

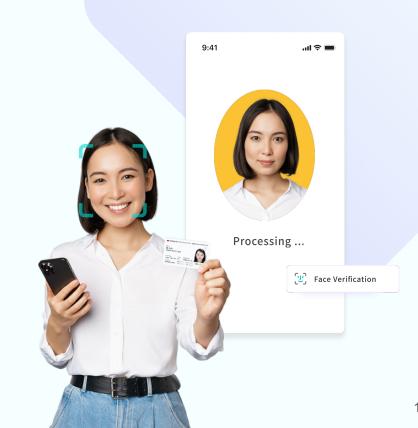
Trend of Digitalized Credentials and Identity Verification

Authme CTO | Shiu You Sheng

Al | FinTech

Compliance

FIDO





Introduction

Shiu You Sheng Authme CTO

Current CTO of Authme
Previous CTO of VoiceTube

FIDO IDWG Member

Experienced leader in digital identity verification



Verify Identity, Rooting for Security.

The solution that provides reliable identity verification to build security for digital world.

Experience

Collaborated with **Audrey Tang** to fix vulnerabilities in the government's Mydata platform in 2019

Member of the <u>FIDO Alliance</u> and participated in the Identity Verification Working Group (IDWG) with the Industrial Technology Research Institute (ITRI)

Awards

2021: Champion of the first RegTech Hackathon led by the FSC

2022: Selected as the "Next Star" of the Taiwan Al Ecosystem Map

2023: Received the "Taiwan Al Awards"

2024: Received "Taiwan Product Award"

What is digital identity?

A set of validated digital attributes and credentials

Include attributes such as a unique identity number, social security number, vaccination code, name, place, date of birth, citizenship, biometrics, and more, as defined by national law

Credential for Verifying Holder's Identity

elD card

(Germany, Italy, Spain, or Portugal)

Derived digital driver's license

(US states)

Biometric-related
ID number
(India)

Mobile ID

(Finland, Belgium or Estonia)

Digital ID Wallet

(EU initiative, Australia, etc..)

Digital identity certificate

(Sign electronically)

Obtain a seal

(Protect integrity)

Obtain a stamp

(Set time)

Introduction to ID Verification Standards

2016.01 2019.06 2022.08 2023.01

	ISO 30107 Compliance	FIDO Biometric Component Certification	DocAuth	NIST PAD
Scenario	Facial Feature Attack Detection	Testing and Certification of Facial Biometric Capture Components	Document Digitization via Optical Scanning	Facial Biometric Attack Detection
Purpose	Verified Valid Biometric Data for Authentication	Verification Tool Security Assessment	System Validation for Performance & Security	Testing System Resilience Against Various Attack Scenarios
Verification Entity	iBeta, Fime	FIDO-Certified Labs	Age Check Certification Scheme (ACCS) iBeta	NIST

DocAuth: Current ID Verification Methods

Facial Recognition Document OCR Verification NFC Chip Reading Facial Comparison Liveness Detection Real-time Image Quality Supports Chip Document Ensure the User is the Verify the User is a Real Detection with User Reading to Ensure 100% Document Holder Person to Prevent Al Fraud **Operation Alerts** Data Authenticity Certified by NIST FRVT 1:1 Utilizes AI to Detect Facial Achieves 99% Recognition Supports Chip Passport with a **99.7%** Identification Depth, Skin Texture, and Reading from Over 140 Other Liveness Features Accuracy Accuracy Certified by ISO-30107 **Supports Documents Countries**, Helping **Businesses Serve Global** from Over 192 Countries Users

Digitizing Traditional Documents

As the digital economy grows, paper documents no longer meet modern needs.



Enhanced Security

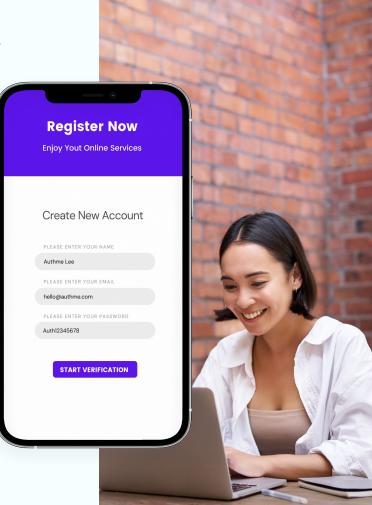
Prevents forgery and misuse through digital credentials and encryption

Improved Efficiency

Simplifies identity verification and cross-border applications

Environmental & Cost Benefits

Reduces paper usage and lowers processing costs for governments and businesses



Digital ID Implementation - EU:eIDAS & ID Wallet





Applications

- Cross-border business and identity verification
- Access to government digital services
- Enhanced privacy and trust

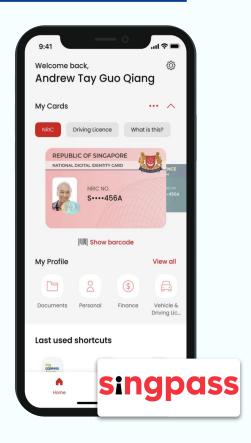
eIDAS

Launched by the EU in 2014, eIDAS provides a framework for secure cross-border digital identity verification and electronic transactions, enabling mutual recognition across EU member states.

ID Wallet

eIDAS 2.0 introduced the ID Wallet, enabling European citizens to **store and manage digital identities**. It supports secure authentication for government and private services, giving users control over shared data and enhancing cross-border interoperability.

Digital ID Implementation - SingPass



Singpass, launched in 2003, is Singapore's digital ID platform, connecting hundreds of government and private services for transactions and service access.

Recent Developments

- Myinfo: Allows users to share personal data for identity verification without repeatedly submitting documents.
- Digital ID: Users can generate digital ID through the Singpass app for identity verification.
- Biometrics: Singpass integrates facial recognition and fingerprint authentication for enhanced security and convenience.

Applications

- Access to private services such as banking, healthcare, and insurance
- Handling various government procedures and documents
- Quick identity verification with Myinfo integration

Digital ID Implementation - TW:FidO



Taiwan's Citizen Digital Certificate has been in operation for years, enabling citizens to secure online access to government services with <u>electronic signatures and encryption</u>.

Recent Developments

- Expanded Services: Broader use in tax filing, healthcare, and more.
- **Upgrades**: Improved security and verification efficiency.

Applications

- Government e-services (e.g., tax filing, licenses)
- Online transactions and e-signatures
- Healthcare and medical services



Digital ID Implementation - TW ID Wallet



Taiwan's Ministry of Digital Affairs launched a **Digital Wallet initiative**, integrating digital identities, government services, and payments. <u>It focuses on digitizing and verifying signatures without replacing existing credentials.</u>

Recent Developments

• Internal testing in the public sector is planned for November, with the official launch expected next year.

Applications

- Store and access personal digital ID and certificates
- Securely store and manage personal data, such as health records
- Support electronic payments and transactions



Digitalization Challenges and Risks

Addressing security, privacy, infrastructure, and trust issues in digitalization.

Key Challenges

Data Privacy and Security

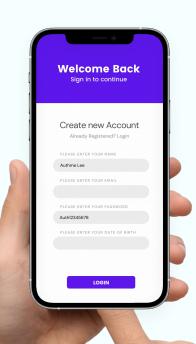
 Ensuring citizen data protection during digitalization

Infrastructure Challenges

 Addressing technical and policy challenges across nations

Public Trust

 Building and maintaining trust in digital identities



Shaping the Future of Digital Identity

Digital Identity: A Key Trend in Global Modernization

















Conclusion

Digital identities enhance security, streamline verification, and boost efficiency as industries shift from traditional IDs.

Future Outlook

More countries will adopt frameworks like the EU and Singapore. Al biometrics and digital wallets will drive innovation, improving security and user control.

Call to Action

Collaboration,
infrastructure, legislation,
and public trust are
essential for secure,
interoperable ecosystems.

U Aüthme

Trusted Identity Verification Partner



Support

192+

Countries' Document

Milestone

3,000,000

Verifications Worldwide

Trusted by



Taiwan's Ministry of Interior















Thank you

Verify Identity, Rooting for Security.

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