



Technology for State and Local Government

Biometric Maryland.

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About Us

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About the TALK Program



Helps build leadership skills in students from immigrant families
Provides mentors to help students grow academically, professionally,
socially, and personally.

Our Goal...

To provide understanding on how biometrics could be a practical solution for many current challenges.



<https://goo.gl/EXQWoc>

Agenda

1. Overview of Security, Mobility, and Biometric Technology
2. Case Studies and Analysis
3. Biometrics and the Future

1.

SECURITY AND MOBILITY: BIOMETRICS

What are they in today's world and how are they made better through biometric technology?

Definitions

Mobility Technology

Access information
anywhere, anytime.

“Smartphone Sales
Surpassed One Billion Units
in 2014”

-Gartner

<http://www.gartner.com/newsroom/id/299681>

7

Security Technology

Better protection
from threats

“Hacks of OPM databases
compromised 22.1 million
people...”

-The Washington Post

Biometric Technology

Analyzing human
characteristics

Physiological:

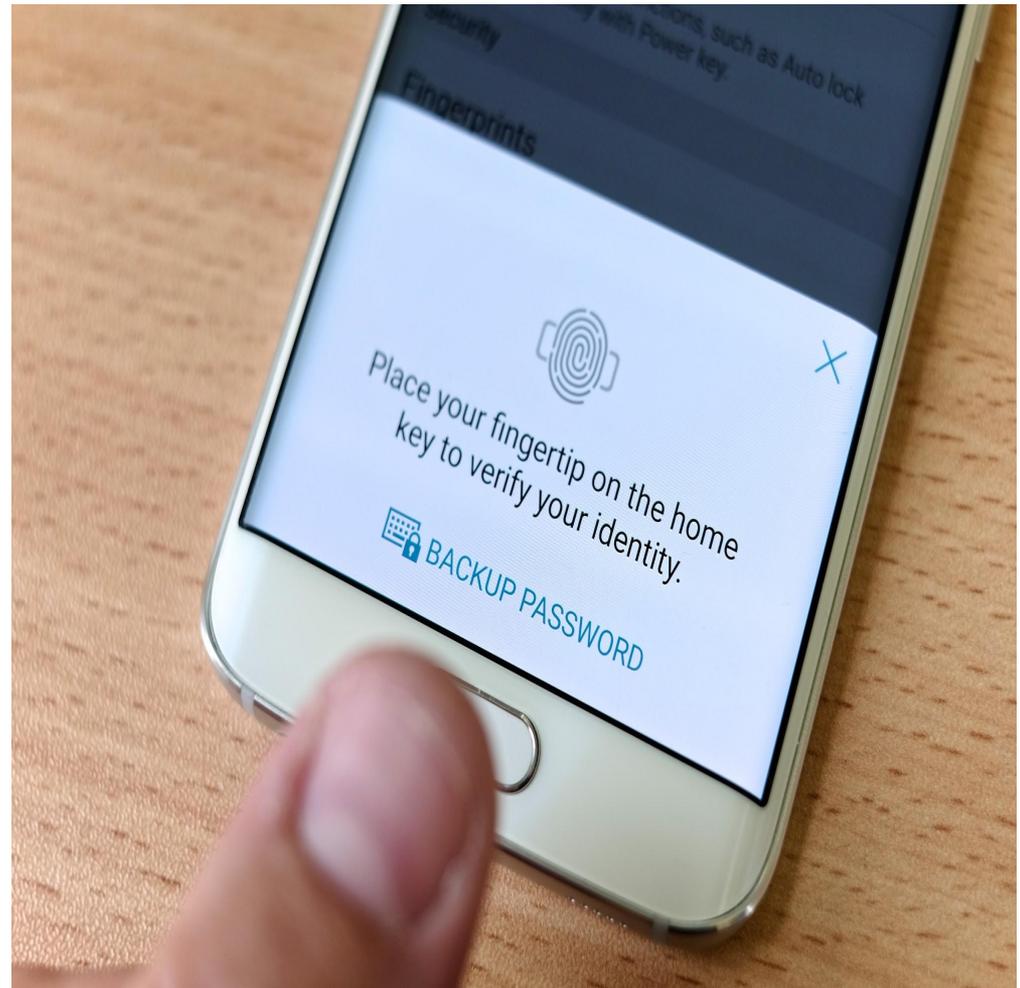
fingerprint, palm veins, face
recognition, DNA, palm
print, hand geometry, iris
recognition, retina.
odour/scent.

Behavioral:

typing rhythm, gait, voice,
dynamic signature

Biometrics Today

On many phones and even on certain door locks, fingerprint scanners represent a recent development in biometric technology that offer both security to users while still maintaining a quick means of access.



Biometrics Today

Already the most popular alternative to banking passwords in many countries, fingerprint scanners are also beginning to become the norm and standard throughout many banks, internationally.



<http://goo.gl/3HNJYc>

Biometrics Today

First developed in 1965, dynamic signature is a form of biometric technology that analyzes a person's signature in order to confirm an identity. Today, dynamic signatures can be found in many retailers with a POS system.

<http://tinyurl.com/qagg32o>
<http://tinyurl.com/p8582op>



<http://goo.gl/dv17Az>

Biometrics: New Applications

Used daily in our lives, biometric technology is a well-known system that is finding new modern applications in areas such as network security.



<http://goo.gl/vXJrZg>

Traditional vs. Biometrics

Traditional System:

Many current systems used to secure data and information in businesses, generally revolve around **strict guidelines** for employees and **long passwords**.

Although this security system can provide a degree of security, this system is nowhere close to providing full protection in a simple and efficient method.

The screenshot displays a password strength checker interface with four examples. Each example includes a 'Choose a password:' label, a password input field with a strength indicator (dots), the password text, a 'Password strength:' label, and a color-coded rating. A 'Re-enter password:' field is also present for the first example. The minimum length requirement is consistently 'Minimum of 8 characters in length.' for all examples.

Example	Password	Strength Rating
1	123456789	Weak
2	98765432	Fair
3	987654321	Weak
4	98765432A	Strong

<http://tinyurl.com/qf66tuh>

Traditional vs. Biometrics

Biometrics System:

A system used to secure facilities, protect access to computer networks, counter fraud, identify individuals, and fight various types of crimes, biometric technology is a **practical, realistic, and tested solution** to some of our newest security challenges.

In addition, biometric technology, unlike conventional security systems, is **easy and simple to use**. With biometric technology, long passwords could be replaced with finger scans!

How can biometric technology be so effective?

Because biometric technology relies on physiological and behavioral characteristics, biometric technology presents a security system that relies on a source that is **unique, that cannot be shared, that cannot be copied, and that cannot be lost**.

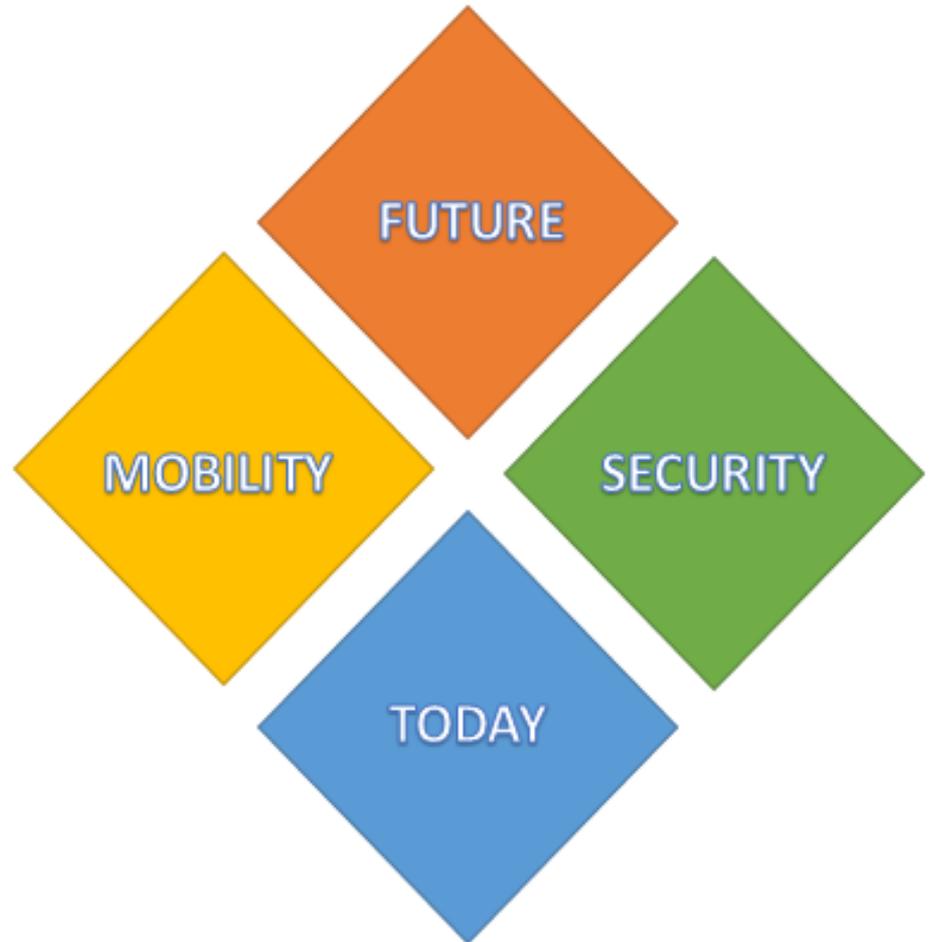
Biometric technology, in short, could aid current security systems and improve protection of data.

A Future Made with Biometrics

Today:

With increasingly outdated security measures and inefficient methods of obtaining sensitive information, modern businesses have been slowed by inefficiency, in the face of more advanced challenges and greater developments in technology.

However, biometric technology can help fix this problem!



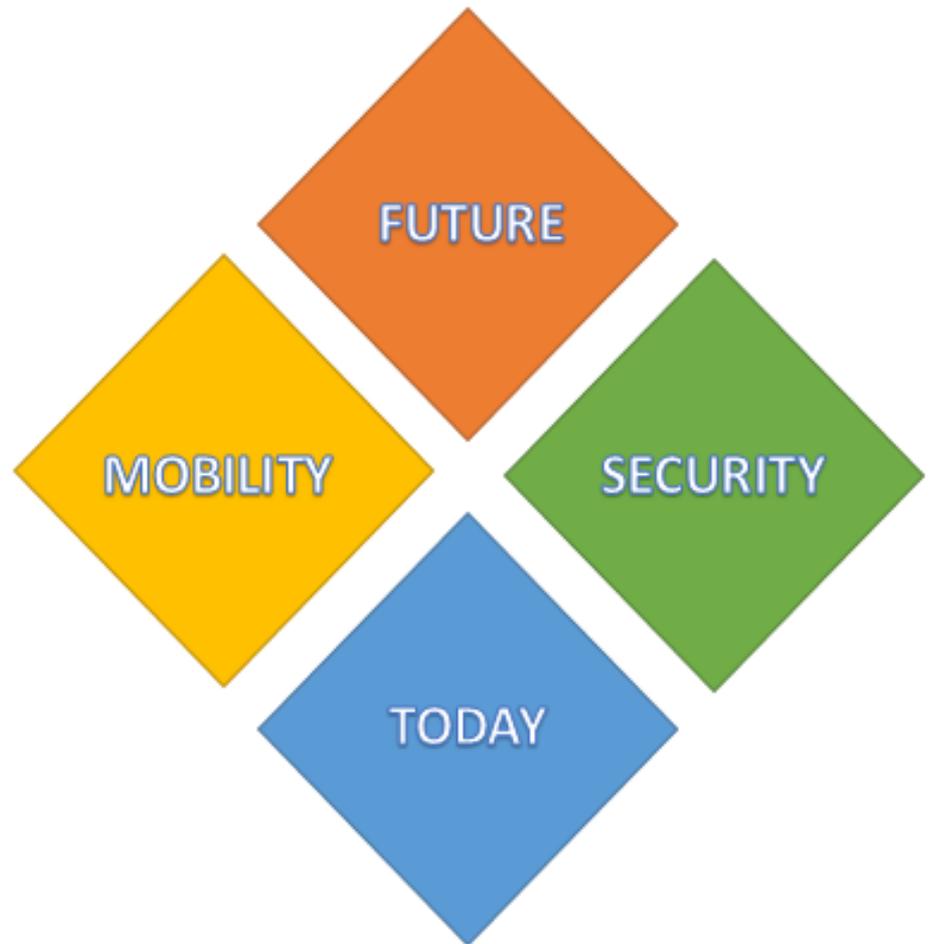
A Future Made with Biometrics

Mobility:

Biometric technology can make obtaining sensitive information **faster** by replacing long codes and passwords with a **simple fingerprint or eye scan**.

Security:

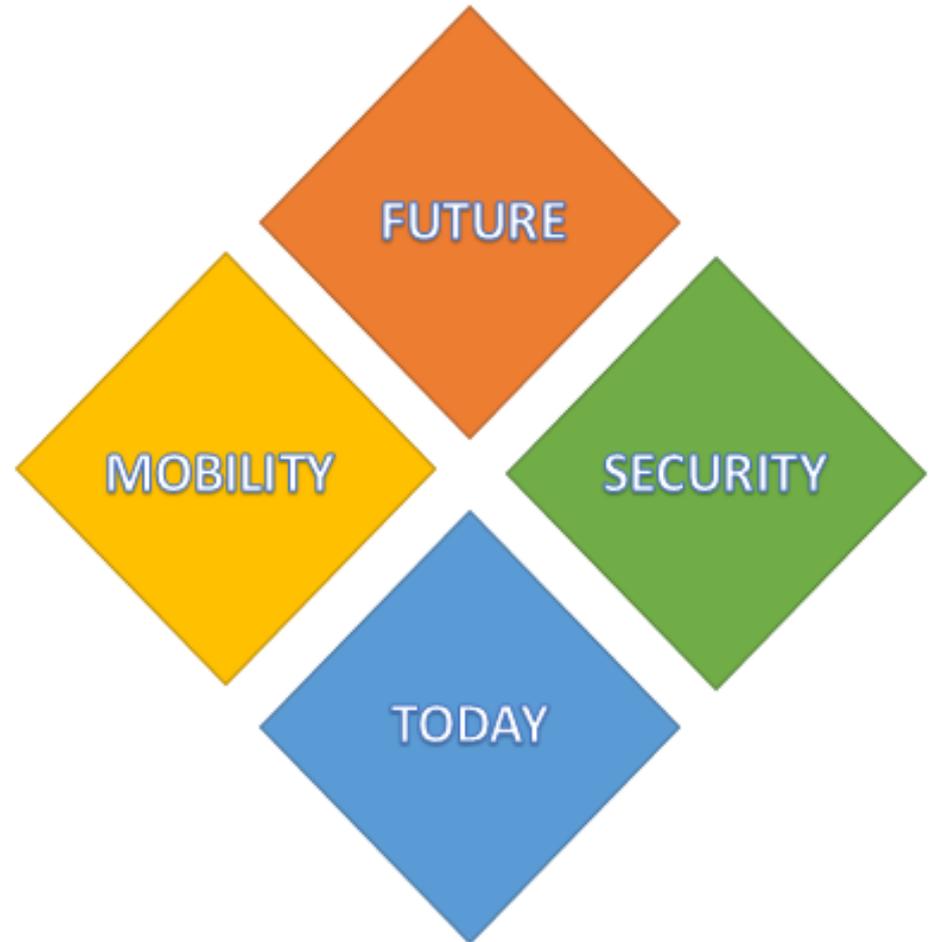
Biometric technology can also make networks and storing information, **more secure** by making it harder for hackers or criminals to access data, as **personal and unique data** will be needed to access files.



A Future Made with Biometrics

Future:

Through biometric technology, companies, businesses, and institutions would be able to **increase productivity and user-experience**, in a faster and more secure technology environment.



2.

REALISTIC FUTURE APPLICATIONS

How biometric technology can be used in the future-in
Maryland.

Application: Firefighters

Background:

Today, firefighters have a problem in quickly accessing information- such as the floor plan of a building-at the scene of a fire. This problem creates inefficiency in the form of precious seconds that could be used to save lives.

Through biometric technology, firefighters could be able to quickly access information, securely and efficiently-saving lives.

<http://techpresident.com/blog-entry>



<http://goo.gl/x2WgOQ>

Application: Public Service

Background:

Today, people have to wait in long lines when they want to visit facilities that require a person's identification.

With biometric technology, people can easily prove their identity by using fingerprints, thus shortening long lines.

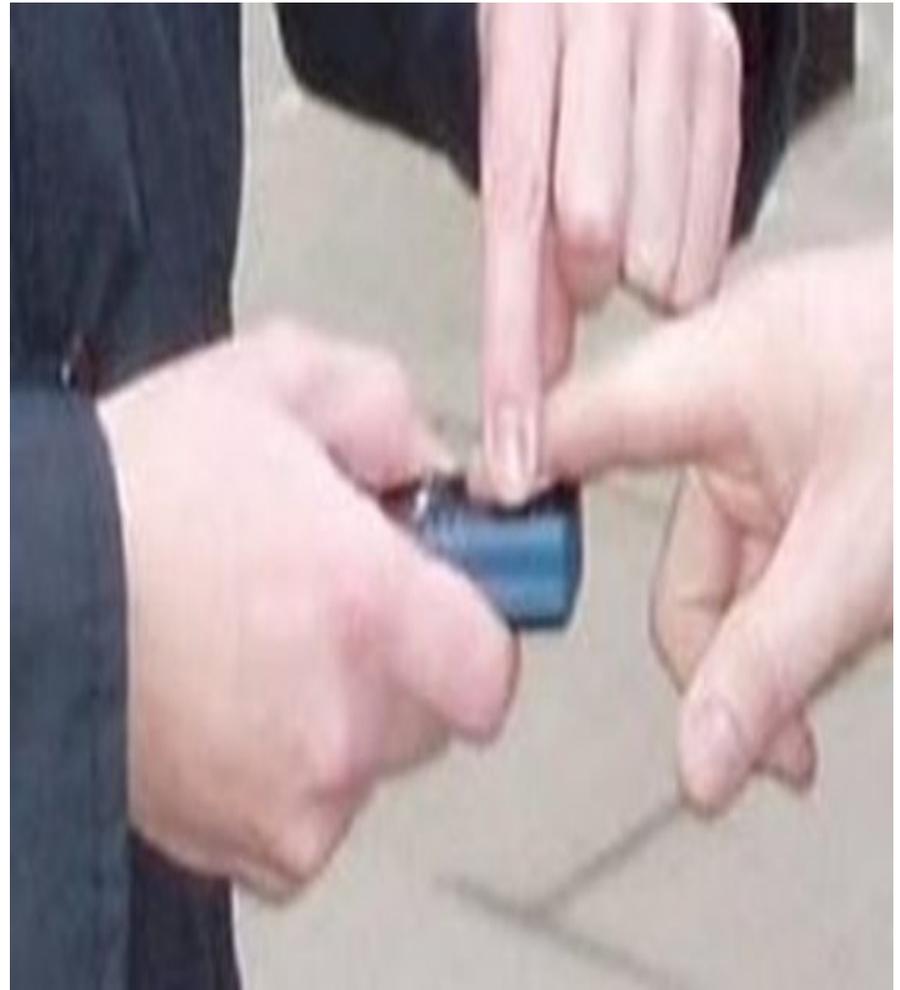


Application: Police I.D.

Background:

Currently, law enforcement officials have a hard time with identifying suspects in public. Already becoming a popular solution to this problem, law enforcement officials are beginning to test out mobile fingerprint scanners to identify wanted suspects.

With further development of this form of biometric technology, police, in the future, may be able to easily identify suspects, creating safer and stronger communities.



<https://goo.gl/nLlfn>

3. CONCLUDING THOUGHTS

**A world made better through biometric technology:
mobility and security.**

Conclusion

In a modern world where online security threats have become more advanced, biometric technology offers an **efficient approach to security**, that has made it the current leading industry trend.

With such **broad applications** and **effective results**, biometric technology offers an **advanced protection solution** for Maryland in the current technology-driven era.

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