SECURE
TECHNOLOGY
ALLIANCE

The webinar will begin shortly

SECURE TECHNOLOGY ALLIANCE

Identity on a Mobile Device: Healthcare, Banking and Transportation Payment Use Cases

Identity Council Webinar
September 20, 2018

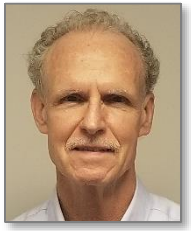
Introductions

- Randy Vanderhoof, Secure Technology Alliance

- Tom Lockwood, NextgenID

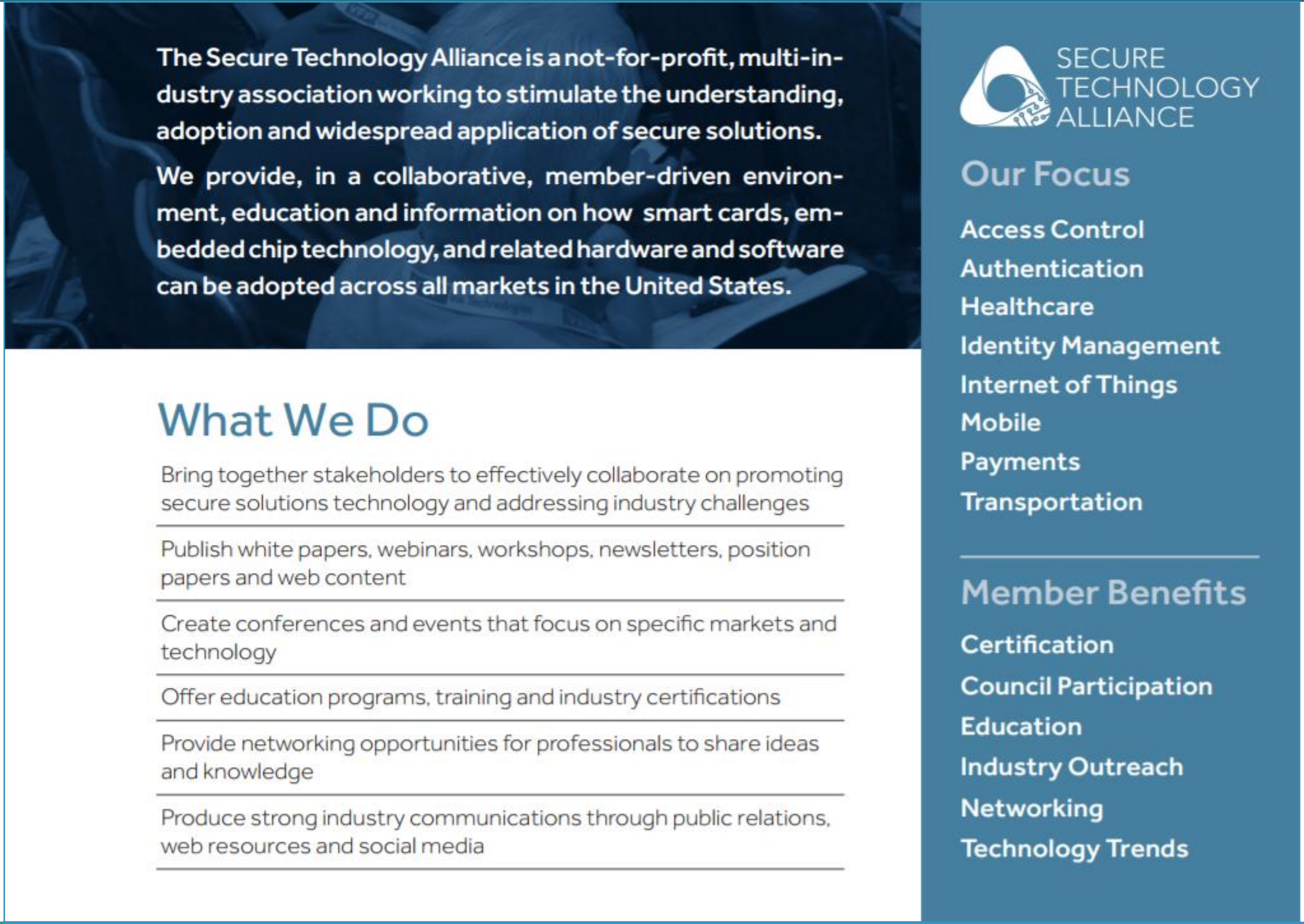
- Jeffrey Fountaine, Ingenico Group

- Judy Keator, SecureKey Technologies



- Jerry Kane, SEPTA

Who We Are



SECURE TECHNOLOGY ALLIANCE

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

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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.

This impacts 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 Approach: 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

Landscape Assessment

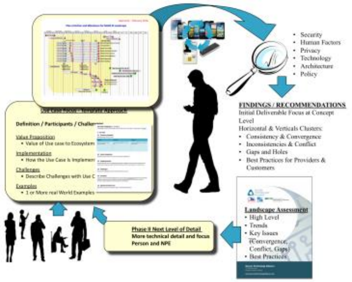
√ **Webinar #1 – In-Person Proofed Identities on Mobile Devices,** Moderate & High Assurance Applications - Mobile Drivers License Use-Case (AAMVA/Gemalto, IDEMIA); Derived PIV/PIV Use-Case (ID Council/Intercede, DHS, DoD)

√ **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 - Campus Wayfinding (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 determi**
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


Security
Human Factors
Privacy
Technology
Architecture
Policy
FINDINGS / RECOMMENDATIONS
Initial Deliverable Focus at Concept Level
Horizontal & Verticals Clusters:
Consistency & Convergence
Inconsistencies & Conflict
Gaps and Holes
Best Practices for Providers & Customers
Definition / Participants / Challenges
Value Proposition
Value of Use case to Ecosystem
Implementation
How the Use Case is Implemen
Challenges
Describe Challenges with Use C
Examples
1 or More real World Examples
Landscape Assessment
High Level
Trends
Key Issues (Convergence, Conflict, Gaps)
Best Practices
Phase II Next Level of Detail
More technical detail and focus
Person and NPE

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Healthcare Use Case

Jeffrey Fountaine, Ingenico Group

Poll Question

What kind of identity form would you prefer to use in a healthcare setting?

A) Smart card with chip

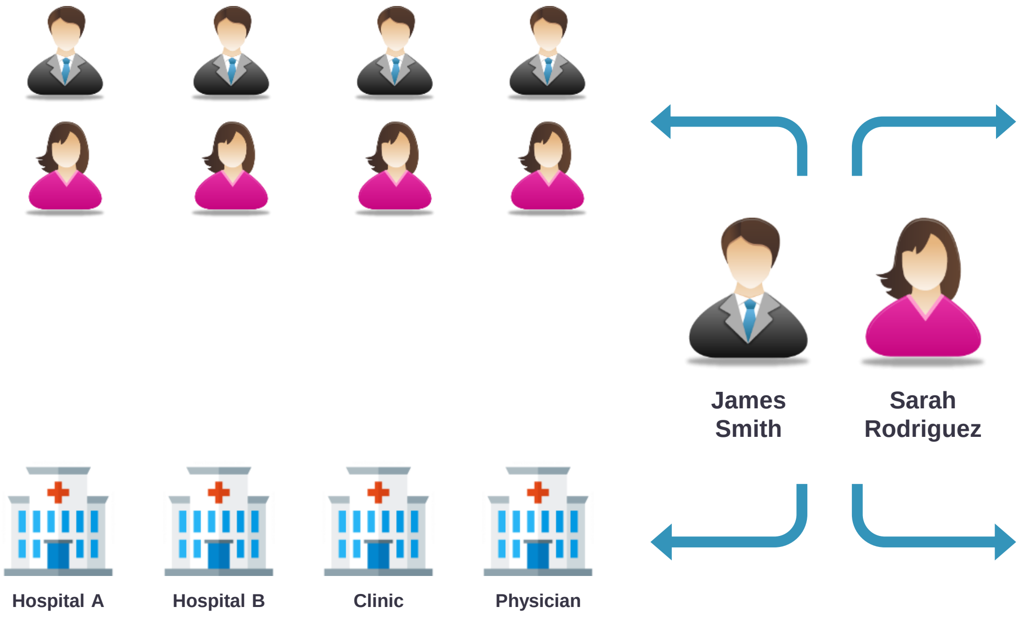
B) Credit card with chip

C) Mobile wallet pass on smartphone

D) Biometric

E) Driver's license

Identity Proofing: *“You are who you say you are”*



- Healthcare providers face identification problems due to lack of systems/processes
- Patients may be presenting with lack of information and common names/DOB
- Merging patient information in a Master Database may occur without awareness of inaccuracies or faulty data

- Lack of interoperable systems between facilities and, even, within Integrated Delivery Networks can lead to patient record matching issues
- If patient authentication processes exist, it is not always utilizing industry best practices for identity proofing

Identifying Patients across Care Continuum

Duplicate Records

Places patients at risk for undue treatments and medical errors while burdening the healthcare provider with unnecessary processes

- 92% of duplicate medical records are created during inpatient registration according to Johns Hopkins study
- ONC seeking to reduce that number of duplicate medical records to 2% in 2017 and 0.5% in 2020

Medical Identity Theft

Risk exposing PHI and all the burdensome pain associated with managing a breach

- Victims pay, on average, $13,500 to resolve medical identify theft, which may be a burden of the breached entity
- Incidents increased 22% between 2014 and 2015 impacting more than 2.3 million people in United States

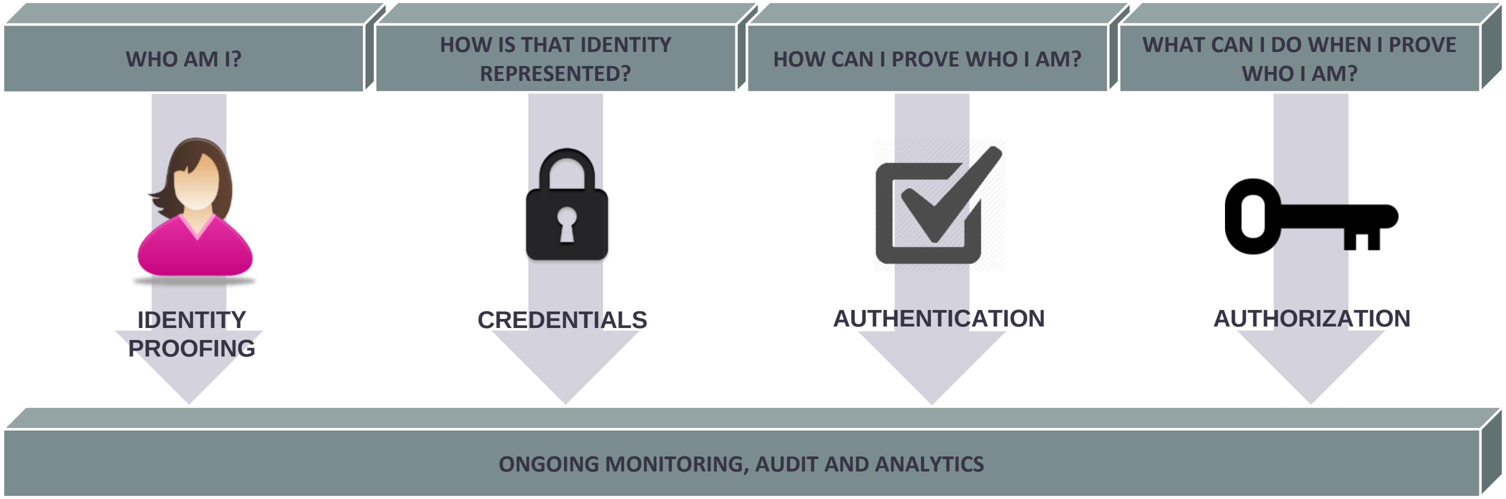
Payment Fraud

Huge losses impacting public and private healthcare sector totaling tens of billions

- It is estimated that Medicare fraud costs taxpayers between $60 and $90 billion each year
- The entire United States healthcare system may experience $272 billion in fraud each year out of $2.7 trillion in spending

Office of National Coordination Recommendations

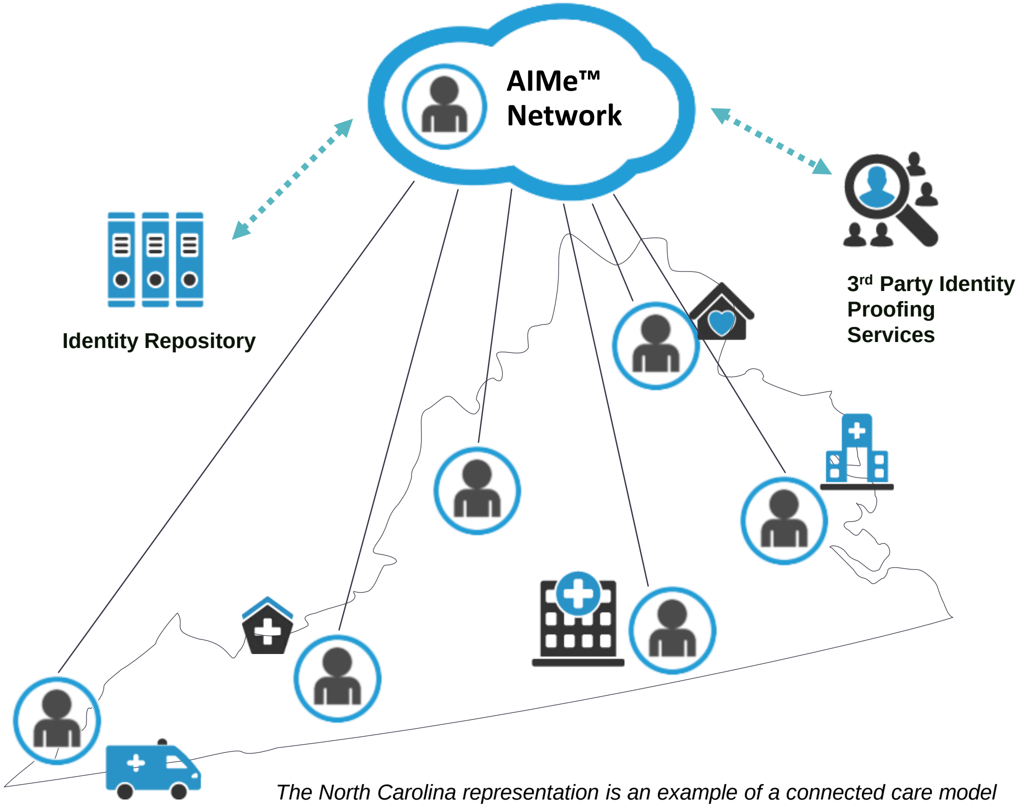
A patient's identity must be accurately determined across the institutions that are sharing information before healthcare data about a specific patient can be integrated.


WHO AM I?
HOW IS THAT IDENTITY REPRESENTED?
HOW CAN I PROVE WHO I AM?
WHAT CAN I DO WHEN I PROVE WHO I AM?
IDENTITY PROOFING
CREDENTIALS
AUTHENTICATION
AUTHORIZATION
ONGOING MONITORING, AUDIT AND ANALYTICS

The complexity of linking patient identity across providers is exacerbated by the presence of multiple patient identifiers, syntactic and semantic differences in key patient demographic attributes, and duplicate patient registration records.

Example Use Case in Action: AIME™ by LifeMed ID

- Strong Identity Proofing within ONC Recommendations
- Standardized Identity Proofing training via NAHAM
- Establishes an interoperable "Master Record": providing each unique patient identity with a Unique Health Safety Identifier (UHSI) with multi-factor authentication via a "token" (ex: credit card, biometric, smartphone)
- Links the UHSI to patient's medical record(s)



The North Carolina representation is an example of a connected care model and can correlate to any state or nation-wide solution

Multiple Approaches to Identity including Mobile

- Patient owning and maintaining their identity in the format they prefer to use for authentication will be key to success, one size does not fit all
- Identity proofing combined with improved process design will lead to higher collections of patient financial responsibility at time of service and post-service
- Elimination of record duplication will improve medical record increasing patient safety and enabling care provider to make more informed decisions on care
- Key aspect to improving interoperability across technological systems and care providers

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ADVANCING DIGITAL IDENTITY GLOBALLY: Banking Use Case

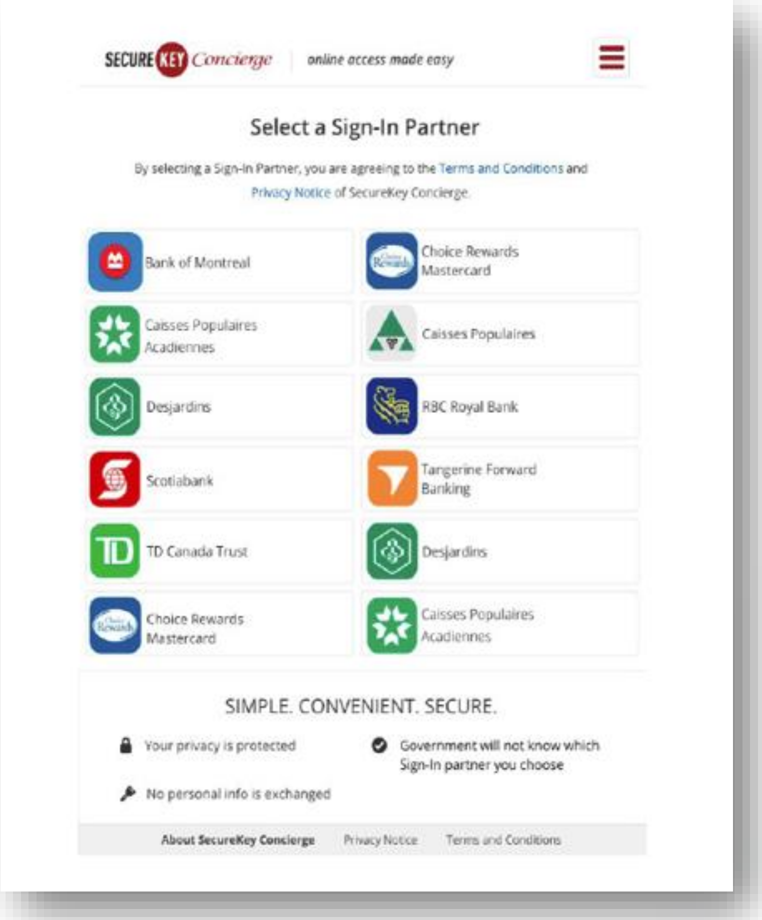
Judy Keator, SecureKey Technologies

SECURE KEY

Around the world banks face big challenges

- The price of Payment transactions is going to Zero
- Information about payments is worth more than the fee for processing
- Regulators are creating requirements to be more open
- Faster Payments is a growing reality – brings additional fraud risks, and competition
- The Bank’s presence at transaction in decline – they are losing their moment with the customer
- Digital ID is a market requirement

Canadian Banks: Started with Authentication



online access made easy

Select a Sign-In Partner

By selecting a Sign-In Partner, you are agreeing to the Terms and Conditions and Privacy Notice of SecureKey Concierge.

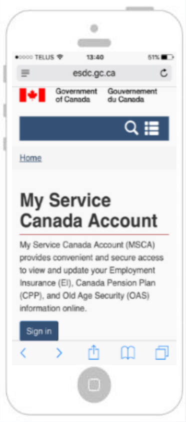
Bank of Montreal	Choice Rewards Mastercard
Caisses Populaires Acadiennes	Caisses Populaires
Desjardins	RBC Royal Bank
Scotiabank	Tangerine Forward Banking
TD Canada Trust	Desjardins
Choice Rewards Mastercard	Caisses Populaires Acadiennes

SIMPLE. CONVENIENT. SECURE.

- Your privacy is protected
- Government will not know which Sign-In partner you choose
- No personal info is exchanged

About SecureKey Concierge · Privacy Notice · Terms and Conditions

- 80+ departments
- 10 million registrations
- 99.99 availability
- Integrated at Affinity Credit Union, ATB Financial, BMO, Choice Rewards, CIBC, Desjardins, Caisses Populaires, National Bank, RBC, Scotiabank, Tangerine, TD, UNI
- Full customer indemnity agreements, call center support, soft handoffs, operational processes in place.



esdc.gc.ca

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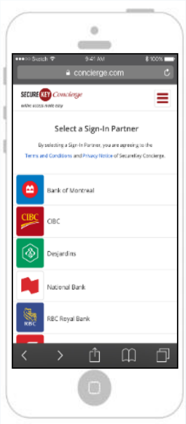
Home

My Service Canada Account

My Service Canada Account (MSCA) provides convenient and secure access to view and update your Employment Insurance (EI), Canada Pension Plan (CPP), and Old Age Security (OAS) information online.

Sign in



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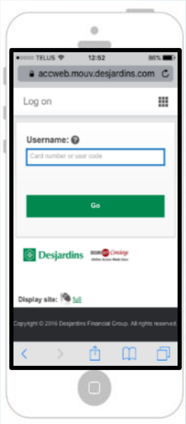
- CIBC
- Desjardins
- National Bank
- RBC Royal Bank



accweb.mouv.desjardins.com

Log on

Username:

Card number or user code

Go

Desjardins

Display site: full

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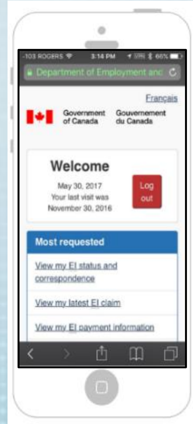


Department of Employment and

Français

Government of Canada · Gouvernement du Canada

Welcome

May 30, 2017
Your last visit was
November 30, 2016

Log out

Most requested

- View my EI status and correspondence
- View my latest EI claim
- View my EI payment information

SECUREKEY

TD

BMO

CIBC

Scotiabank

RBC

Desjardins

NATIONAL BANK

$30 MILLION INVESTMENT IN SECUREKEY FROM MAJOR BANKS **TO DEVELOP** DIGITAL IDENTITY NETWORK

WHY BUILD A DIGITAL IDENTITY ECOSYSTEM?

- Account opening is complex and expensive
- Fraudsters keep getting better
- It’s a mobile first world
- Regulatory requirements
- Customers resent friction
- Governments-driven identity models
- Consumers want more control over their data

FINDING WAYS TO ADD VALUE

- Open Data – Open Banking
- Increased competition from Fintech
- Need to create new sources of value
- Customers are increasingly living their lives digitally
- How do we leverage unique position of trust with customers to make their lives easier?

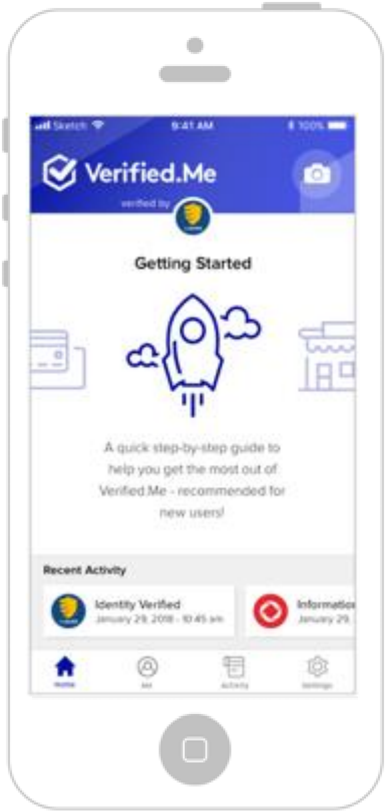
Key Considerations as we build Digital ID of the Future

- Resiliency against denial of service attacks
- No honeypots of data
- Consumer centric with a strong consent model
- Separation of Authentication and Attestation Service Providers
- Triple blind privacy matter – where Data Providers and Data Consumers are blinded from each other and Broker Operator can not observe data
- Standard - OAuth 2.0 / OpenID Connect, NIST 800-63-3, GDPR

A new ecosystem - Trusted Identity In Your Control

SECURE KEY

A new service for customers to manage their digital identity



Getting Started

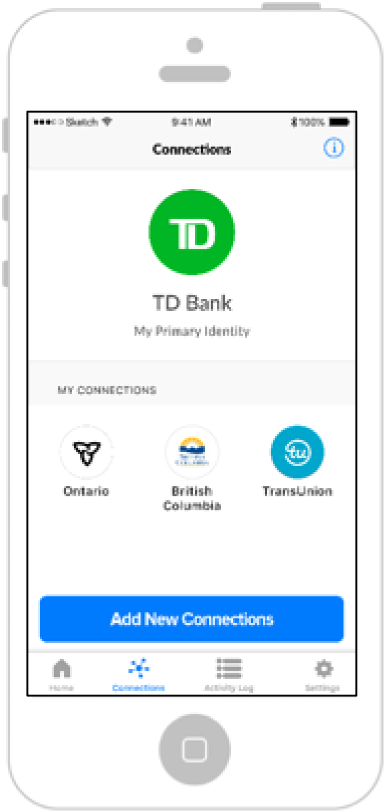
A quick step-by-step guide to help you get the most out of Verified.Me - recommended for new users!

Recent Activity

Identity Verified
January 29, 2018 - 10:45 am

Informatio
January 29,

Leverages a user's existing connections with trusted public and private organizations



TD Bank

My Primary Identity

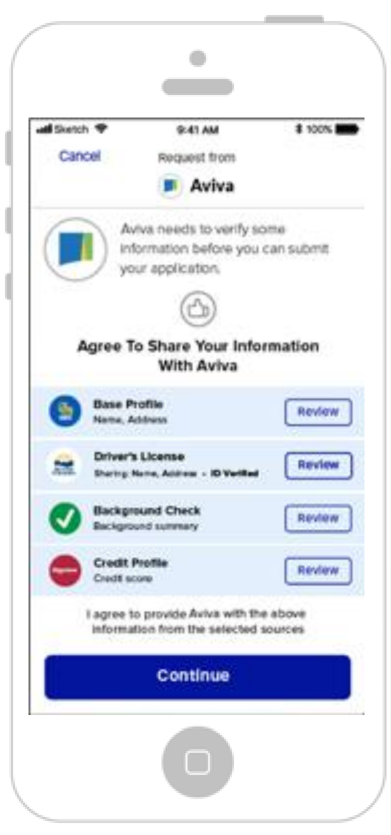
MY CONNECTIONS

Ontario

British Columbia

TransUnion

Enables simple, safe and secure sharing of personal information to 3rd parties from those sources



Request from

Aviva

Aviva needs to verify some information before you can submit your application.

Agree To Share Your Information With Aviva

Base Profile
Name, Address
Review

Driver's License
Sharing: Name, Address - ID Verified
Review

Background Check
Background summary
Review

Credit Profile
Credit score
Review

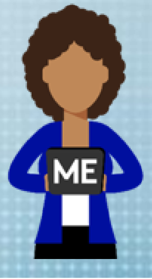
I agree to provide Aviva with the above information from the selected sources

Provides high assurance by combining multiple factors and ID claims

What I Know

What I Have

What I Am



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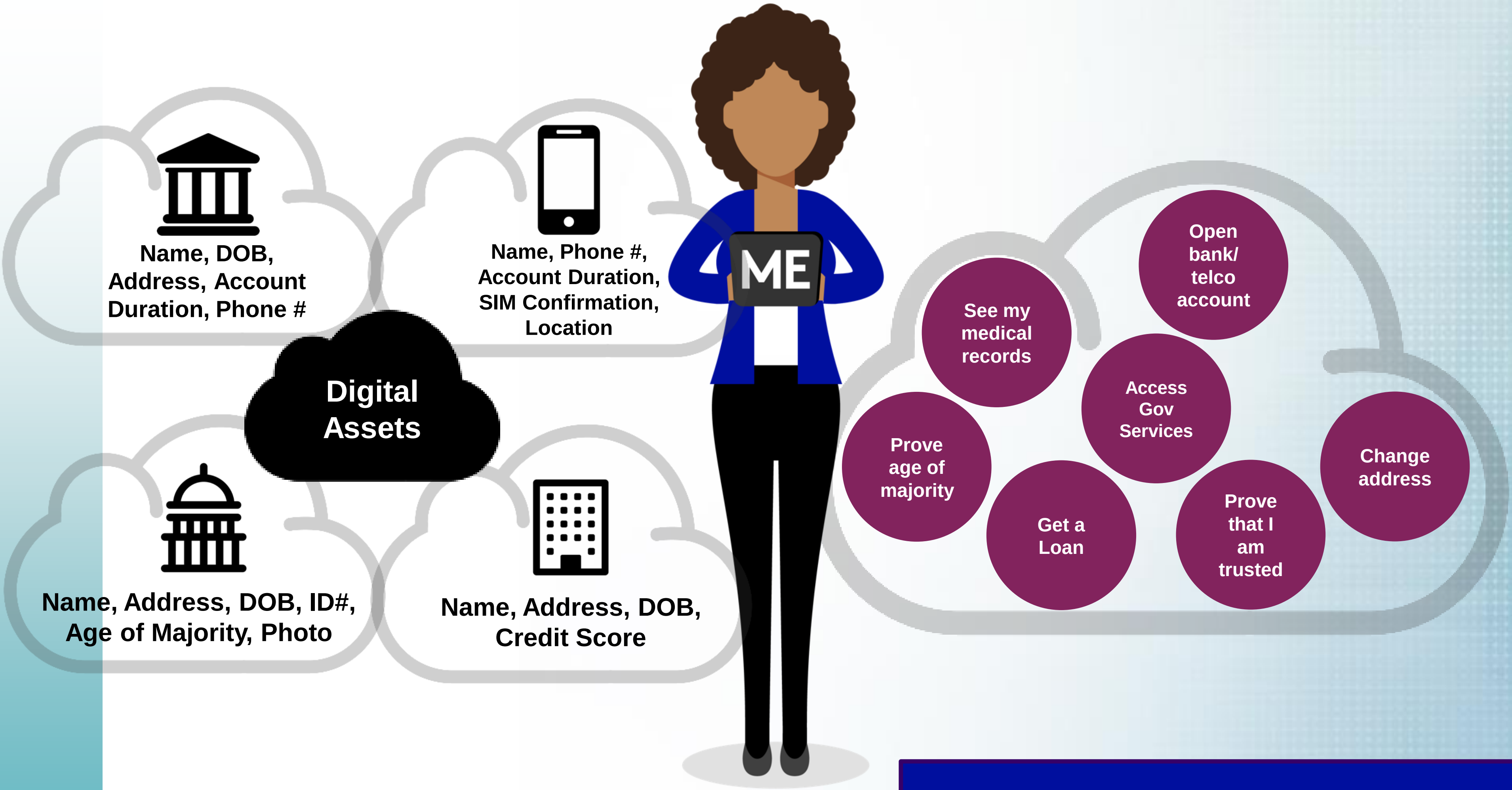
Financial Institution Roles



Name, DOB, Address, Account Duration, Phone #

Name, Phone #, Account Duration, SIM Confirmation, Location

Digital Assets

Name, Address, DOB, ID#, Age of Majority, Photo

Name, Address, DOB, Credit Score

ME

See my medical records

Open bank/ telco account

Access Gov Services

Prove age of majority

Get a Loan

Prove that I am trusted

Change address

Public Private Partnership

A BANK'S VIEW

Eliminate Costs / Drive Efficiency

- Improve onboarding experience across product line and channels
- Enable shift to lower-cost, automated channels
- Streamline cross- and up-sell capabilities
- Leverage data from other partners to provide better customer offerings

Re-Intermediate with Customers

- Provide tool for customers to reduce friction online
- Create strong, multi-factor authentication platform for use across industries
- Enhance brand positioning

Generate Incremental Revenues

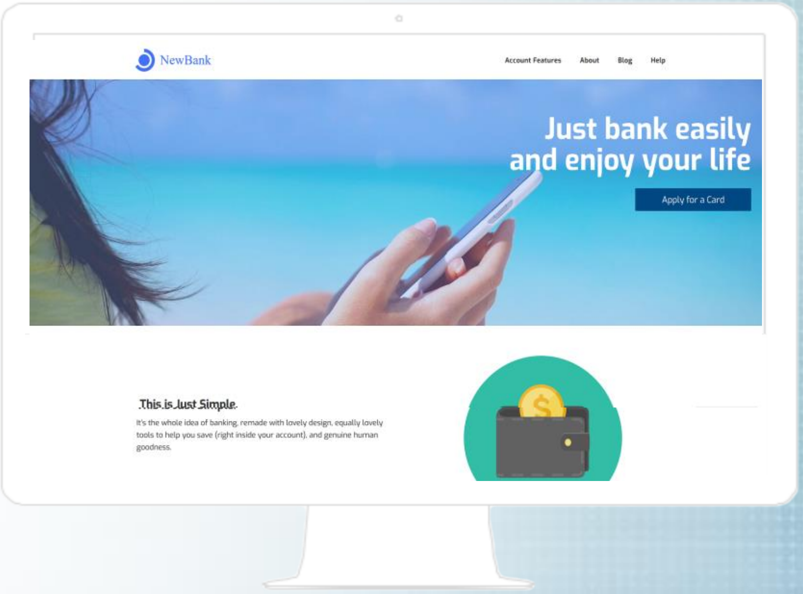
- Provide 'identity as a service' for onboarding and authentication
- Leverages assets generated for business-as-usual activities (verified data, strong authentication)

Experience – Credit card sign-up

- **Use case:** Financial Services companies want to offer customers the ability to sign up for new credit products online

- **Business Driver:**
  - Current onboarding methods are expensive to complete – often allow customers to start sign-up process online, but require additional work to complete – e.g., come in-store to receive the card, outbound call centre for validation, etc.
  - High drop off rates for existing ID verification methods – e.g., low match rates for manually entered data, failure to answer knowledge-based credit-based questions, etc.

- Web flow experience: link
  - Select My Bank as the provider, and use any password for the demo



Just bank easily and enjoy your life

This is Just Simple.

It's the whole idea of banking, remade with lovely design, equally lovely tools to help you save (right inside your account), and genuine human goodness.

Sun Life Case Study

- **Use case:** Sun Life group benefits customers registering for access to self-serve sunlife.ca account

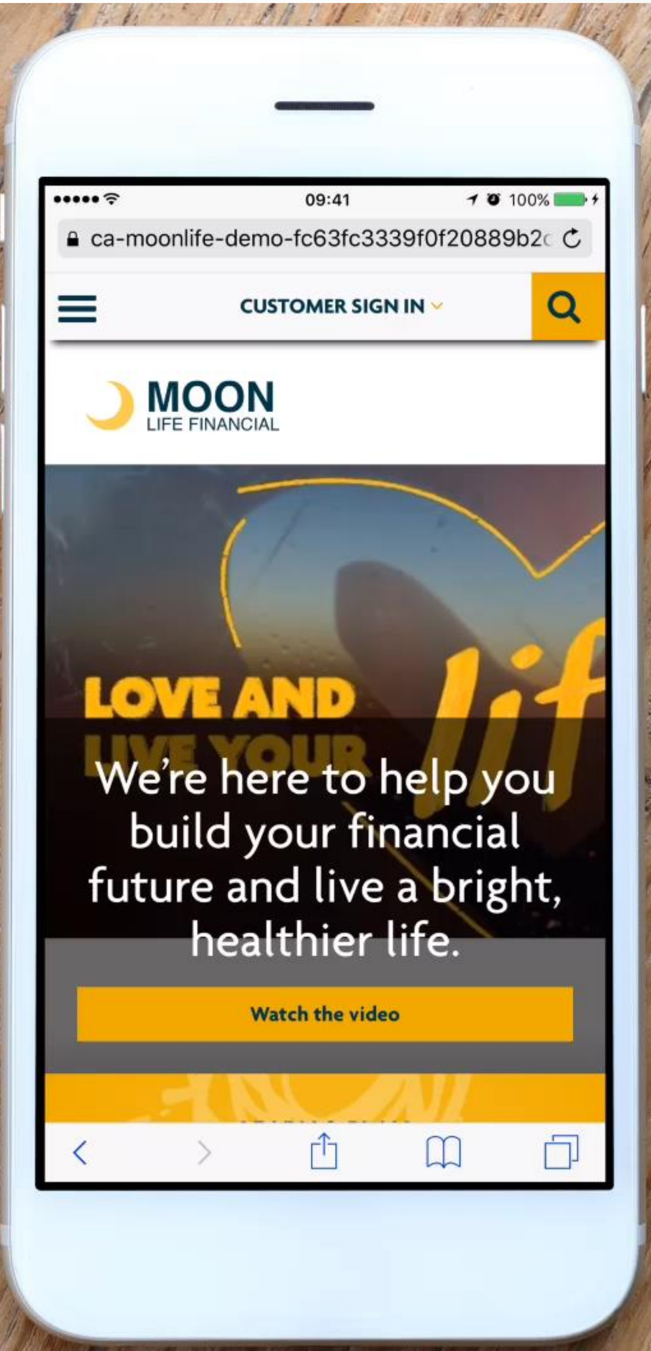
- **Business Driver:**
  - Encourage customers to use self-serve channels (online, mobile app), which provides better customer experience and lower cost
  - Streamline online portal registration which can take up to 7 days (for postal mail codes) and requires customers to know their contract / member # (often forgotten)
  - Reduce cost of customer support (call centre based)

- **Attributes used:** bank name, date of birth, address, contact details; phone verification

- Further cost savings possible by eliminating password resets by leveraging Verified.Me to login and/or reset

"As part of our relentless focus on making it easier for our Clients to do business with us through new digital capabilities, we are proud to team up with SecureKey to offer an even more simplified online experience. As we take the next step along our digital transformation journey, we'll soon be able to streamline and simplify the onboarding process for new Clients by using SecureKey's permission-based tools and Blockchain security to instantly verify personal information."

- Mark Saunders, Executive Vice-President & Chief Information Officer, Sun Life Financial.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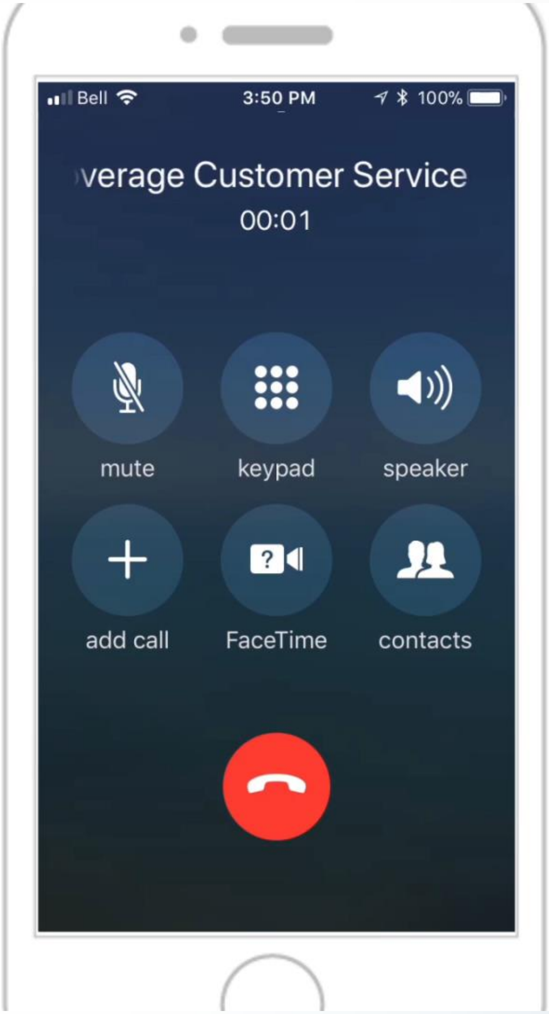
100%
ca-moonlife-demo-fc63fc3339f0f20889b2c
CUSTOMER SIGN IN
MOON
LIFE FINANCIAL
LOVE AND
LIVE YOUR
We're here to help you build your financial future and live a bright, healthier life.
Watch the video

Call Center

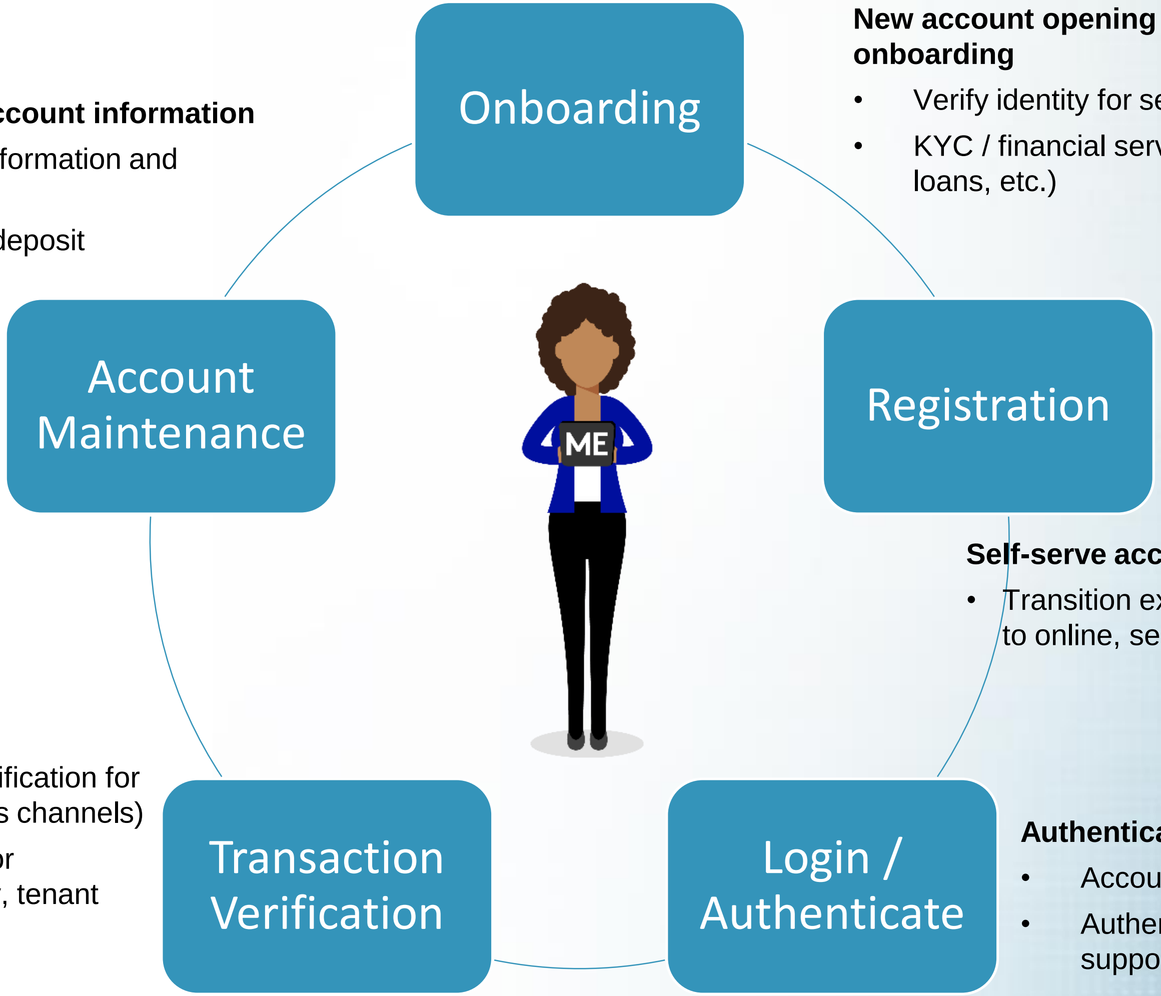


Bell 3:50 PM 100%

verage Customer Service

00:01

Verified ID Helps Across the Customer Lifecycle


Onboarding

Registration

Login / Authenticate

Transaction Verification

Account Maintenance

New account opening / new user onboarding

- Verify identity for service delivery
- KYC / financial services (accounts, loans, etc.)

Self-serve account registration

- Transition existing customers to online, self-serve channels

Authenticate returning users

- Account login or recovery
- Authenticate customers for support

Validate user eligibility

- Age and location verification for product sales (across channels)
- Background check for sharing/gig economy, tenant screening

Update customer account information

- Update address information and contact details
- Sign up for direct deposit

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Transportation Payments Use Case

Jerry Kane, SEPTA

Poll Question

What level of government or what organizations do you see leading the way toward deploying mobile ID for transportation?

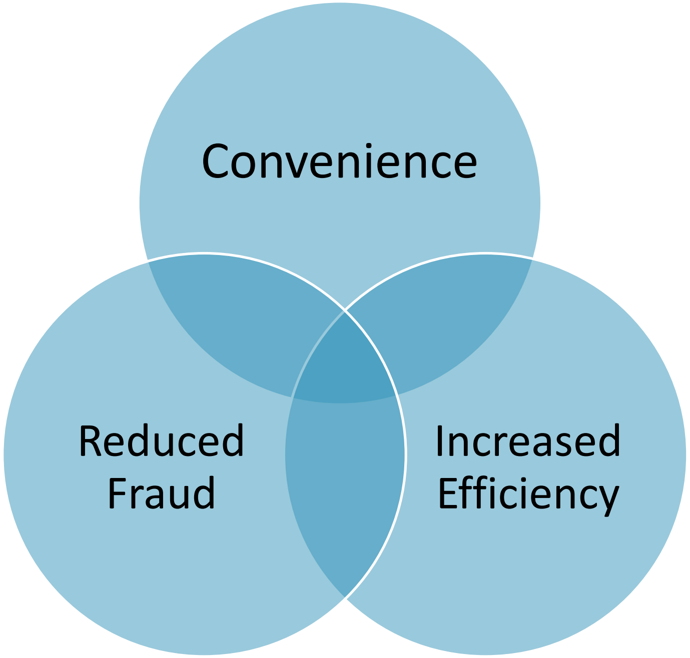
A) City

B) State

C) Federal

D) Private-Public Partnerships

What is the Value Proposition?



Convenience

Reduced Fraud

Increased Efficiency

Providers can improve service efficiency and customer experience by supporting integrated, regional mobile identity service.

Mobile Identity would support verification to allow individualized services related to trip planning and fare payment.

The mobile I.D links the use of an existing credential to fare tariffs and apply rates and discounts for the traveler.

Transport NFC Compatibility

- Public transportation electronic ticketing is compatible with NFC mobile devices.

- NFC Mobile Device current uses:
  - Serve as the fare payment card or token;
  - Provide a channel to gain service and product information;
  - Offer multi-modal travel planning and payment.

NFC Agency Contactless Cards

Mobile Ticketing – Bar Codes

Open payments with contactless cards…

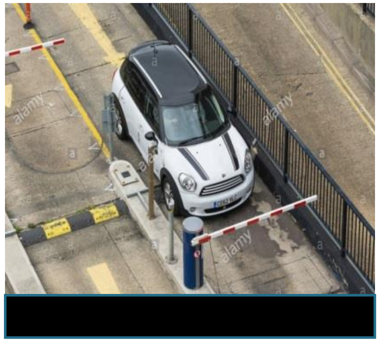
…and mobile wallets.

Using Mobile Identity for Travel Account Registration and Management

- Today riders must provide ID at the operator’s location, sign an application, etc.; or register online to access services and wait for approval of personal data.

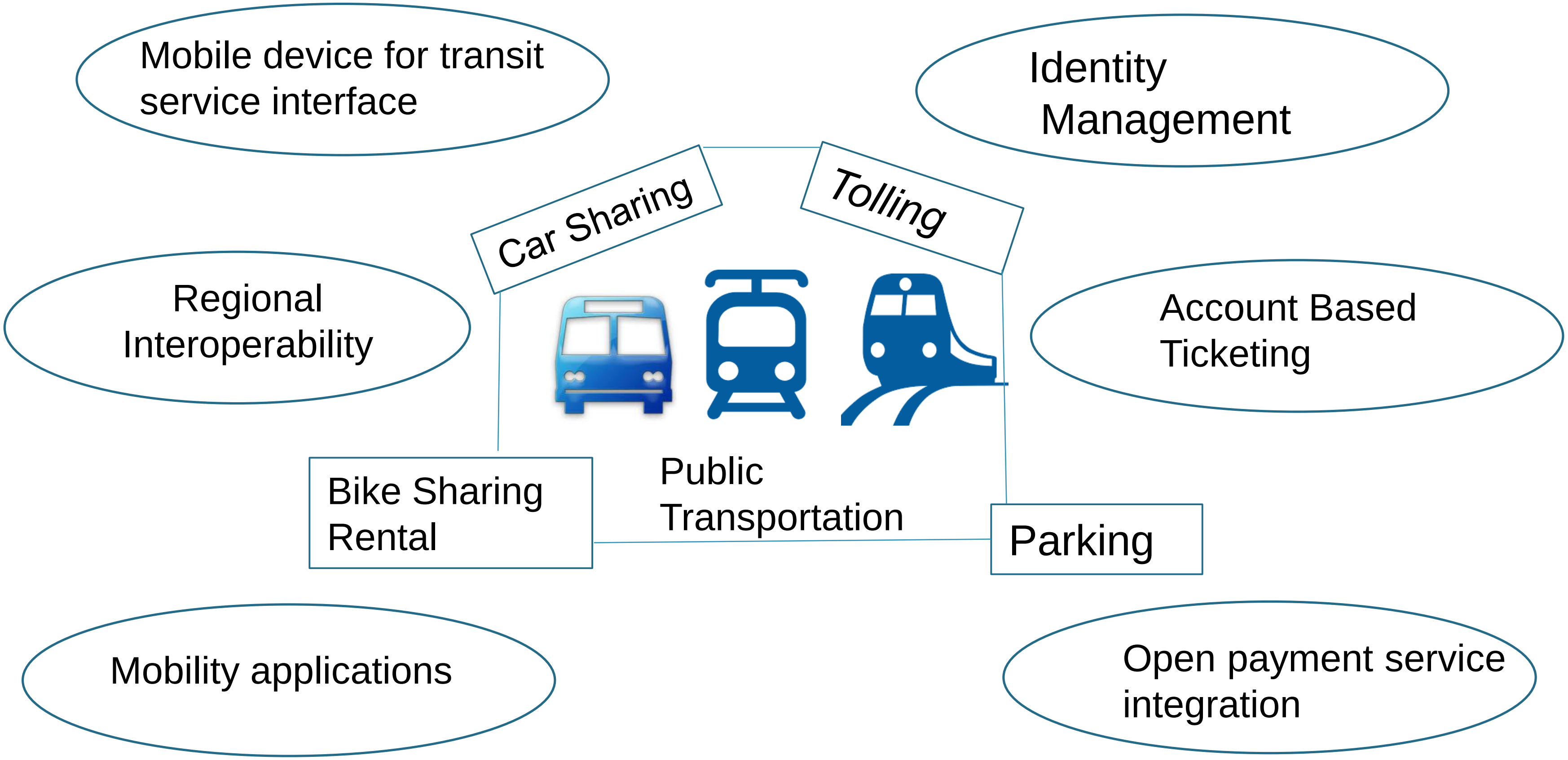
- A seamless approach could use an electronic primary identity that interfaces with the NFC enabled mobile device.

- No need for additional agency cross check before activating the account.



Mobility and Mobile NFC Platform

Building a Seamless Regional Travel Experience



Mobile device for transit service interface

Identity Management

Regional Interoperability

Account Based Ticketing

Car Sharing

Tolling

Bike Sharing Rental

Public Transportation

Parking

Mobility applications

Open payment service integration

Challenges

Absence of a Unifying Framework to:

- Integrate back office data management systems;
- Unify account and user data verification
- Verify account to support seamless travel among providers

Business Relationships and Contracts

- Coordination between multiple operators and services
- Competing interests between proprietary vs. public information standards

Complex Technology Integration

- Complex legacy technologies
- High data security and privacy expectations
- Lack of industry standards

Q&A

Selected Secure Technology Alliance Resources

- **Identity on a Mobile Device: Driver's License and Derived Credential Use Case and Access Control Use Cases** 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
- **Securing Digital ID 2018**, December 4-5, 2018, Washington, DC - http://securingdigitalid.com/?utm=STA-Next-Event

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