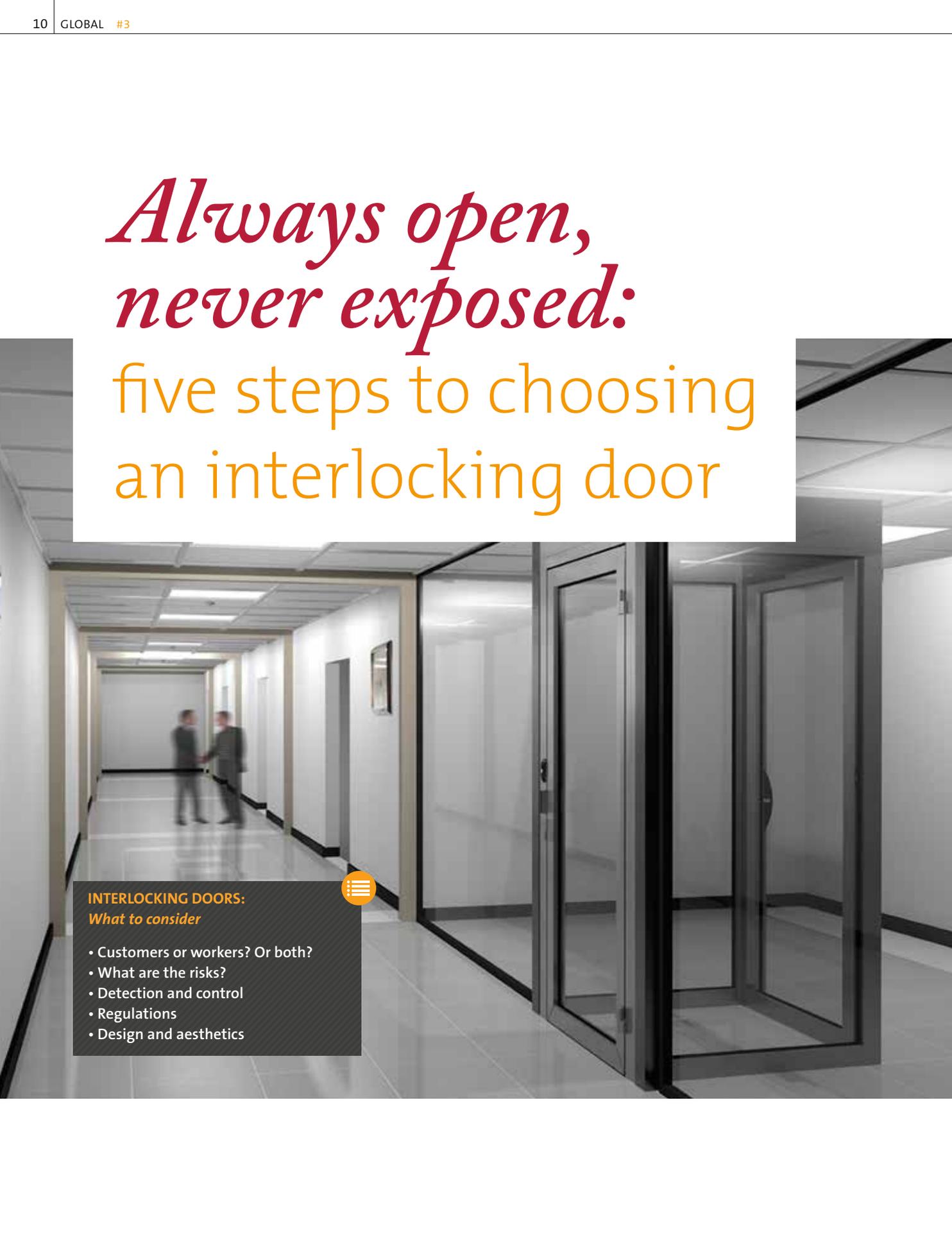


TIM WARD

Tim Ward has been active in the security industry for almost 30 years and over half of this time has been dedicated to working for Gunnebo in the UK. He focuses on delivering specialised high-security solutions to commercial buildings and high-risk sites, such as government agencies, power stations and petrochemical plants.

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Always open, never exposed: five steps to choosing an interlocking door



INTERLOCKING DOORS: *What to consider*

- Customers or workers? Or both?
- What are the risks?
- Detection and control
- Regulations
- Design and aesthetics

Whether you are protecting a building from a kleptomaniac or a Kalashnikov, the answer could be an “airlock” entrance system that remains sealed at all times.

 David Crouch

In its simplest form, an interlocking system is composed of two doors electronically connected so one cannot open until the other has closed. This gives security management a window of several seconds or more to check that the person between the doors has the right to enter or leave.

Global spoke to Thierry Guth, a security expert from France who specialises in physical security for

buildings, about choosing the right door to match specific needs.

“Interlocking doors represent the most secure system of managing access,” he says. “But you need to balance keeping out the wrong people with welcoming the right ones.”

According to Thierry, there are five important steps to consider when choosing an interlocking system:

1 *Customers or workers? Or both?*

Customers should never feel intimidated when entering a bank or a luxury store, so for them, security must be discreet.

“They should feel the entrance system is there for their own safety, rather than the company’s,” Thierry says. “So an interlocking door for public access is likely to be made of glass and easy to use so people can pass through naturally, intuitively and in comfort.”

For employees with access to information, money or valuable goods, there needs to be tighter control. In this case an interlocking door is likely to have rather smaller dimensions and an access control system such as a keypad or a badge reader.

But the technology means you can also have the best of both worlds, Thierry says.

“You can choose different modes of functionality: in the morning you have high control with both doors in operation, then once the employees are already inside, the risk is more limited and you can switch to a single door.”

Airlocks can also be adapted for a high flow of people, for sites such as a company head office or research facility with a lot of employees, he adds. Interlocking doors can cope with up to eight people per minute.

2 *What are the risks?*

“I get a lot of enquiries about providing solutions against Kalashnikov machine guns,” Thierry says. “We are in a period where there is a heightened risk of terrorism.”

Interlocking doors come with different levels of certified security, such as protection against manual attack with a sledgehammer or crowbar, but also firearms and ballistics. An embassy or data centre, for example, might require the highest level, but in other locations this might be considered excessive.

It is essential to analyse the risks you face, Thierry says. One needs to ask questions such as: how long will it be before the police intervene? Do my doors and windows have sufficient resistance? Are staff trained to react to aggression? “If the police need 8-12 minutes to get there, you need resistance for 15 minutes,” he says.

“You should use certified products in accordance with explicit standards to guarantee a level of security that is appropriate to the risks you face. If you don’t feel confident about doing so, it is better to ask a known security company to help.”

And beware of products that use laboratory-tested glass but which are fitted in a standard frame – the frame itself should also have been tested and certified according to EN (European) or UL (United States) standards.

3 *Detection and control*

Interlocking doors can be adapted to control, detect and communicate with the person inside. When there is a risk of firearms, a metal detector increases the chances of detection, for example, while an intercom allows a visitor to speak to staff from within the airlock.

Biometric readers that recognise faces, eyes or fingerprints add a further level of sophistication.

“Voice synthesisers offer an alternative to pushing buttons or reading cards, helping to make a door system pleasant to use,” Thierry adds. “Systems such as these are automatic, but if the visitor sets off an alarm then control switches to manual.”

4 *Regulations*

Regulation of interlocking doors differs from country to country, but in general they must:

- Allow access for disabled people, not just through being wide enough for wheelchairs but also through equipment such as handles or buttons being accessible for someone sitting down;
- Respect climate change legislation by including thermal insulation to ensure the building doesn't waste energy;
- Enable people to evacuate the system, and the building, in an emergency – motorised locks release automatically if the power fails, or an emergency override handle means the door can be opened manually.

5 *Looking good*

Now you are at the last step – choosing the model that best fits your expectations for how the doors should look. Glazed or opaque infill? Powder coated or anodised finish for the frame? Swing doors or sliding?

“Interlocking doors come in standard models, but there is also scope for them to be customised to integrate harmoniously into any environment,” Thierry says.

But at the end of the day, the main aim of customisation is security.

“A particular bank was attacked several times by criminals. It installed an interlocking system – ever since then, there have been no more attacks.”



THIERRY GUTH

Thierry Guth has been part of the security industry for the last 25 years, focusing predominantly on R&D and the management of security projects. He has been working with interlocking doors since the mid-90s and is an expert in physical security for buildings. Today, Thierry is Global Product Manager for security doors and interlocking doors at Gunnebo.

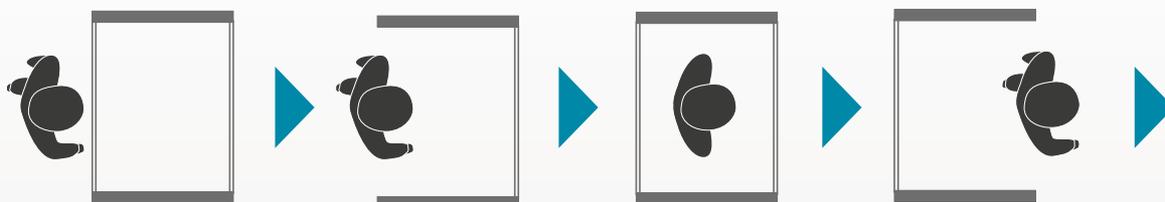
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Interlocking doors can be adapted to control, detect and communicate with the person inside

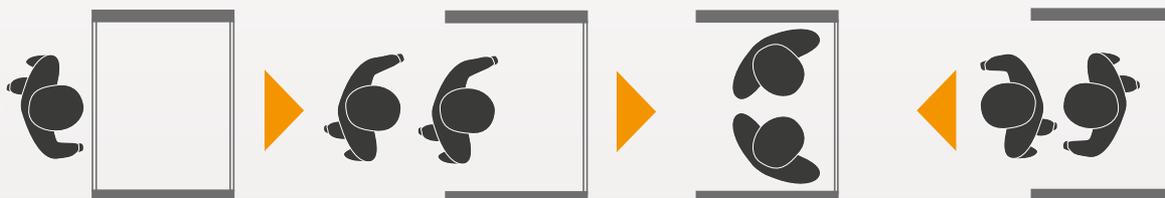


What is an interlocking door?

An interlocking door works like a booth. Using identification, you enter the first door which must close behind you before the second door opens and allows you to pass through.



This interlocking system is particularly effective at stopping prevent piggybacking or tailgating.



Piggybacking and tailgating are attempts to enter a restricted area by following closely behind someone with the correct authorisation. The subtle difference is consent: tailgating is following an authorised person without their consent, whilst piggybacking refers to the same practice, but the authorised person is in on the act.

Open and Shut Case

Why a new generation of store gates is taking off in Scandinavia



Automated speed gates have become a familiar sight at the entrance to railway stations, sports venues and big office blocks. Now they are poised to make the leap into retail.

The supermarket may be about to become the latest environment to benefit from Scandinavian design acumen. A new generation of motion-sensitive barriers is “starting to explode” on the Nordic retail market, according to Mikael Sundebäck, a security specialist at Gunnebo. These stylish sliding speed gates are becoming more and more popular with retailers who are looking for modern ways to make their stores more open, but at the same time more secure.

 David Crouch

The new generation of retail gates

- Upmarket, sleek modern appearance
- High security, so shrinkage is minimised
- Takes up less store space
- Gives the store an open, welcoming feel
- Eliminates need for surveillance at the gate
- Highly robust, cuts maintenance costs
- Potential to provide precise footfall data





SAFER

A big advantage to store managers is that the new generation of gates is very secure. Head-high safety glass prevents a shoplifter from leaving the store through the entrance – they can't be vaulted over or squeezed underneath. And if someone tries to go back through them the wrong way, an alarm sounds, so cashiers can be situated far from the gates without sacrificing security.

At ICA Maxi, a supermarket in the Swedish town of Borås, managers wanted to avoid additional investment in surveillance cameras or guards, so they plumped for automated speed gates.

"It was important for us to find a safe solution for when the store's entrance is unattended," says Mikael Carlsson, store manager. "The gates give our shop a modern and welcoming feeling, while they prevent shoplifters walking back out through an unguarded entrance."

Return on investment is rapid because shrinkage is minimised, and the cost of servicing vulnerable mechanical gates is eliminated.

SMALLER

A selling point for small shops is that the technology takes up less floor space than mechanical gates, freeing it up for more retail display. "They look better, are more durable and secure than old-fashioned swing gates," Sundebäck says.

While a speed gate might be slightly wider, by eliminating the need for a system of double gates, which are common in retail, they don't extend so far into the store.

The gates are connected to the fire system, so they open automatically if the alarm is triggered and they also fall open if the power fails.



SMARTER

The aesthetic of the new technology is modern and stylish, very different from the simplistic steel swing gate commonly found in retail outlets. The colour and finish are easily customised to suit different locations or brands.

"It gives the shop a whole new perspective – as a visitor you respect the shop a whole lot more," Sundebäck says.

An array of infra-red sensors either side of the gate is sensitive to the customer's speed of motion, and to whether they are pushing a trolley or leading a child by the hand. Decades of industry experience with high-volume gates for public transport means the new entrance systems are robust and reliable.

Customers can be wary of gates when they are first installed, but because they are familiar from other environments, it only takes a few visits for them to feel comfortable, Sundebäck says. The sensors enable the gates to be adjusted so there is minimal risk to children or elderly people.

Despite the advantages over old-style mechanical gates, the test of the new technology will be whether its success in Scandinavia spreads elsewhere.

"It's a change in mindset," says Sundebäck. "You find these speed gates everywhere else, but no one has yet made the leap to retail."



MIKAEL SUNDEBÄCK

Mikael Sundebäck has been working with customised security solutions for the Nordic market for the past 15 years. Today Mikael works closely with Swedish customers in a number of different segments from retail to bank and from airports to commercial buildings.

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BEGINNER'S GUIDE

BIOMETRIC IDENTIFICATION

*BIOMETRICS [BAHY-UH-ME-TRIKS]
FROM THE GREEK WORDS "BIO" MEANING
LIFE AND "METRIC" MEANING TO MEASURE.*

Biometrics works on the principle that every individual has unique physical or behavioural characteristics which can be used to identify them. Biometric technology is commonly used for access control.

3 Things You Didn't Know about Biometrics

1 India has the largest biometrics database in the world

India is in the midst of the world's largest national identification number project. Its goal is to issue a 12-digit unique identity number, called Aadhaar, to every single resident. As of 1 January 2016, the project has gathered the fingerprints, iris scans and photos of more than 950 million citizens (75% of the population) – many of whom had no prior proof of their identity.

2 Your eyeprint will allow you to make payments

Eye-recognition technology has been used in airports and other high-risk sites for a long time. Now the technology has come to your smart phones which can be unlocked with an "eyeball selfie". Your eyeprint can also be used to log you into apps and validate mobile payments.

3 Facial recognition is being used to select the ads you see

Face-scanning tech on advertising screens is already being used by retailers so that they can show targeted content to customers. A face-detection camera at the top of the screen gathers data on the age and gender of a person and combines that with information about the location and time of day to determine what ads they see.

Biometric identifiers are split into two main camps

Visual

Fingerprints
Eyes – retina or iris
Face
Hand

Behavioural

Gait
Gestures
Typing rhythm
Mouse movements

To this you can also add:

- Chemical biometrics (DNA)
- Olfactory biometrics (odour)
- Auditory biometrics (voice)

Biometric identification requires three main elements

- 1 A scanning or reading device
- 2 Software which converts the scanned information into digital form
- 3 A database of biometric data for comparison

SOURCES

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THE GUNNEBO GROUP

Gunnebo is a global leader in security products, services and solutions with an offering covering cash management, safes and vaults, entrance security and electronic security for banks, retail, CIT, mass transit, public & commercial buildings and industrial & high-risk sites.

We make your world safer.

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