



ideco[™]
certainty through identity

The ultimate set of keys



The ultimate fingerprint terminals



Cost-effective protection throughout your organisation

How to protect your bottom line

Cutting cost, minimising risk

Accuracy

- Eliminates the cost and administration associated with backup or bypass systems (PINs, cards, passwords etc).
- World-leading algorithms designed to manage even the most damaged fingerprints accurately and consistently in the harshest environments.

Capacity

- Investment is protected as the solution is able to grow and adapt to an organisation's changing needs.
- Fully scalable solutions to address a variety of applications in organisations of any size.

Security

- Eradicates the threats and expense of security breaches such as buddy clocking, key, card, PIN and password theft.
- Ultra-secure matching thresholds ensure stringent enforcement of security policies.

Integration

- Does away with the cost and effort involved in running multiple systems, interfaces and databases.
- A single solution for integration into a diverse range of business processes dependent on identification of individuals e.g. payroll, time and attendance, health and safety, IT, security and HR applications.

Speed

- Reduces the number of required terminals and eliminates delays and lost productivity resulting from queue times.
- Industry-leading matching speeds ensure maximum throughput and convenience.

Ideco + Sagem Sécurité = unbeatable return on investment

Sagem Sécurité controls over 2 billion fingerprints in more than 100 countries

50 000+ Sagem Sécurité terminals installed across SA, securing access for over 2 million people

Accurate identification and verification in:

Vertical markets

- Manufacturing • Warehouses • Offices • Mines
- Stadia • Leisure parks • Residential estates
- Business parks • Retailers • Health clubs
- Golf estates • Schools • Universities • Colleges
- Construction • Banking • Government
- Ports • Airports • Logistics

Horizontal markets

- Enterprise solutions • Physical access • Logical access
- Time & attendance • Payroll • Building management
- Visitor management • Health & safety • Workforce access
- Activity management • Home & office automation
- Industrial automation • Transaction authorisation
- Higher security • Account management • Loyalty & membership



everyone ✓ everytime ✓ everywhere ✓

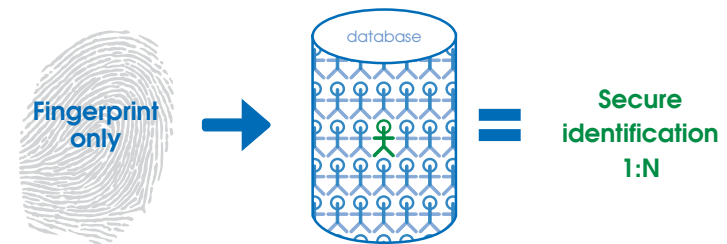
Sagem Sécurité = genuine identification, genuine verification

Absolute certainty of people's identities

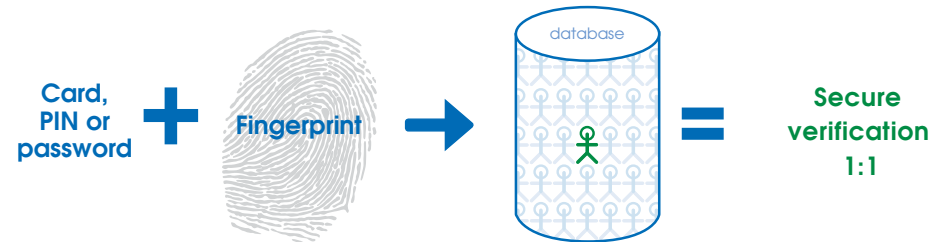
Identification and verification by Sagem Sécurité technology, compared to cards, PINs and passwords

A solution based on Sagem Sécurité terminals can work in identification mode, verification mode or a combination of both.

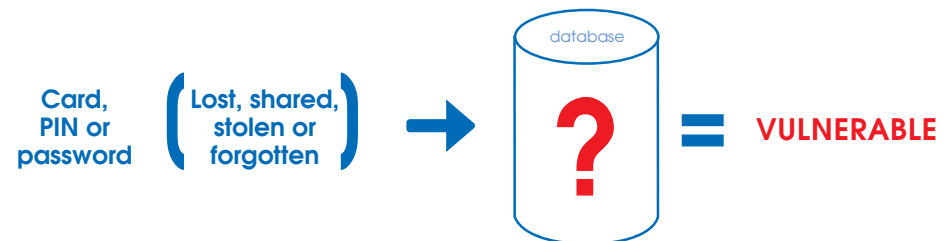
Identification compares a person's fingerprint to all records in the database, returning an exact match and positively identifying them. This process is called one-to-many or 1:N.



Verification matches a user's fingerprint data with additional information in their possession – for example a password, ID number, PIN or card. This process is called one-to-one or 1:1.



Cards only control the access of authorised pieces of plastic but not who is in possession of the card, which can be shared or stolen. Similarly, the use of PINs and passwords requires an individual to punch in a specific code to gain entry, but who actually entered the code cannot be determined as PINs and passwords can also be shared, stolen or forgotten.

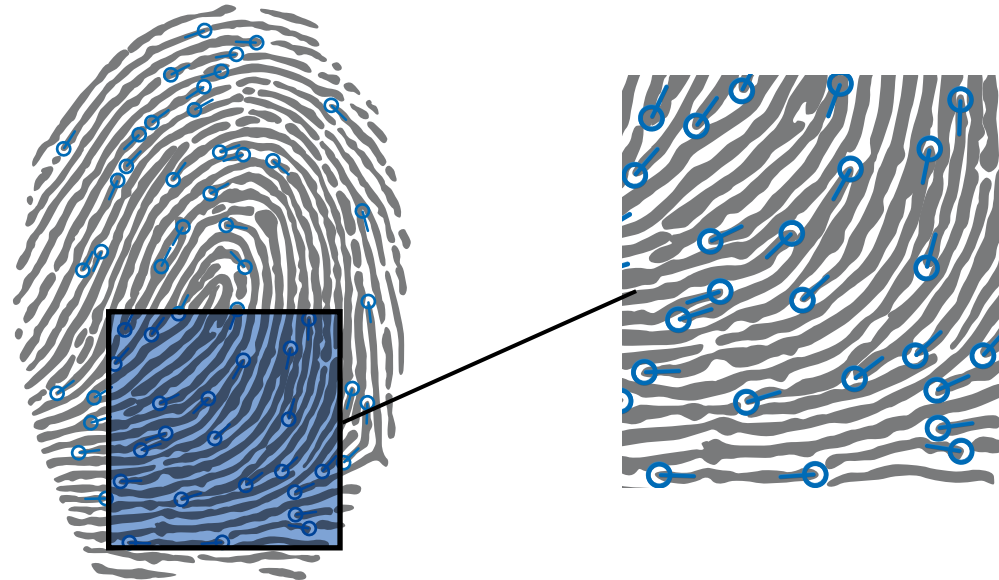


Sagem Sécurité + Ideco = access controlled

Sagem Sécurité algorithms = more true minugia points

Minimal rates of false acceptances and rejections routinely caused by lesser biometrics

Graphic of true minugia points showing where fingerprint ridges split or end



Referred to as a template, the unique pattern formed by true minugia points distinguishes one fingerprint from all others.

Sagem Sécurité fingerprint scanners are approximately 50% larger than most competing scanners and thus capture more true minugia points, creating highly accurate templates.

Other technologies also register false minugia points caused by injury or dirt. This reduces template accuracy even further, causing dangerously high levels of false acceptances and false rejections.

In contrast, Sagem Sécurité's algorithms recognise and exclude these false minugia, resulting in more accurate templates.

Sagem Sécurité's superior scanners and algorithms deliver faster and more accurate identification than any other fingerprint technology.

This world leadership in biometrics is based on Sagem Sécurité's experience dating back to 1979, including partnerships with international law enforcement and government agencies.



Sagem Sécurité =
unrivalled accuracy
from true minutia points

Biometrics explained

Ergonomic design

The design of Sagem Sécurité fingerprint terminals results from extensive experience in biometric solutions. The size of the scanner, and the angle of its position, ensures optimum fingerprint-capture and ease of use.

Analytical algorithms

Testing and benchmarking surveys by the US National Institute of Standards & Technology (NIST) and NIST Minutia Interoperability Exchange (MINEX) consistently rank Sagem Sécurité algorithms among the world's top performers.

Sagem Sécurité algorithms are entrusted to manage more than 2 billion fingerprints worldwide.

Fast, accurate and reliable fingerprint matching is imperative for Sagem Sécurité clients, particularly those such as government agencies.

Matching speed

Sagem Sécurité technology is renowned as the world's fastest and most accurate, for example: Fingerprint matching speeds in Sagem Sécurité logical access systems (MorphoSmart) against a database of 10 000 users:

- Identification: less than 1 second
- Verification: less than 0.8 seconds

Fingerprint matching speeds in Sagem Sécurité physical access systems (MorphoAccess 500 series)

MorphoAccess terminal options matrix																
	MorphoAccess Range	Weather Resistance	Internal Relay	User Capacity	WiFi Option	Matching Mode	Internal Card Reader	Matching Options								
								FP Only	PIN Only	PIN + FP	Card Only	Card + PIN	Card+ FP	Card + BioPIN	Card + PIN + FP	Card + PIN + BioPIN
	MA 100	IP53	Yes	500	No	Identification only	No	Yes	No	No	No	No	No	No	No	No
	MA 110	IP53	Yes	500	No	Multi-Factor	Yes (HID iClass)	Yes	No	No	Yes	No	Yes	No	No	No
	MA 120 W	IP53	Yes	500	No	Multi-Factor	Yes (MiFare)	Yes	No	No	Yes	No	Yes	No	No	No
	MA 120 D	IP53	Yes	500	No	Multi-Factor	Yes (MiFare/DESfire)	Yes	No	No	Yes	No	Yes	No	No	No
	J-Series Bio	IP65	Yes	500	Yes	Identification only	No	Yes	No	No	No	No	No	No	No	No
	J-Series Bio Extended	IP65	Yes	3 000	Yes	Identification only	No	Yes	No	No	No	No	No	No	No	No
	J-Series Dual	IP65	Yes	500	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	No	No	Yes	No	Yes	No	No	No
	J-Series Dual Extended	IP65	Yes	3 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	No	No	Yes	No	Yes	No	No	No
	MA 500+	IP30	Yes	3 000	Yes	Identification only	No	Yes	Yes	Yes	No	No	No	No	No	No
	MA 500+ Extended	IP30	Yes	50 000	Yes	Identification only	No	Yes	Yes	Yes	No	No	No	No	No	No
	MA 520+ D	IP30	Yes	3 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MA 521+ D	IP30	Yes	3 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MA 520 D Extended	IP30	Yes	50 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	MA 521 D Extended	IP30	Yes	50 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	OMA 520 D	IP65	Yes	3 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	OMA 521 D	IP65	Yes	3 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	OMA 520 D Extended	IP65	Yes	50 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	OMA 521 D Extended	IP65	Yes	50 000	Yes	Multi-Factor	Yes (MiFare/DESfire)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Multifactor (Merged) mode = Reader is able to dynamically switch between Identification and various Verification Modes. During enrolment each user can be assigned any one of these modes																
In this mode the user's PIN number is the same as the system identifier number																

Identification mode:

- 1 000 users in less than 0.9 seconds
- 3 000 users in less than 1.1 seconds
- 10 000 in less than users 1.8 seconds

Verification mode:

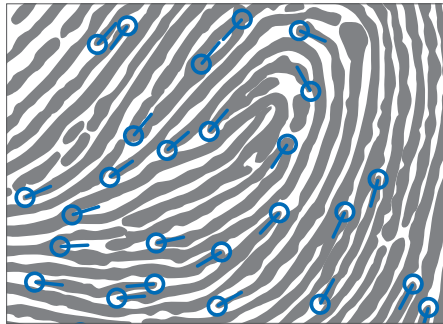
1:N in 0.7 seconds

Capacity

The Sagem Sécurité range of terminals caters for implementations of varying sizes. The database capacity of Sagem Sécurité terminals facilitates the enrolment of:

- 500 users (1 000 fingerprint capacity)
- 3 000 users (6 000 fingerprint capacity)
- 50 000 users (100 000 fingerprint capacity)

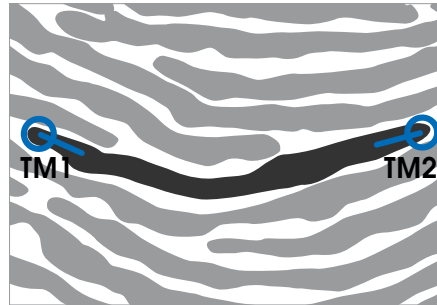
The terminals also offer multifactor verification with MiFare and DESfire contactless cards, fingerprints and PINs, as per the matrix opposite:



Networking capabilities enable the terminals to address all security applications – from one-door control to the protection of buildings and vast infrastructures.

True minutia points

Typically, a fingerprint has around 80 minutia points. These are the positions on a fingerprint where ridges split or end – as shown below.



A damaged fingerprint could have 150 minutia points, of which some 50% may be false. If these false points are misinterpreted as true minutiae, there is the obvious likelihood of mismatching.

Accuracy

Consistently accurate fingerprint matching relies on algorithms that:

1. Detect and identify the positions of true minutia points
2. Predict the positions of obscured, distorted or erased true minutia points
3. Recognise and exclude false minutia points created by injury, dirt or liquid.

The graphic illustrates a single ridge on a fingerprint. At each end of the ridge there is a termination marked by true minutia points: TM1 and TM2.

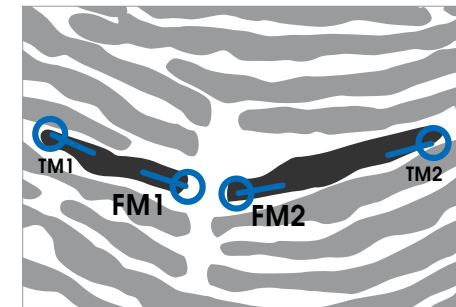
False minutia points

Sagem Sécurité's ability to correctly detect false minutiae and predict missing minutiae has been consistently proven around the world in government systems comprising many millions of fingerprint records.

These abilities are also clearly proven in environments that typically exhibit the worst quality fingerprints: mining, construction, agriculture, manufacturing and pension payments.

Sagem Sécurité's analytical algorithms have been developed to recognise and reject data produced by distortion, injury, dirt or liquid and accurately predict missing fingerprint information.

If the continuity of a fingerprint ridge is interrupted by an injury, two additional terminations are created on this ridge, these are false minutiae. In reality, injuries commonly intersect multiple ridges, resulting in dozens of false minutia points, as marked FM1 and FM2 in the graphic below.



It is this type of false data that continuously causes lesser biometric systems to produce false acceptances and false rejections when dealing with damaged or dirty fingerprints.

Integration

To maintain its world-leading rankings, Sagem Sécurité continuously refines its fingerprint technology to allow optimum integration into related software and technologies, such as payroll, time and attendance, health and safety, IT, security and HR applications.

Scanners

Sagem Sécurité scanners conform to biometric industry benchmarks defined by NIST, MINEX and NIST PIV (Personal Identity Verification).

These standards ensure that Sagem Sécurité scanners are the ideal choice for professional fingerprint identification solutions.



These four images illustrate fingerprint terminals with a scanning surface smaller than that used by Sagem Sécurité. A smaller scanner surface captures a much smaller set of minutia data during enrolment. These enrolments are likely to result in higher false rejection rates unless exactly the same surface area is subsequently scanned.

The size of a scanner's surface area determines the amount of fingerprint and minutia data that can be captured: the larger the surface area, the larger the amount of data.

The images on the right are of a fingerprint captured on a Sagem Sécurité MSO scanner.

The coloured shapes superimposed on the Sagem Sécurité print show the surface area captured by four other scanners.

As demonstrated here, not one of the four smaller scanners captures nearly as much of the data acquired by the Sagem Sécurité scanner. Smaller scanners neglect valuable minutia points on the periphery of the fingerprint, thus requiring users to place their finger in exactly the same position each time they use the reader.

Sagem Sécurité scanners capture much more data, so a user can place their finger differently every time they scan and a positive match will always be made.

Optical vs capacitive and thermal

Sagem Sécurité scanners use high-end optical sensors. An advantage of optical scanners is that they can be produced with a much larger surface than capacitive and thermal sensors.

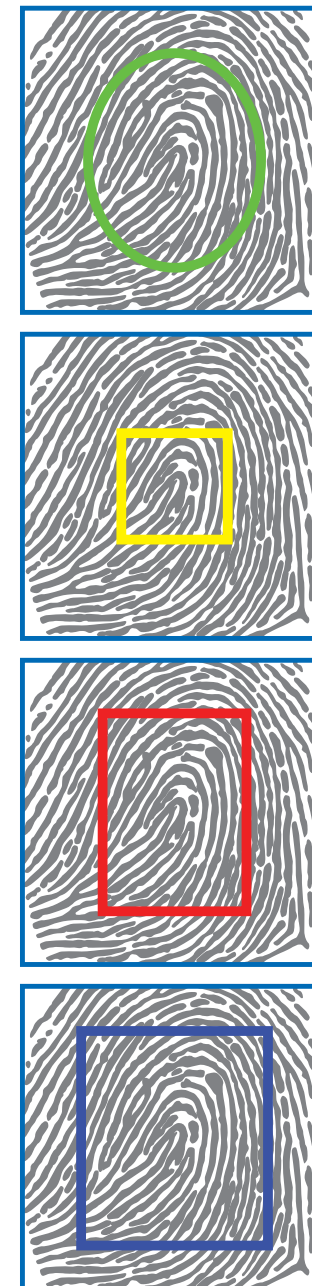
The Sagem Sécurité reflecting prism is situated within the scanner and can withstand the effects of Electro-Static Discharge (ESD) that commonly disable capacitive scanners.

Thermal scanners also suffer abrasive damage during use and are therefore much less durable than optical scanners.

The key to a perfect match

A highly competent fingerprint scanner must operate in conjunction with algorithms that accurately analyse and encode scanned images.

Sagem Sécurité's superior scanners and algorithms deliver faster and more accurate identification than any other fingerprint technology based on the scanners' ability to capture accurate data as well as the algorithms' analytical and predictive capabilities.



MorphoAccess

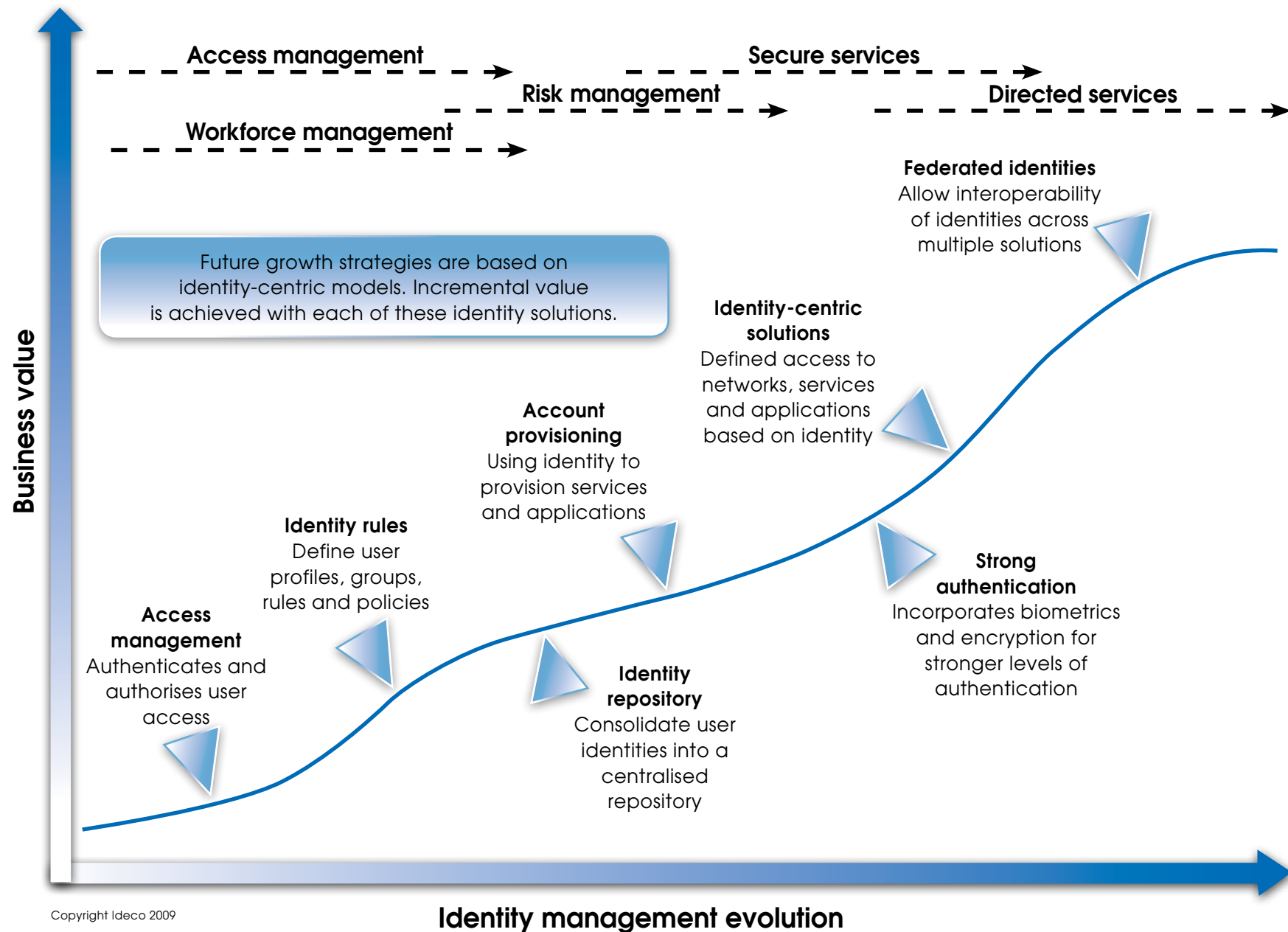
Please place
your finger

02:01

MAR 27



Sagem Sécurité + Ideco = infinite applications, unlimited solutions



Sagem Sécurité + Ideco = a future-proof investment

Ideco Group Limited

Established in 2001 and listed on the AltX board of the JSE, Ideco is a leader in Identity Management Solutions and biometric applications. The Group employs over 100 staff in Johannesburg and Pretoria and is South Africa's sole distributor of Sagem Sécurité fingerprint terminals.

Ideco Certified Partners

Ideco has established a national network of Certified Partners, comprising all of South Africa's most successful companies in the fields of physical and logical security, workforce management and identity solutions. These Partners have integrated Sagem Sécurité fingerprint biometrics with the world's leading systems and applications.

In association with Ideco, the Partners provide practical consulting, sales and support services to their clients across southern Africa.

Service and support

As the official Sagem Sécurité-approved repair and maintenance centre in South Africa, our service team works with the Partners and their clients to ensure that all Sagem Sécurité terminals deliver optimum levels of performance.

National distribution

As one of the world's largest stockists and distributors of Sagem Sécurité terminals, we provide our Partners and their clients with the fastest possible access to Sagem Sécurité products and services for biometric terminals.

Product and service training

Our training programmes provide the Partners and their clients with product knowledge that maximises and maintains all the benefits delivered by Sagem Sécurité.

- Extensive biometrics training:
 - Understanding biometric principles and theory
 - Sales and marketing training
- Technical certification training, covering:
 - System design and specification
 - System installation and configuration
 - System support and first-level maintenance

Commercial biometric applications

Ideco and its partner channel are responsible for the implementation of over 50 000 Sagem Sécurité terminals in SA to date. This equates to over 2 million people transacting daily on Sagem Sécurité terminals for the purposes of time and attendance and access control in a diversity of professionally-managed, security-conscious businesses.

World's largest biometric conversion

Ideco's conversion of the SA Department of Home Affairs' paperbased fingerprint records is still the largest project of its kind in the world, having processed some 40 million paper records for conversion to an electronic format.

Integration with SAPS

Ideco has worked with Sagem Sécurité and the South African Police Service on its Automated Fingerprint Identification System. Through AFISwitch, Ideco operates the only commercially-available, automated link to the SAPS criminal record database.

Partner of choice

Integrating Sagem Sécurité's fingerprint technology into your business applications will prove to be fully scalable to expand into:

- Future online identity verification services;
- Integrated identity management solutions.

everyone  everytime  everywhere 



Sagem Sécurité = fingerprint terminals for every application



MA 500+

For access and time & attendance
Up to 50 000 users
PoE and optional WiFi
Available MiFare/DESfire options - MA 520+ D



OMA 520 D

IP65 for access and time & attendance
Up to 50 000 users
PoE and optional WiFi
MiFare and DESfire contactless smart card reader



MA 100

For access and time & attendance
Up to 500 users
Identification in 0.7 seconds or less
Available MiFare and iClass options



MA 120 W

For access and time & attendance
Up to 500 users
Identification in 0.7 seconds or less
Includes contactless MiFare reader



High-volume enrolment
PC login applications
Harsh environments
Embedded verification software licence option

MSO 300/1300

For logical access
ID management
PIV-compliant



MARC

Robust and portable
For access and time and attendance
Compatible with MA 200, MA 500 and MA 500+ series



MA J Series

IP65 access control terminal for indoor and outdoor use
PoE and optional WiFi
Available MiFare and DESfire options - J Dual
Standard 500 users upgradeable to 3 000 users



Software

Fully integrated enrolment module
Centralised biometric template management
Integration tools and libraries



Cutting cost, minimising risk

Accuracy

Improve rules and records

Capacity

Complete identity management

Security

Minimise risk and liability

Integration

Integrated work force management

Speed

Improved productivity and efficiency

Through its certified partners Ideco is the sole SA distributor of Sagem Sécurité's fingerprint biometrics

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