Coronavirus Aftermath:

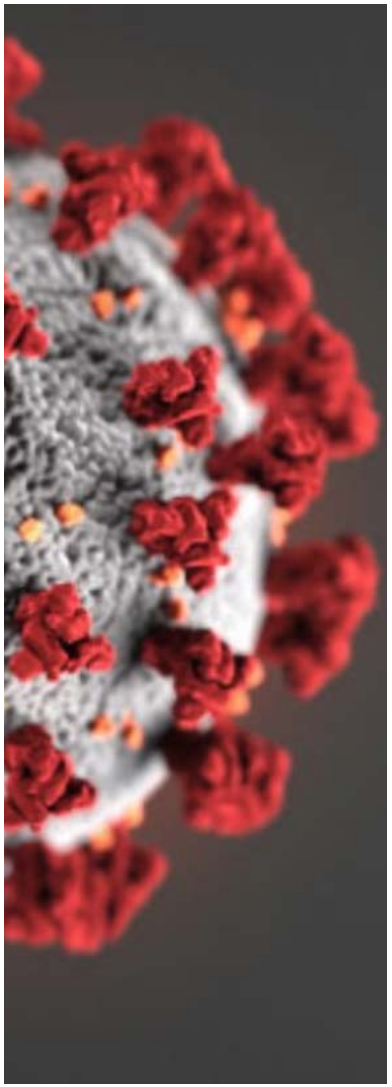
What is the New “Norm” Regarding Electronic Safety & Security?

Presented By:
Larry Reed, CEO – ZKTeco USA

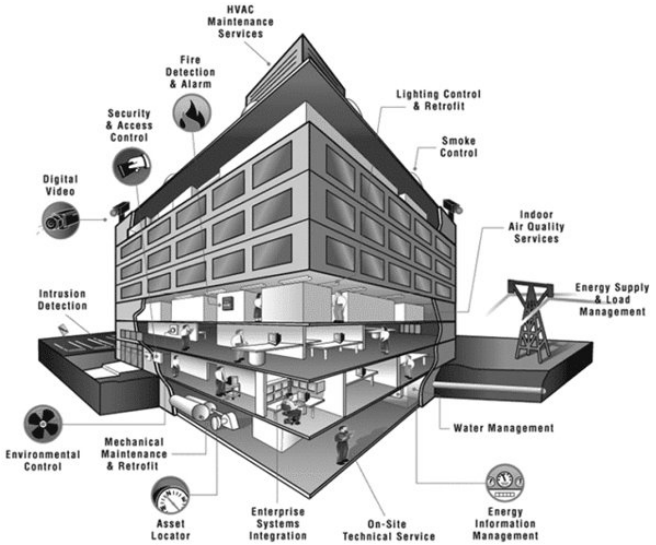
COURSE CURRICULUM

- Customer Security Priorities Before COVID-19
- Access Control 101 – Evolution
- Customer Business Priorities After COVID-19
- Why Thermal Recognition/Body-Temperature Detection (BTD) is Being Implemented
- Surveillance Camera vs. Access Control BTD Implementations
- Current & Emerging Products Integrated with BTD
- Introduction to Biometrics and Business Applications

CUSTOMER REPORTS … BEFORE COVID-19 CHANGED THE WORLD



BEFORE SAFETY & SECURITY



FIRE SUPPRESSION

Sensors

Panels

Monitoring

ACCESS CONTROL

Lock ‘n Key

Card Access

Biometrics

INTRUSION

Sensors

Panels

Monitoring

SURVEILLANCE

Cameras

NVR

Monitoring

Card Door Access Kits

Card + Fingerprint Door Access Kits

HID Compatible & ZKTeco Card Readers

Variety of Biometric Readers

Variety of Long-Range UHF & License Plate Recognition Readers

Variety of Turnstiles

Variety of Walkthrough & Handheld Metal Detectors

Variety of X-ray Package Scanners

ACCESS CONTROL EVOLUTION

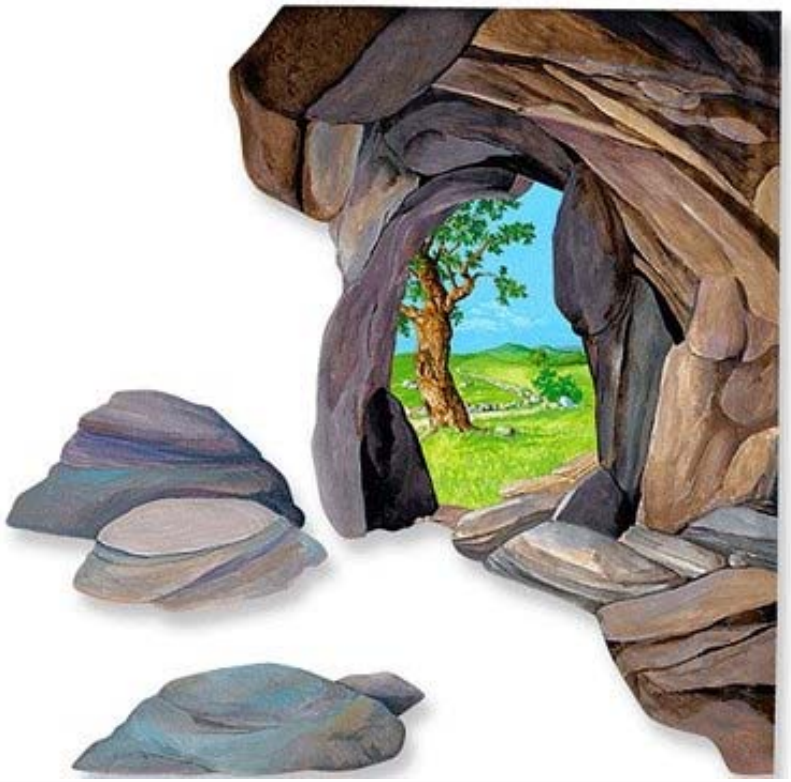
ACCESS CONTROL EVOLUTION (CAVES)

PROS:

- Cheap (rocks?)
- Secure (from nature)
- Durable

CONS:

- Very heavy, cumbersome
- Not secretive
- Not secure (from equally strong men)



ACCESS CONTROL EVOLUTION (METAL KEYS)

PROS:

- Cheap
- Light weight
- Easy to copy

CONS:

- Easy to copy
- Hard to manage & distribute
- Easy to lose or confuse keys

ACCESS CONTROL EVOLUTION (PUSH PIN DOOR LOCK)

PROS:

- Eliminates keys
- Simple to install
- Relatively inexpensive

CONS:

- PIN codes can be forgotten
- PIN codes discovered by bad guys
- No audit trail (if non-networked)

ACCESS CONTROL EVOLUTION (BAR/MAG/RFID)

Bar Code/ Mag Stripe/ Swipe

The employee slides or flashes his/her card through the card reader's slot.

Proximity Card

The card emits a radio frequency ID (RFID) signal to the card reader once within proximity.

ACCESS CONTROL EVOLUTION (BAR/MAG/RFID)

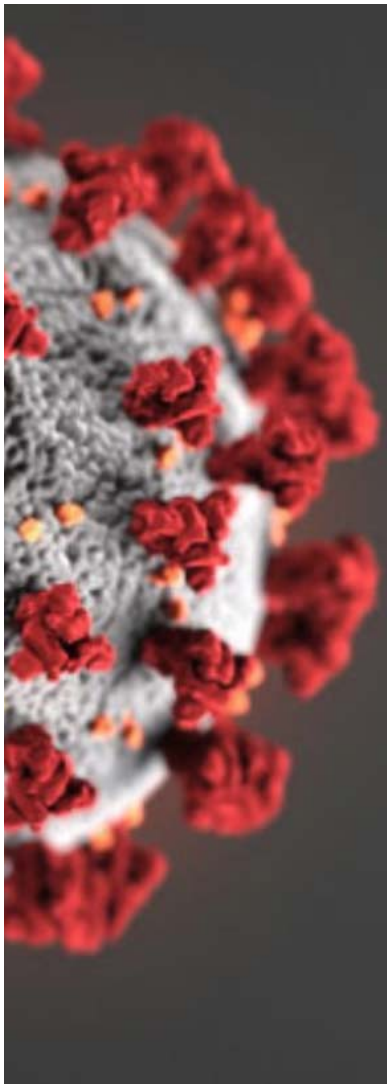
PROS:

- Produce audit trail
- Cheap
- No PIN codes to forget or misuse
- Cards not too easily copied
- Cards are light weight & easy to carry


INTRODUCING
amazon go

ACCESS CONTROL EVOLUTION (INTEGRATED BIOMETRICS)

CUSTOMER PRIORITIES AFTER COVID-19 CHANGED THE WORLD



HOW TO REOPEN BUSINESS?

TODAY

HOW TO REOPEN?

~~FIRE SUPPRESSION~~

~~ACCESS CONTROL~~

~~INTRUSION~~

~~SURVEILLANCE~~

Re-Installing Confidence

Government

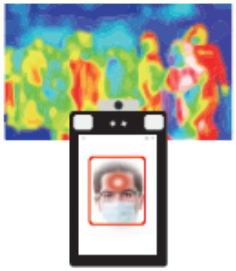
Employees

Customers

TODAY

BODY-TEMPERATURE

HOW DOES BODY-TEMPERATURE WORK?

STEP 01	STEP 02	STEP 03	STEP 04
Face Detection	**Energy Absorption**	**Temp. Value Display**	**Measurement Deviation +/-0.3℃**
The primary aim of face detection algorithms is to determine whether there is any face in an image or not. ZKTeco infrared temperature detection is like non-contact thermometers using infrared rays, which can be focused at a spot on a surface from a distance, reflected, or absorbed.	All matters, including the human body, emits energy in the form of heat; the higher the temperature of the body or any substances, the faster the molecules move, the more radiation IR thermometers can detect and measure. Generally speaking, a fevered person might emit more IR energy.	If there is a temperature difference between objects, including the surroundings, the IR difference will also be measured and calculated. If an object's temperature is the same as the surrounding environment, the net energy exchange will be zero.	ZKTeco's Access Control with temperature sensors takes advantage of this IR energy difference on temperature to produce a value for the targeted object and display the results for the system operator to monitor and record.
			

HOW DOES BODY-TEMPERATURE SURVEILLANCE WORK?

Black Body

Thermal Camera

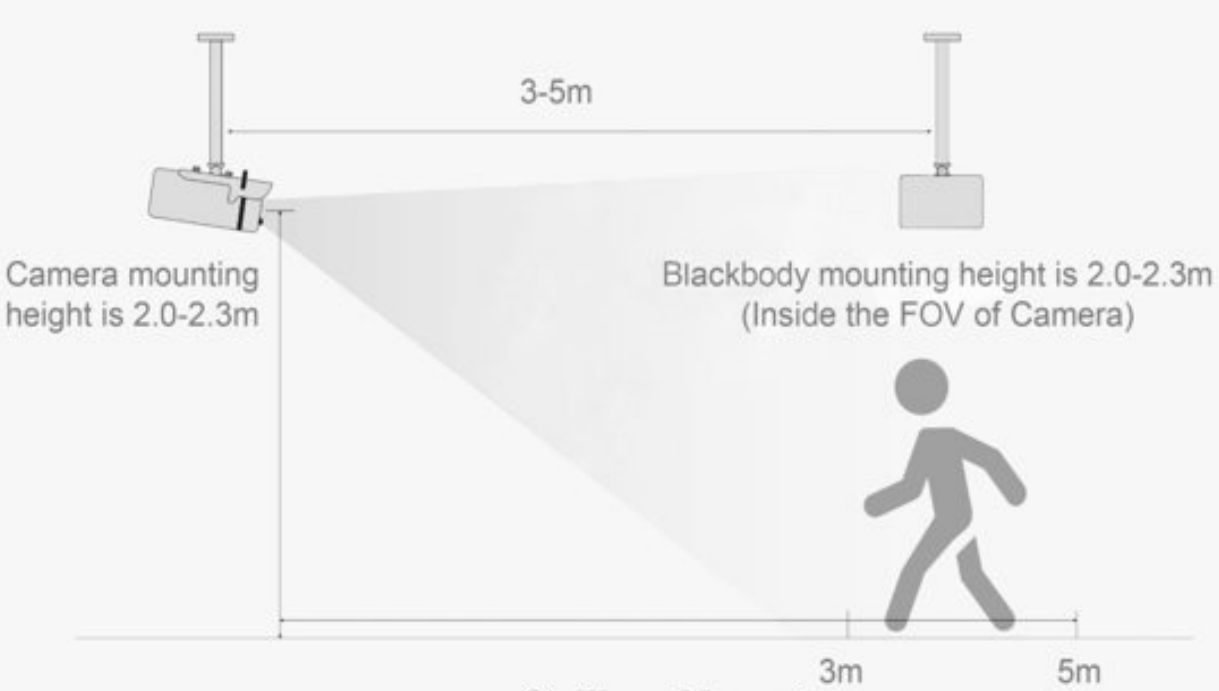
Face reader with integrated body-temperature detection

Video Recorder

Manned monitoring station running Face Recognition & thermal analytical software

HOW DOES BODY-TEMPERATURE *SURVEILLANCE* WORK?

Installation



Ceiling Mount

Installing on the Security Gate

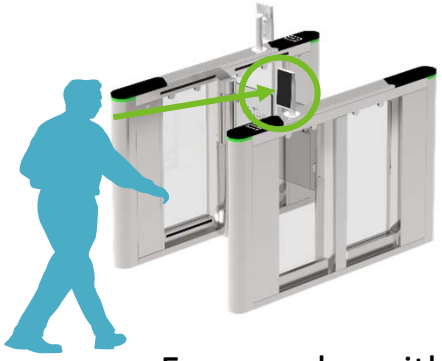
"Survey" Body-Temperature

Respond AFTER a body-temperature alert

HOW DOES BODY-TEMPERATURE ACCESS CONTROL WORK?

Black Body

Thermal Camera



Face reader with integrated body-temperature detection

Video Recorder

Manned monitoring station running Face Recognition & thermal analytical software

ACCESS CONTROL

SPECIFICATIONS:

- Ideal for access control & time attendance apps
- 8-inch touchscreen display
- Supports up to 50,000 faces & 5,000 palms
- Body-temperature detection (o.6°F < 18 inches)
- Mask detection (recognizes faces wearing a mask)
- Operates in total darkness & bright light (<50k Lux)
- Visible light camera (speed & remote face enrollment)
- Infrared light camera (accuracy)
- Powerful anti-spoofing engine
- Controls door lock, alarm, exit button, auxiliary input

VISITOR MANAGEMENT

SPECIFICATIONS:

- Ideal for self-service & event management apps
- 13.3-inch touchscreen display
- Supports up to 10,00 faces
- Supports fingerprint, QR & barcode recognition
- Body-temperature detection (0.6°G < 18 inches)
- Mask detection (recognizes faces wearing a mask)
- Integrated ticket printer
- Operates in total darkness and bright light (<50k Lux)
- Comms: TCP/IP, Wiegand

METAL DETECTION

SPECIFICATIONS:

- Walkthrough Metal Detector & body-temperature
- Reads temperature from wrist or forehead
- Read range 6 inches
- Accuracy +/- 1°F
- Temperature read intervals: 2 seconds


Fri
ZKTeco

CUSTOMER PRIORITIES AFTER COVID-19 CHANGED THE WORLD. THE NEW "NORM"

INDOOR/OUTDOOR FACE READER

SPECIFICATIONS:

- Ideal for access control & time attendance apps
- 8 – inch touchscreen display
- Weatherproof (IP68 & IK04 vandal resistant)
- Supports up to 50,000 face templates & cards
- Operates in total darkness & bright light (< 50k Lux)
- Comms: TCP/IP, Wiegand In/Out, RS485
- Visible light camera (speed & remote face enrollment)
- Infrared light camera (accuracy)
- Powerful anti-spoofing engine
- Controls door lock, alarm, exit button, auxiliary inputs


RECOGNITION
IN UNDER 0.3 SECONDS

BIOMETRICS

BIOMETRICS TODAY IS PREVALENT

Today, who can deny the popularity of the smart phone and the security and convenience provided by its fingerprint sensor & face camera.

SIMPLE BUSINESS APPLICATIONS FOR BIOMETRICS

When a teacher sees a suspicious bad guy outside during recess, with a 1-second glance at a face recognition camera, the door will immediately unlock and lock OUT the bad guy.

Schools

When healthcare workers have their hands occupied, with a 1-second glance at a face recognition camera, the door will immediately unlock HANDS FREE.

Healthcare

When an officer has a suspect in tow and needs door access, with a 1-second glance at a face recognition camera, the door will immediately unlock HANDS FREE.

Corrections

SIMPLE BUSINESS APPLICATIONS FOR HVAC

Save money on energy.

Make employees accountable for switching on & off utilities including HVAC and light.

BIOMETRIC APPLICATIONS FOR RETAIL

Prevent injury, fines & lawsuits by safeguarding dangerous equipment with biometric kill switches.

OSHA fines can be huge.

BIOMETRIC APPLICATIONS FOR RETAIL

Biometrics ideal for unattended warehouse deliveries.

Why pay employees overtime to receive deliveries?

BIOMETRIC APPLICATIONS FOR RETAIL

Revenue by preventing employees & customers from discarding recyclables.

Throwing out recyclables is like throwing money out the window.

SIMPLE BUSINESS APPLICATIONS FOR BIOMETRICS

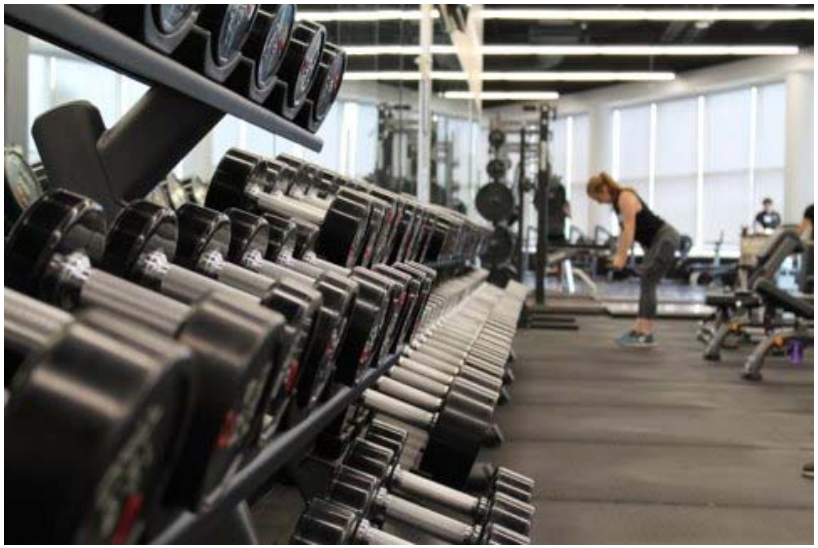
Schools validating student attendance.

- Schools receive government money based on student attendance.
- Parents know where their children are.

SIMPLE BUSINESS APPLICATIONS FOR BIOMETRICS

Health clubs use biometric readers to prevent members from sharing ID cards

Protects their membership revenue stream.



SIMPLE BUSINESS APPLICATIONS FOR BIOMETRICS

Starting and customizing your car.

- Unlock doors with no worry of keys
- Start your ignition
- Automatically position your seat
- Pre-set your favorite music

SIMPLE BUSINESS APPLICATIONS FOR DISPENSING

Secure drug safes.

Healthcare providers can prevent drug theft by incorporating biometrics into their drug safes.

SIMPLE BUSINESS APPLICATIONS FOR BIOMETRICS

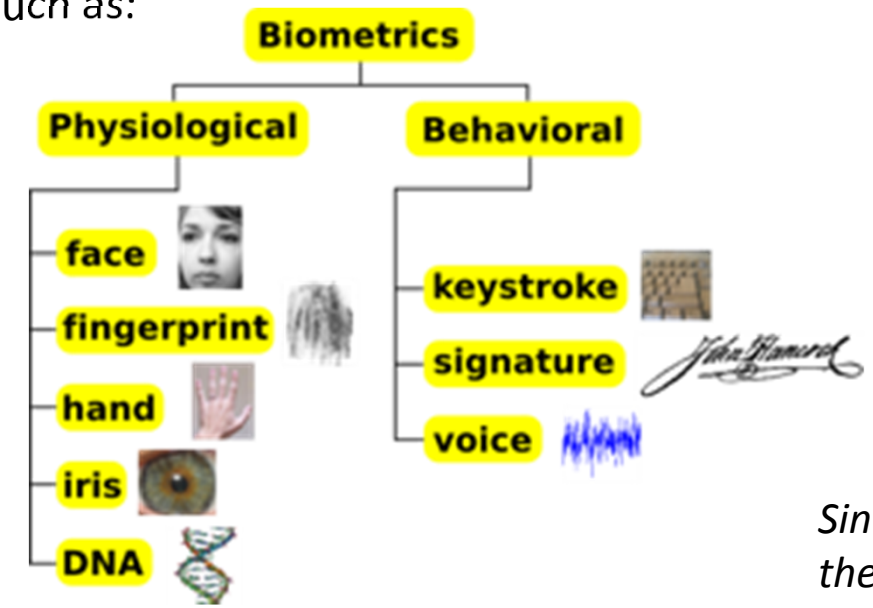
Entering your home, office or hotel room.

We're already starting to see some offices, homes, and hotel rooms with this technology because it's becoming so much more affordable.

WHAT ARE BIOMETRICS?

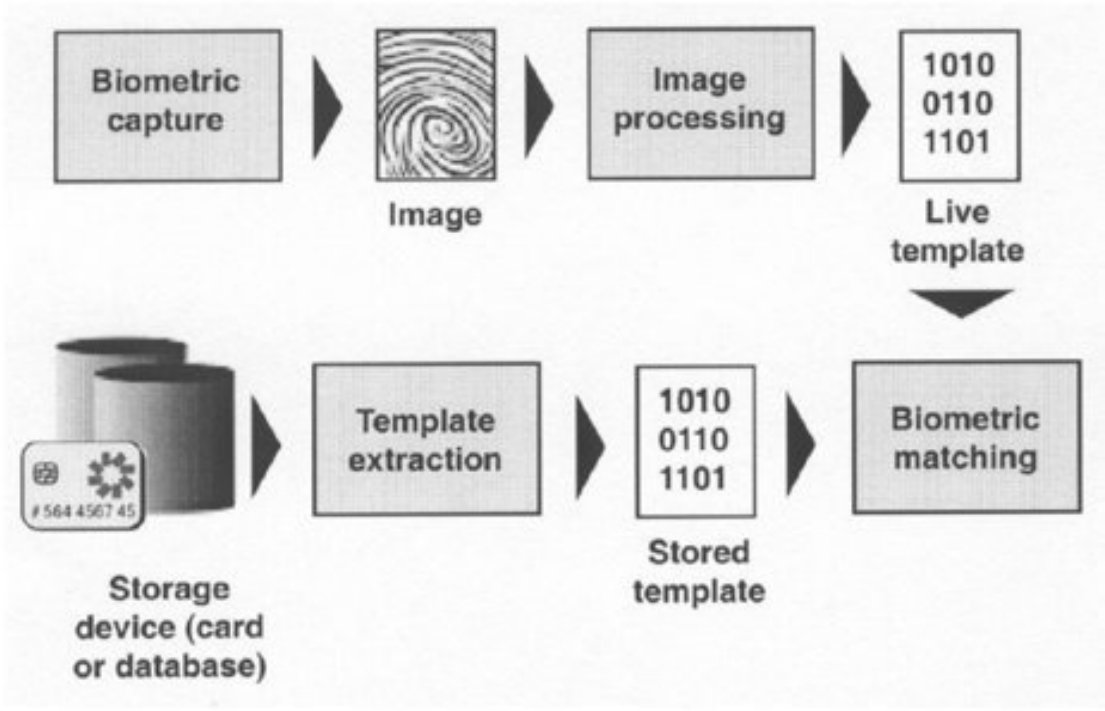
WHAT ARE BIOMETRICS?

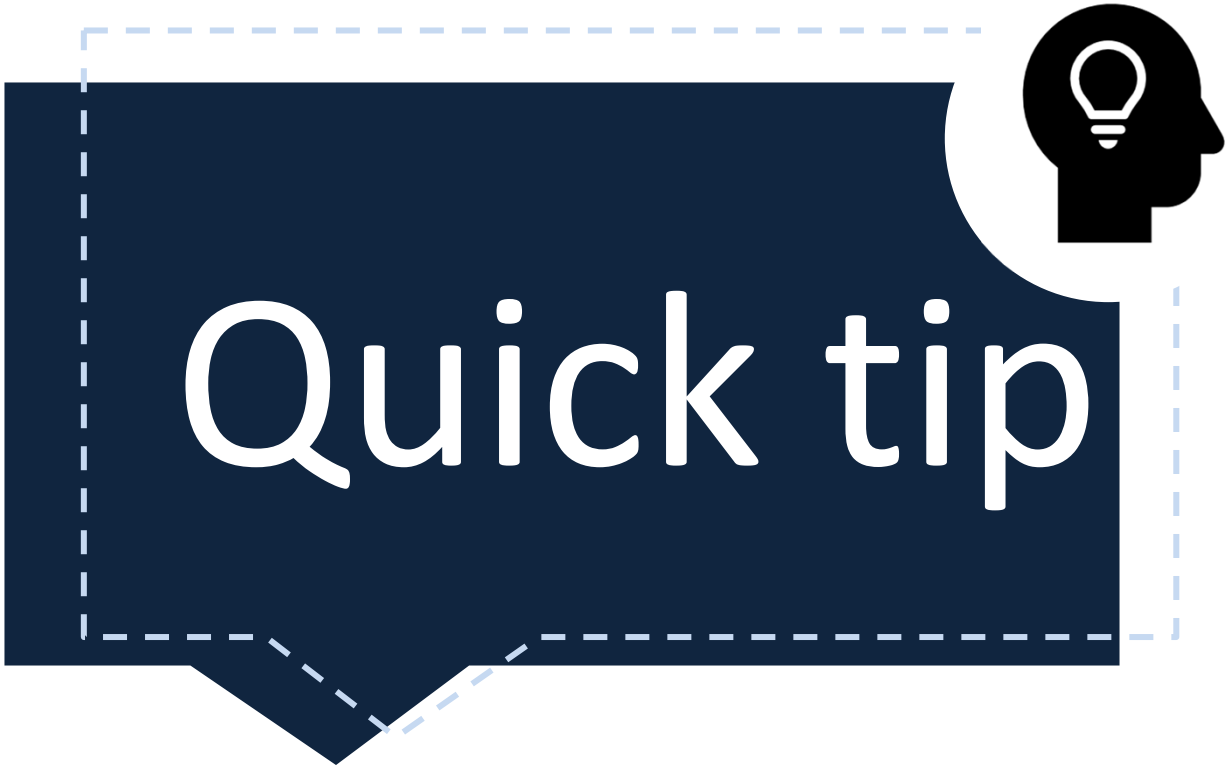
Biometrics refers to technologies that measure and analyze human body characteristics, such as:



Since biometric identifiers are unique to individuals, they are more reliable in verifying identity than token and knowledge-based methods.

HOW DOES BIOMETRIC USER-AUTHENTICATION WORK?



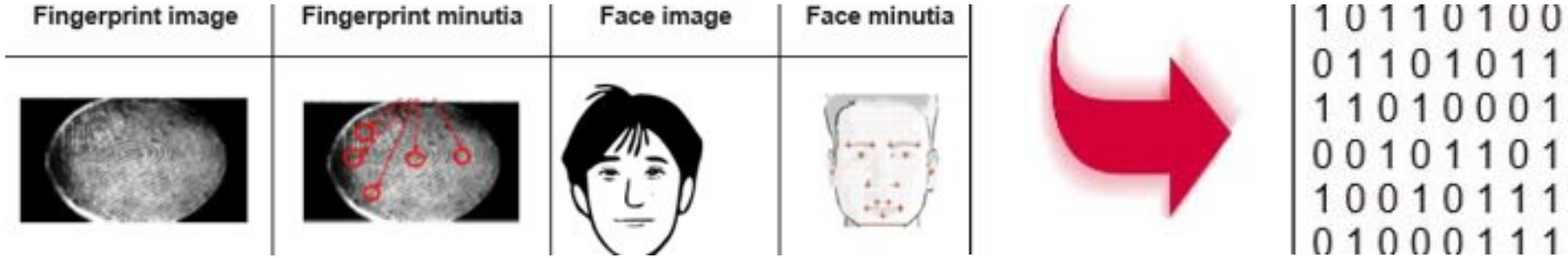

Quick tip

WHICH BIOMETRIC READER SHOULD I RECOMMEND?

Technology	Pro	Con
Fingerprint	Least expensive	Accuracy effected by skin surface (i.e. cuts, scrapes), difficulty recognizing users age 60+ years & young children.
Face (using Infrared light source)	100% touchless. Highly accurate. Works in total darkness.	Doesn't work well outdoors. Requires users to physically enroll on the face reader. Some customers have privacy concerns
Face (using Visible light source)	100% touchless. Works well outdoors. Allows users to remote enroll their face (from mobile device or computer)	More expensive than fingerprint and infrared face readers, some customers have privacy concerns.
Vein-pattern (finger and palm)	Extremely accurate. No privacy concerns	Requires users to physically enroll on the face reader.

SHOULD CUSTOMERS HAVE PRIVACY CONCERNS USING BIOMETRICS?

Biometric devices do not capture and store actual images. Instead, they collect only a tiny sub-set of sample data (aka minutia points), convert it into binary data using a mathematical algorithm, and then store only a digital representation of the fingerprint and/or face image called a TEMPLATE:



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Thank You