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The webinar will begin shortly





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Identity on a Mobile Device: Airport Passenger Experience and Higher Education Identity Use Cases

Identity Council Webinar
December 13, 2018

Introductions



- Randy Vanderhoof, Secure Technology Alliance



- Tom Lockwood, NextgenID



- Chris Runde, AAAE



- Mark Sarver, Biometric Signature ID

Who We Are

The Secure Technology Alliance is a not-for-profit, multi-industry association working to stimulate the understanding, adoption and widespread application of secure solutions.

We provide, in a collaborative, member-driven environment, education and information on how smart cards, embedded chip technology, and related hardware and software can be adopted across all markets in the United States.

What We Do

Bring together stakeholders to effectively collaborate on promoting secure solutions technology and addressing industry challenges

Publish white papers, webinars, workshops, newsletters, position papers and web content

Create conferences and events that focus on specific markets and technology

Offer education programs, training and industry certifications

Provide networking opportunities for professionals to share ideas and knowledge

Produce strong industry communications through public relations, web resources and social media



Our Focus

Access Control
Authentication
Healthcare
Identity Management
Internet of Things
Mobile
Payments
Transportation

Member Benefits

Certification
Council Participation
Education
Industry Outreach
Networking
Technology Trends

Identity Council

“...Serves as a focal point for Alliance’s identity and identity related efforts leveraging embedded chip technology and privacy- and security-enhancing software...Supports a spectrum of physical and logical use cases and applications, form factors, attributes, and authentication and authorization methods.”

COUNCIL RESOURCES

- [Assurance Levels Overview and Recommendations](#), Smart Card Alliance Identity Council position paper
- [FICAM in Brief: A Smart Card Alliance Summary of the Federal Identity, Credential, and Access Management \(FICAM\) Roadmap and Implementation Guidance](#), Smart Card Alliance Identity Council and Physical Access Council summary
- [Identifiers and Authentication – Smart Credential Choices to Protect Digital Identity](#), Smart Card Alliance Identity Council position paper
- [Identity Management in Healthcare](#), Smart Card Alliance Healthcare Council webinar
- [Identity Management Systems, Smart Cards and Privacy](#)
- [Interoperable Identity Credentials for the Air Transport Industry](#)
- [Identity on a Mobile Device: Mobile Driver’s License and Derived Credential Use Cases](#)
- [Smart Card Technology and the FIDO Protocols](#), Smart Card Alliance Identity Council white paper

Mobile Identity Landscape Assessment

Secure Technology Alliance Identity Council & Identity
Community Stakeholders

Tom Lockwood, NextgenID



Strategic Trending

...Identity is moving from vertical to horizontal...

Identity Trends

- Delivery Verticals Continuing Evolution
 - Complementary / Blended: In-person, Desktop, Mobile, Kiosk/Machine
 - Expansion of Mobile and Kiosk Markets
- Privacy – Compliance & “Allow-ability” (GDPR)
- Identity Proofing – Remote & Supervised Remote
- Automation of Backend Services & Machine Learning
- Biometrics Adoption & Matching Enhancements
- Distributed Ledger Technology
- Blurring between Physical & Digital Security
- Physical Identity Documents, augmented, not replaced by Digital Identity/Identifiers
- Zero Trust Models – Identity Centric
- Modularization of Identity Services

**Connects & Defines
Systems, Boundaries, &
Transactions**

Tangible, Necessary
Real Market Relevance

**Identity, Authentication,
Authorization**

Immediate Focus Mobile Device Landscape Assessment

The Problem & Value Outcome

Problem: We are faced with inconsistent solutions, methodologies, practices, and assumptions for implementing mobile identity credential capabilities.

Outcomes are degraded quality and consistencies of products, services and user experiences.

Resources

- Current Secure Technology Alliance Members
- Identity & IT Community Members & Associations

Target Audiences

- Organizations Implementing IDMSs Issuing & Consuming Mobile Identity Credentials
- Product & Service Providers Supporting Mobile Identity Credential Offerings
- Organizations Supporting & Leveraging Mobile Identity Credential Standards & Best Practices
- Executing Organizations and Agencies

Value/Outcome:

- Enhanced User Experience
- Raise Community Awareness
- Mobile Device Best-Practices Guidelines
- Stabilize & Expand Trusted Identity & Authentication Opportunities & Markets
- Enhanced Opportunities for Integrators & Service Providers Across Use-Cases
- Improved Interoperability & Integration
- Recommendations to Support Open Standards & Interfaces

Approach

- Provide a Broad Overview of Mobile Identity Credentials
- Collaborative Across Alliance Councils & Partnering Organizations
- Use-Cases: Community Lead, Community Identified
- Raise Awareness of Approaches & Value Across Verticals
- Common Templates to support collaborative discussions
 - ❑ Value Prop, Implementation, Challenges
 - ❑ Security, Human Factors, Privacy, Technology, Arch, Policy
- Phased-set of Deliverables
 - ❑ Initial Deliverable Focus at Concept Level
 - ❑ Trends, Key Issues (Convergence, Conflicts, Synergies, Gaps)

This Webinar - Raise Awareness of the effort

- Provide a Broad Overview of Mobile Identity
- We Seek Your Feedback & Comments
- Encourage you to follow-up Adoption/Expansion/Leverage

IBIA International
Biometrics+Identity
Association



Landscape Assessment

- ✓ **Webinar #1 – In-Person Proofed Identities on Mobile Devices**, Moderate & High Assurance Applications - Mobile Drivers License Use-Case (AAMVA/Gemalto, IDEMIA); Derived PIV/PIV Use-Case (ID Council/Intercede, DHS, DoD)
- ✓ **Webinar #2 – Mobile Devices for Physical & Logical Access** - Physical & Logical Access Use Cases (Access Council/Leidos, XTec, HID, Exponent)
- **Webinar #3 - Mobile Devices in Transportation, Health, & Banking** - Transportation Use-Case (Transportation Council/SEPTA, SF-TA, Volpe), Banking Use-Case (Payment/SecureKey), Medical Use-Case (Health & Human Services Council/Ingenico, LifeMD-ID)
- ➔ • **Webinar #4 - Mobile Devices Enabling Users & Use Cases** - Airport Use-Case/Facilities - CBP (AAAE); Colleges & Universities - Academic Integrity/Remote Proofing (IBIA/BioSig-ID)
- **Webinar #5* - Mobile Devices Back-End Integration & Interoperability** - Generic Physical & Logical Back End (Access Council, XTec, AAAE) & Interoperability (Mobile Council, ID Council, IBIA)
 - * Note: Horizontals Discussion - Identity (Identity Council), Mobile (Mobile Councils), Biometrics (IBIA); to determine if there is need to present horizontals separately or if they can be included in Webinar #5.

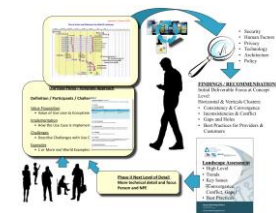
Participating Councils: Access, Transportation, Health & Human Services, Payments, Mobile

Partnering Associations:

AAAE - American Association of Airport Executives

AAMVA – American Association of Motor Vehicle Administrators

IBIA - International Biometric & Identity Association





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Airport Mobile Identity Use Case

Presented by the AAAE Airport Innovation Accelerator

Chris Runde, AAAE



Agenda

Mobile Identity in Airports

- Airports and the Seamless Passenger Journey
- CBP Use Case
- Next Steps and Momentum

About AAAE

The American Association of Airport Executives:

- 5,000 Airport Members
- 80 events/year
- Service Delivery



Aviation in the U.S.



750M Pax/Year

\$1.6T Annually

5% of US GDP

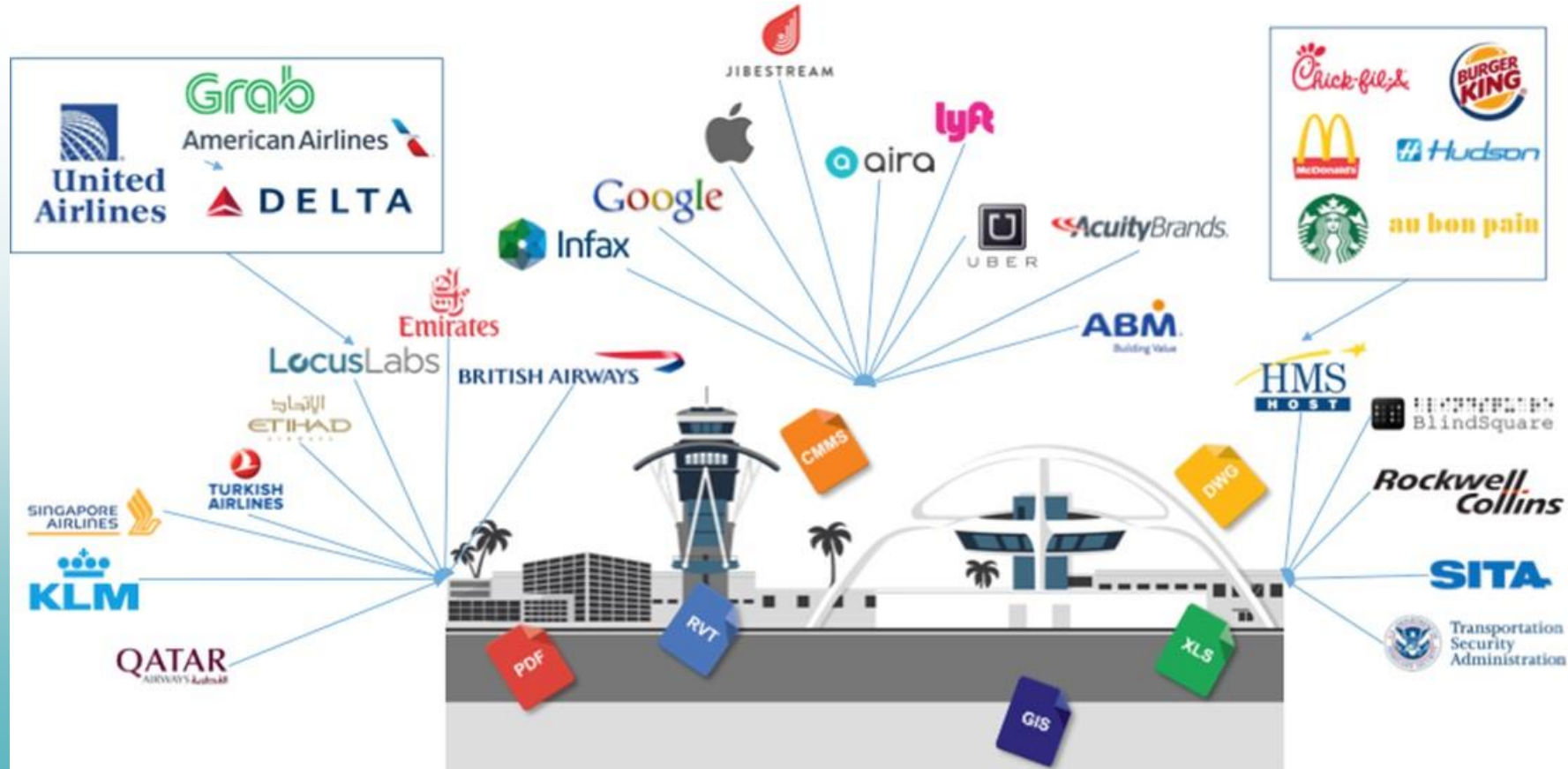


Poll Question

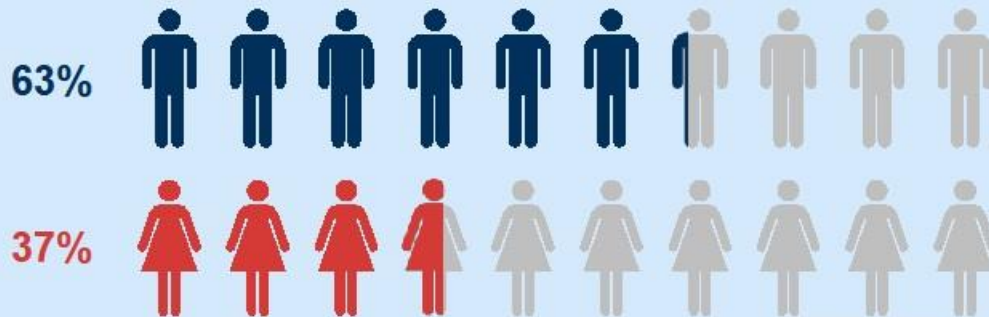
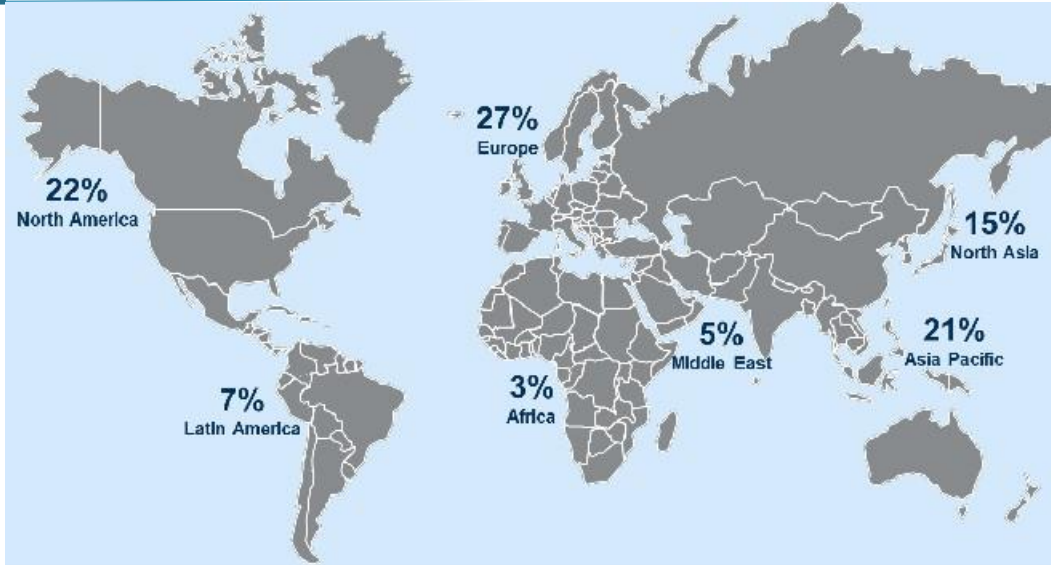
Where would you be willing to use your mobile identity in the air travel journey? (check all that apply)

- A) Booking travel
- B) Ride to the airport
- C) Security checkpoint
- D) Purchases of food/goods
- E) Boarding

Airport Data Ecosystem: Mapping Sample



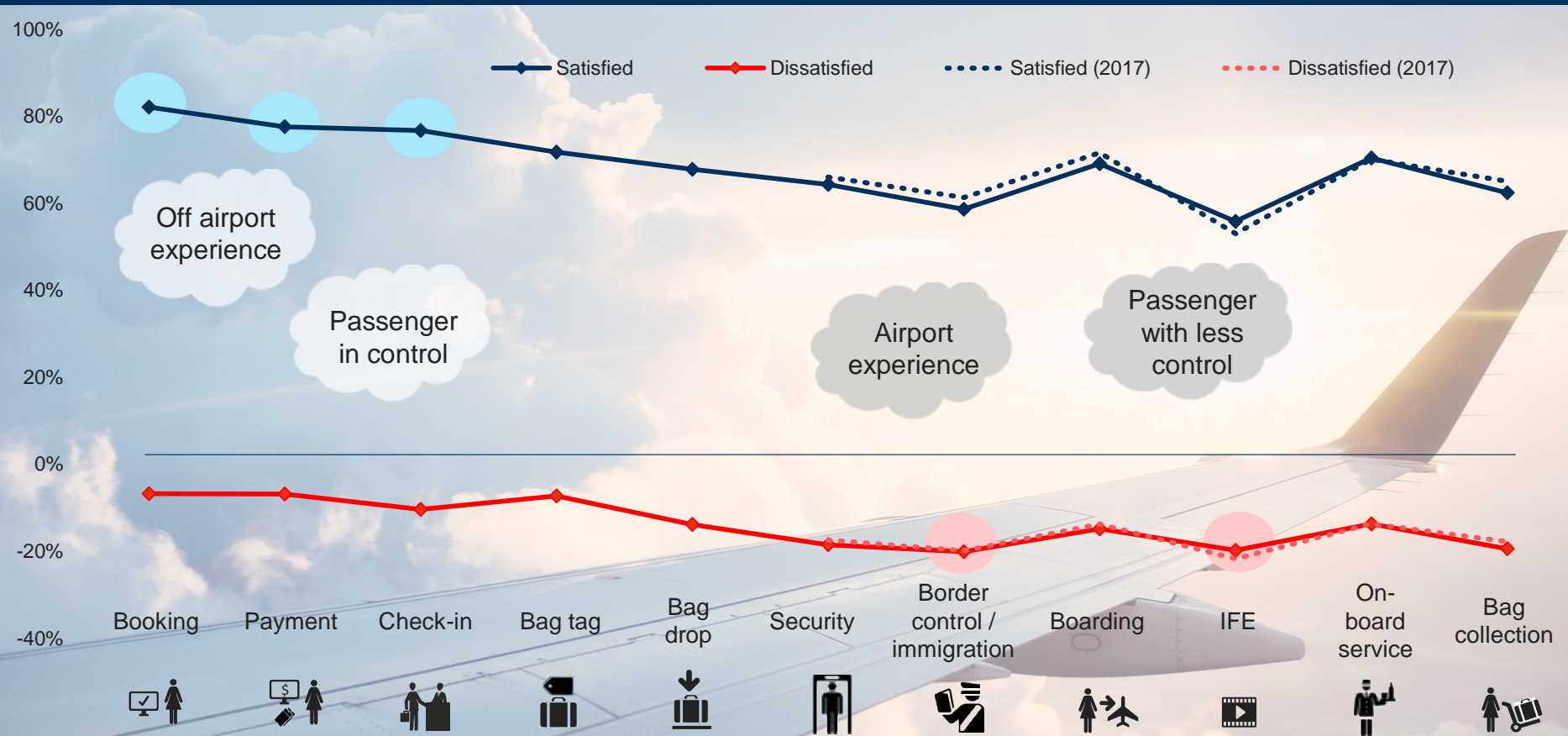
Snapshot: IATA 2018 Passenger Survey



**10,408
RESPONDENTS**

**APRIL - JULY
2018**

PASSENGER SATISFACTION THROUGHOUT THE CUSTOMER JOURNEY



The background of the slide is a photograph of two white security cameras mounted on a dark grey brick wall. A central grey control box is mounted between the two cameras, with black cables connecting them. The text is overlaid on this image.

**SEAMLESS
JOURNEY**

I WANT TO PROTECT MY PRIVACY

65% of passengers are willing to share additional personal information (e.g. address of destination, travel purpose, picture) to speed up their processing at the airport

vs 70% in 2017



**SEAMLESS
JOURNEY**

PAPERLESS EXPERIENCE IS WELCOME

**45% of air travelers choose biometric
identification as a replacement of their passport**

**SEAMLESS
JOURNEY**

**LET ME DO IT
ALL AT ONCE**



Additional products or services purchased together with flight tickets:

Hotel
Insurance
Transportation from the airport to final destination
Car rental

53%

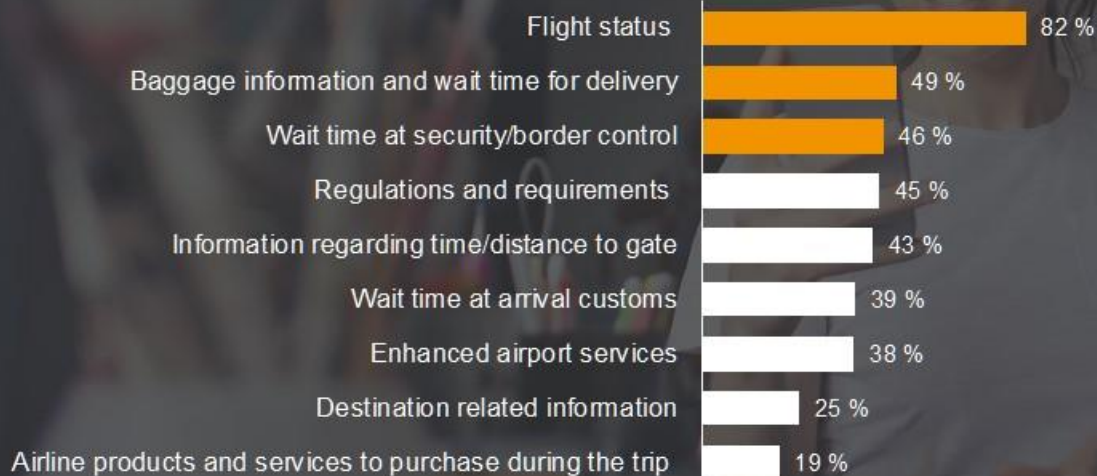
40%

32%

32%

WORLD OF INTERACTIVE DATA

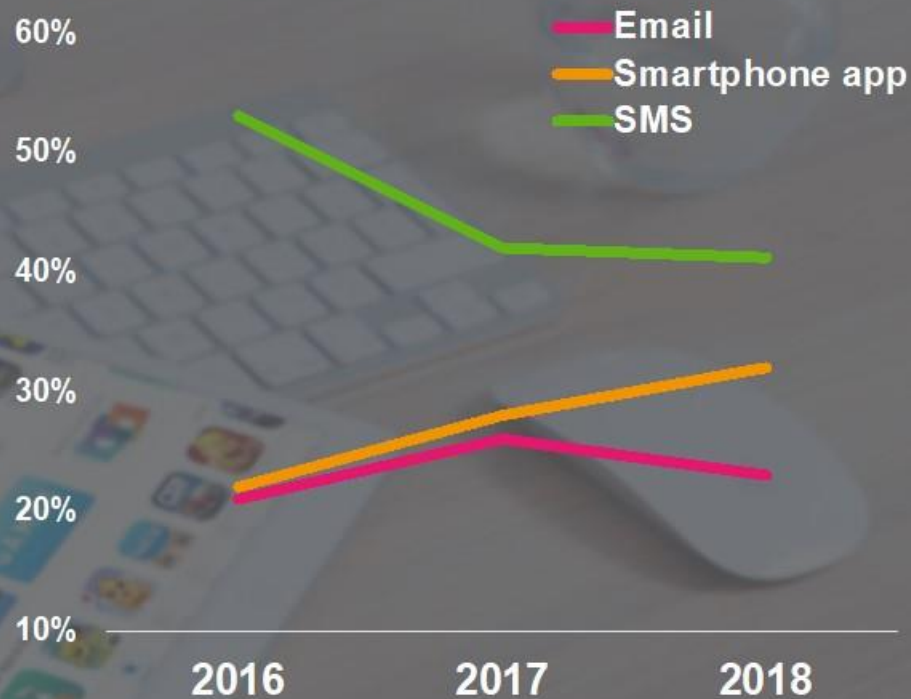
WHAT'S GOING ON WITH MY JOURNEY?



WORLD OF
INTERACTIVE DATA

APP ON THE RISE

Preferred options for receiving notifications:



MILLENNIALS

When boarding - scan the boarding token myself

Notifications through an app

Electronic boarding pass

Biometric identification replacing my passport

On-line check-in using my smart phone/device

Less than 30 seconds to drop off my baggage at departure

Less than 5 minutes to wait for my baggage at arrival



IMAGINE A WORLD...

- + Travelers no longer need a travel document
- + International travel is no longer stressful
- + Security is transparent



CBP'S VISION



CBP'S INVESTMENT



A FACIAL MATCHING SERVICE

WHY IT WORKS

- + Uses existing traveler biometrics
- + Matches one-to-few in the cloud
- + Enables token-less processing
- + Integrates into airport infrastructure
- + Trusted source for identity verification
- + No traveler enrollment required

**Face is the key to unlock
multiple transformations**

Air Arrival **Facial Recognition**



Identifies travelers
as they approach
the CBP Officer



Eliminates manual scan
of passports and
capturing of fingerprints
for known travelers



Enables CBP
Officers to focus
on admissibility
and enforcement



FASTER BOARDING

MWAA reported boarding an
**A380 with 500
passengers
in 22 minutes**

Lufthansa reported boarding
350 passengers on an
A380 in 20 minutes

British Airways reported
boarding **more than 400
passengers in 22
minutes**



FASTER FLIGHT CLEARANCE

CBP measured an average of **11.8 minutes
faster flight clearance times**



ENHANCED EXPERIENCE

British Airways reported
a **20% increase**
in customer
satisfaction

JetBlue reported
biometric boarding
meters passenger
better

PROOF POINTS



PARTNERSHIP WITH TSA

- + In March 2017, CBP and TSA began evaluating the use of facial recognition at the TSA checkpoint for identity verification
- + The overall goal is to enhance security and utilization of resources, while moving towards a frictionless travel experience

FUTURE INNOVATION



SMART QUEUING

Smart queuing during entry into U.S. – directing travelers to zones based on process time.



EDGE DEVICES

Integrating facial biometrics with edge devices and wearables.



EXPANDED SERVICE

Explore the possibility of expanding CBP's identity service to other travel industry partners. (car rental, hotels, UBER, etc.).



ENTRY ENHANCEMENTS

Further streamlining entry for trusted and known travelers.



DATA SHARING

Enhancing data sharing with cruise lines to automate manual forms for passengers and crew.





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Higher Education Student Identity Use Case

Mark Sarver, PhD – Biometric Signature ID



Education

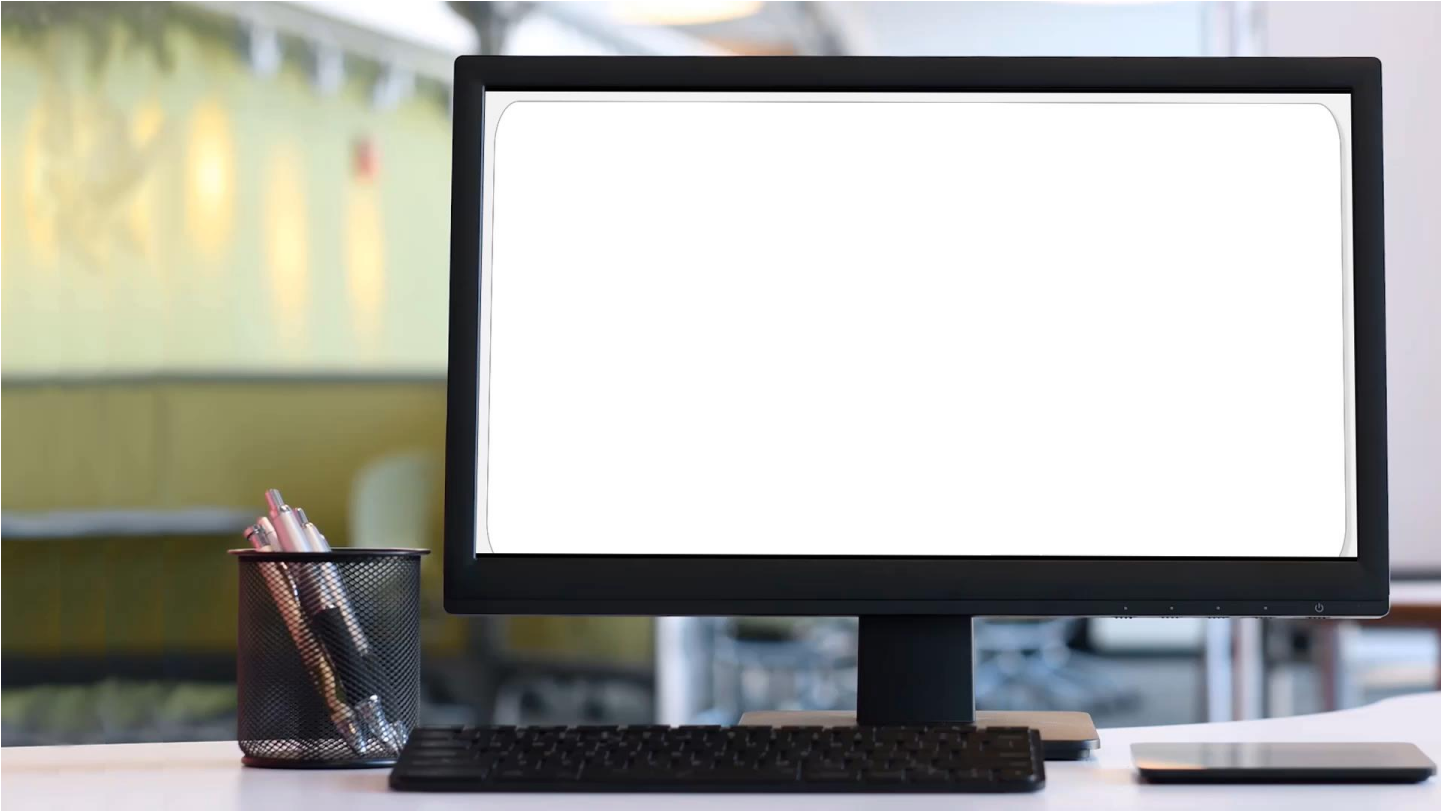
- Expanding online enrollments
- BYOD
- Accreditation
- Financial Aid Fraud
- Dark web and cryptomining

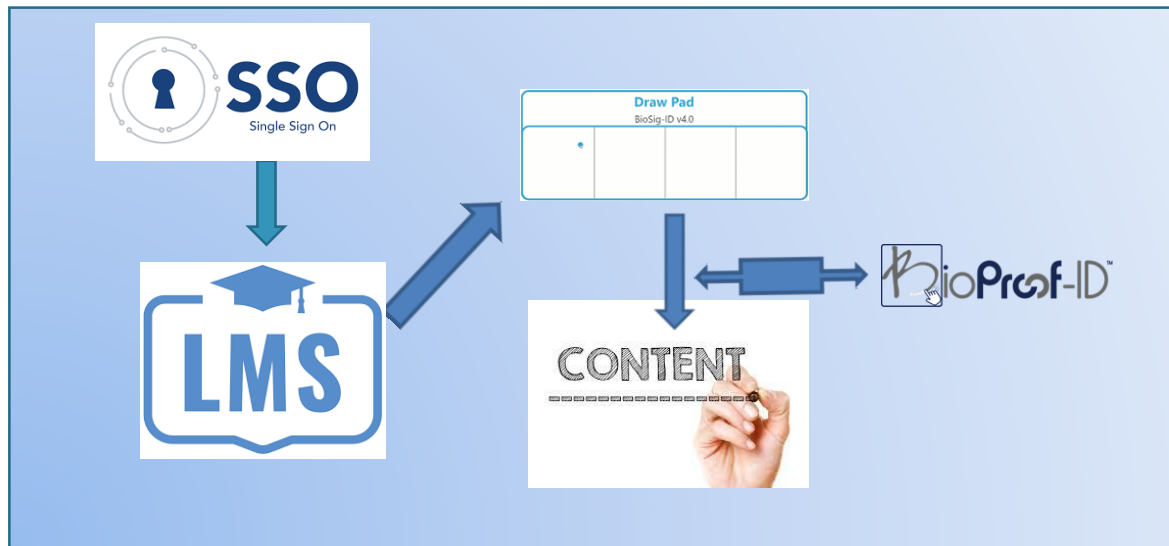
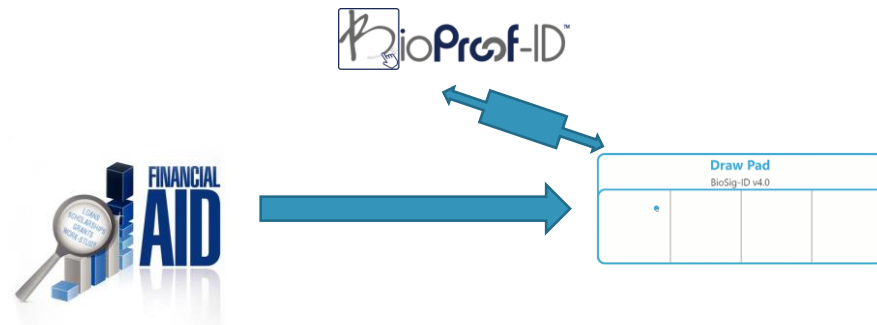
Proofing Landscape

- Additional levels for some remote students
- Reduce vulnerability of pin
- Must be able to use multiple devices
- Needed to be a web-based API and not a mobile app

Solution







Takeaways

- Changes quality of life
- Saves time and costs
- Establishes a level of security up front
- Streamlines linkages to rest of school applications



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Q&A



Selected Secure Technology Alliance Resources

- **Identity on a Mobile Device** webinar recordings - <https://www.securetechalliance.org/knowledge-center/>
- **Secure Technology Alliance Knowledge Center** - <https://www.securetechalliance.org/knowledge-center/>
 - [Smart Card Technology and the FIDO Protocols](#), Secure Technology Alliance Identity Council white paper
 - [Mobile Devices and Identity Applications](#), Secure Technology Alliance Identity Council white paper
 - [Mobile Identity Authentication](#), Secure Technology Alliance Mobile Council white paper
 - [Smart Cards and Biometrics](#), Secure Technology Alliance Access Control Council white paper

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