princeton IDENTITY

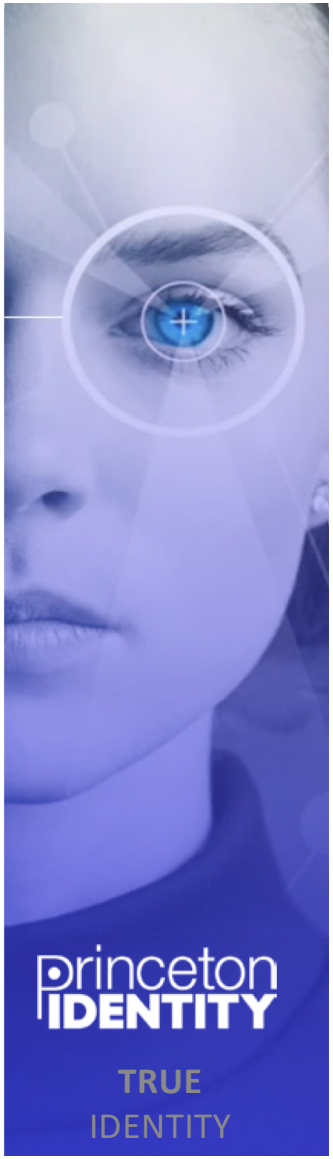
TRUE IDENTITY

Seeing Eye to Eye with Biometrics

STATE-OF-THE ART IDENTITY ACCESS AND MANAGEMENT SOLUTIONS (IAMS) FOR THE PHYSICAL WORLD

Westin R. Wolfenden – Director of Business
Jim DiNapoli – Product Engineer

Security Meets Convenience



BACKGROUND

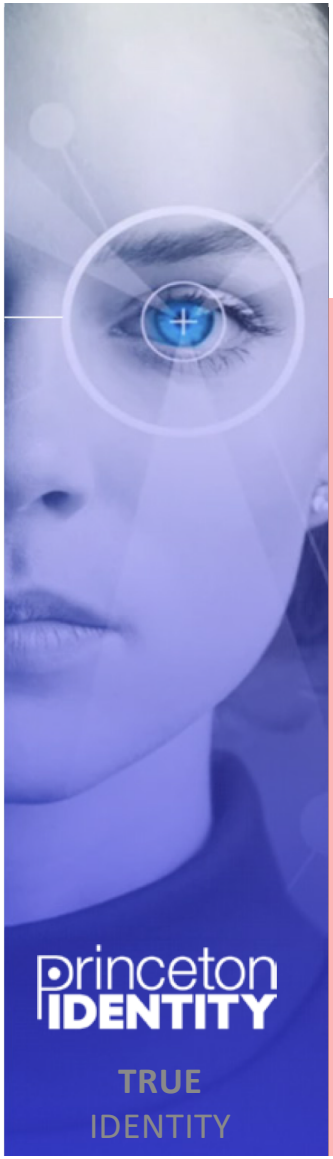
A long and successful history of delivering leading-edge technology

Founded at SRI/ Samsung Ventures

Hold over 37 patents across multiple categories including software, hardware, algorithms and applications

Agile USA based product and software development team- 17 people

Based in Hamilton, NJ. Subsidiary in Dubai



EVOLUTION OF IDENTITY VERIFICATION

Princeton Identity Leading the Advancement of Human Identity Methods

Identifying humans has become more secure, reliable, and more seamless

PIN / Username / Password

Security Lowest

- Security Card
- swapping
- PIN / Password Sharing Cannot
- truly identify the person

Usability

- Requires entering data or presenting card
- Memorization of PW / PINs
- PW / PIN expirations
- Complicated PW standards

Replacing Lost/Stolen cards

Mobile Credentials

Security

- More secure than pins and Passwords.
- Not easily shared. Added security layer beyond cards-location and 2-factor can be enabled

Usability

- Limited device contact Close
- proximity to the reader Contactless

2 step process

Biometrics with mobile phone has increased from 2019 at 27% to in 2022 over 55% of users

Finger / Palm / Face

Security

- Probability of failure 1 out of 1,000 Moderately secure

Face recognition 1-4% failure depending on solution

Usability

- May require contact
- Difficult to use

Iris

Security

- Most secure
- Probability of failure 1 out of 1.4 Billion

Usability

- Contactless
- On-the-Move
- High speed & capture volume

MARKET OPPORTUNITY

Growth in Global Biometrics

$82B by 2027

CAGR 20% from 24.1B in 2020

Source: Biometric Market Reports, Biometric update, October 2020

Growth of Identity and Access Management (IAM) Market

$24.1B by 2025

CAGR 14.4% from 12.3B in 2020

Source: Biometric update, October 2020

Growth of Biometric Devices for Access Control

$12.8B by 2025

CAGR 8.2% from 8.6B in 2020

Source: Findbiometrics, August 24, 2020

Princeton Identity Proprietary Information

Problem / Misconception

Current state of Identity management solutions is flawed

- **Added security layers**
  - ***Multiple apps/Cards/Passwords***
- **Low/No Security**
  - ***Easy to hack/Spoof***
- **Enrollment Nightmare**
  - ***Cumbersome enrollment process in hybrid environment***
- **Return on Investment (ROI)**
  - ***Constantly changing technology***
  - ***Easy to Install/implement***
  - ***Integrate with existing ACS***

Demand for Automation, Security and Convenience

Why Princeton Identity?

Uniquely Meets Highest level of Security without sacrificing Convenience…..

SPEED

Proven Biometric Security solution

Rapid ON-THE-MOVE authentication; focused on **Privacy compliance**

High Throughput

SECURITY

Single Device for ALL access

Iris and face authentication
Mobile credentials

Extremely Accurate

*Residence Hall / Badge checking

SIMPLICITY

Unique Seamless Enrollment

Users can enroll and verify without assistance

Effortless Enrollment Process

Non-Bias Biometrics

Face / Front
Acquired 1/16/2019 19:32:43

REMOVE | SET AS PORTRAIT

Face / Front
Acquired 1/16/2019 21:23:02

REMOVE | SET AS PORTRAIT

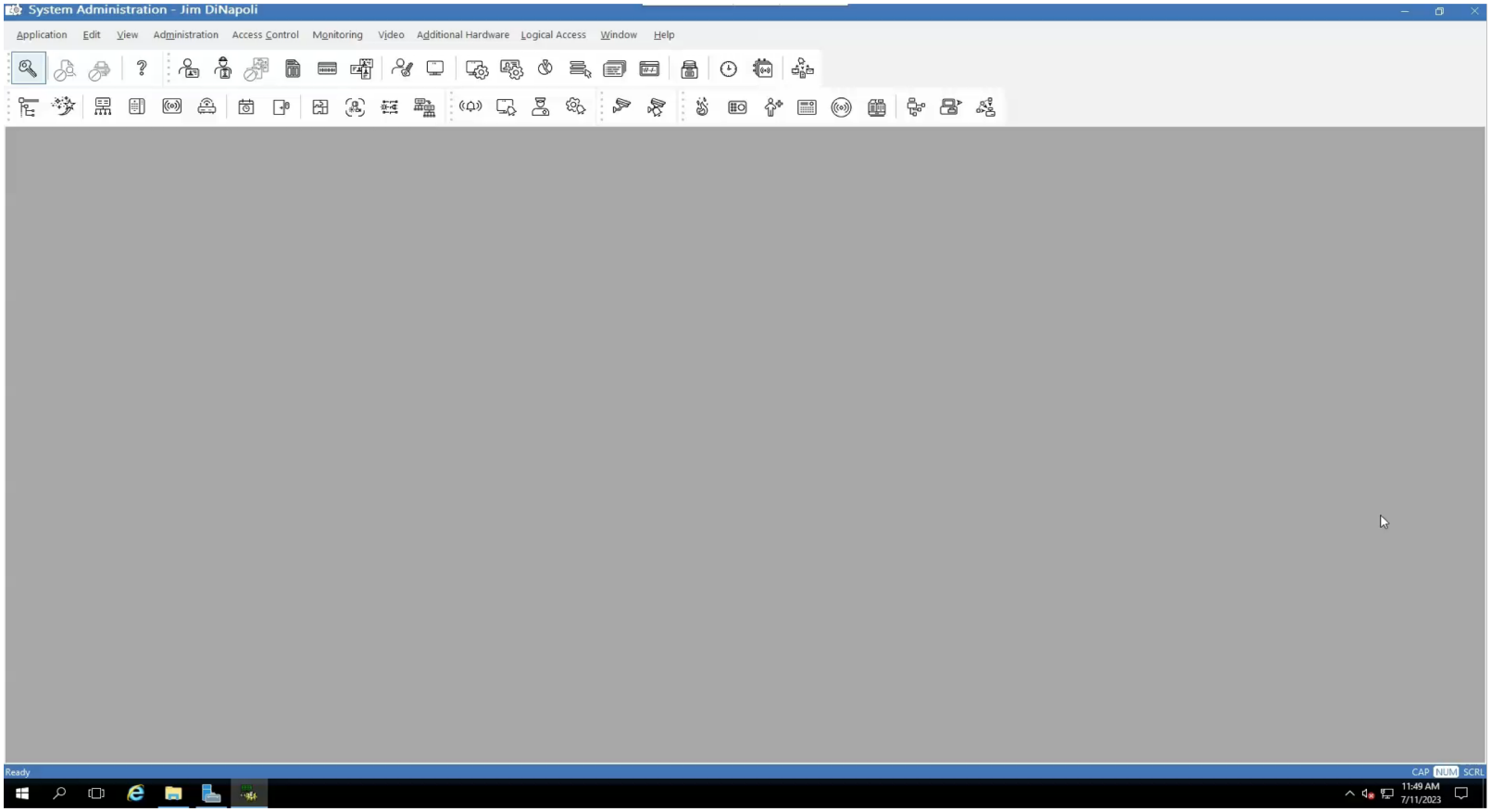
Iris / Left
Acquired 1/16/2019 22:49:29

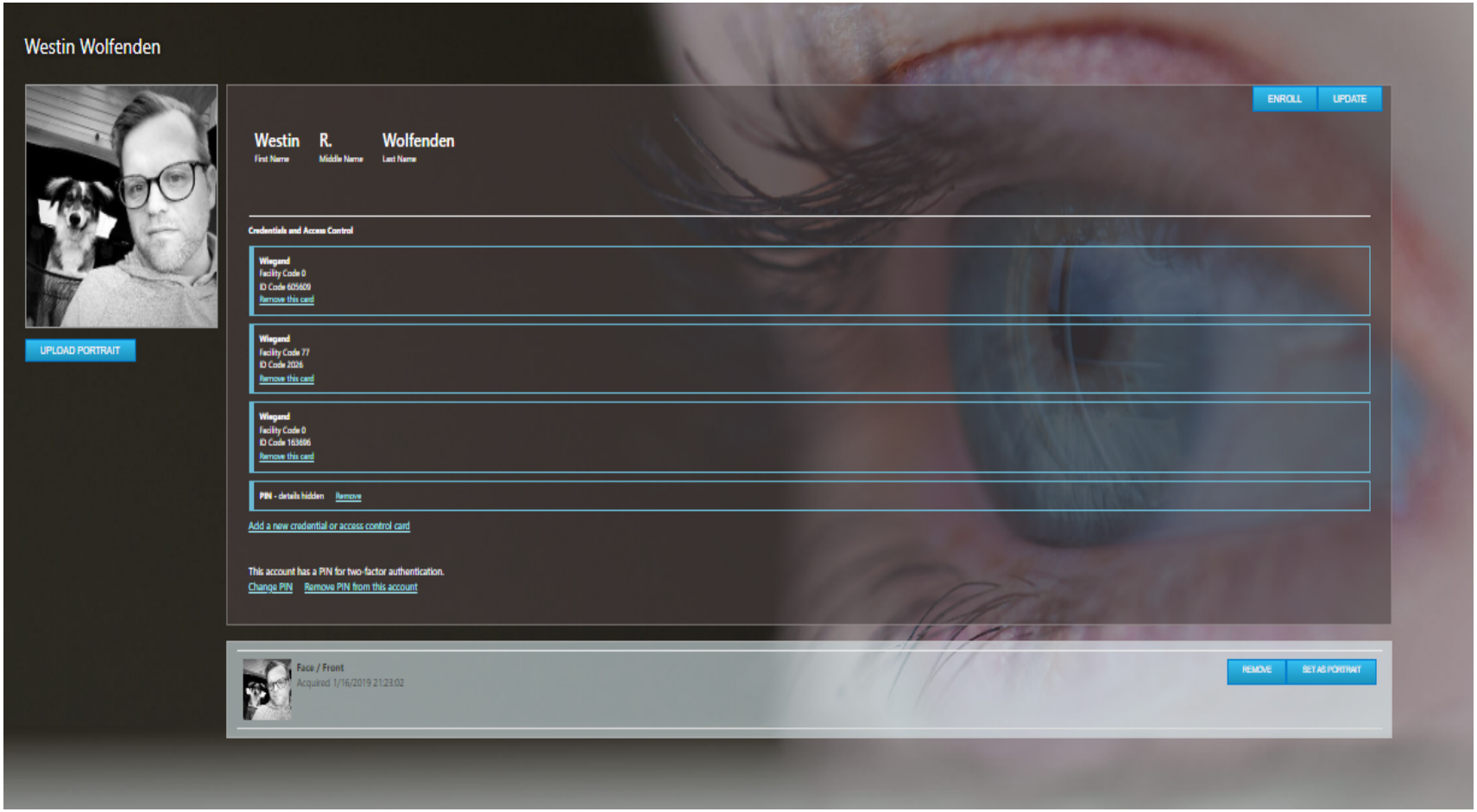
REMOVE

Iris / Right
Acquired 1/16/2019 22:49:29

REMOVE

Princeton Identity Sync with Lenel




Westin Wolfenden
UPLOAD PORTRAIT
ENROLL
UPDATE
Westin
First Name
R.
Middle Name
Wolfenden
Last Name
Credentials and Access Control
Wiegand
Facility Code 0
ID Code 605609
Remove this card
Wiegand
Facility Code 77
ID Code 2026
Remove this card
Wiegand
Facility Code 0
ID Code 163696
Remove this card
PIN - details hidden
Remove
Add a new credential or access control card
This account has a PIN for two-factor authentication.
Change PIN
Remove PIN from this account
Face / Front
Acquired 1/16/2019 21:23:02
REMOVE
SET AS PORTRAIT

Automated Seamless Experience

Initiate Enrollment

Face

Smart Card

Download from ACS/POS
Take from Smart Device
Upload CSV File

Complete Enrollment

Iris

First Interaction w/any Device
Authenticate Face
Automatically enroll irises

Identification (milliseconds)

Iris + Face — ***Biometrics Only***

OR

Iris + Face + Smart Card — ***Biometrics & Card***

Digital Keypad

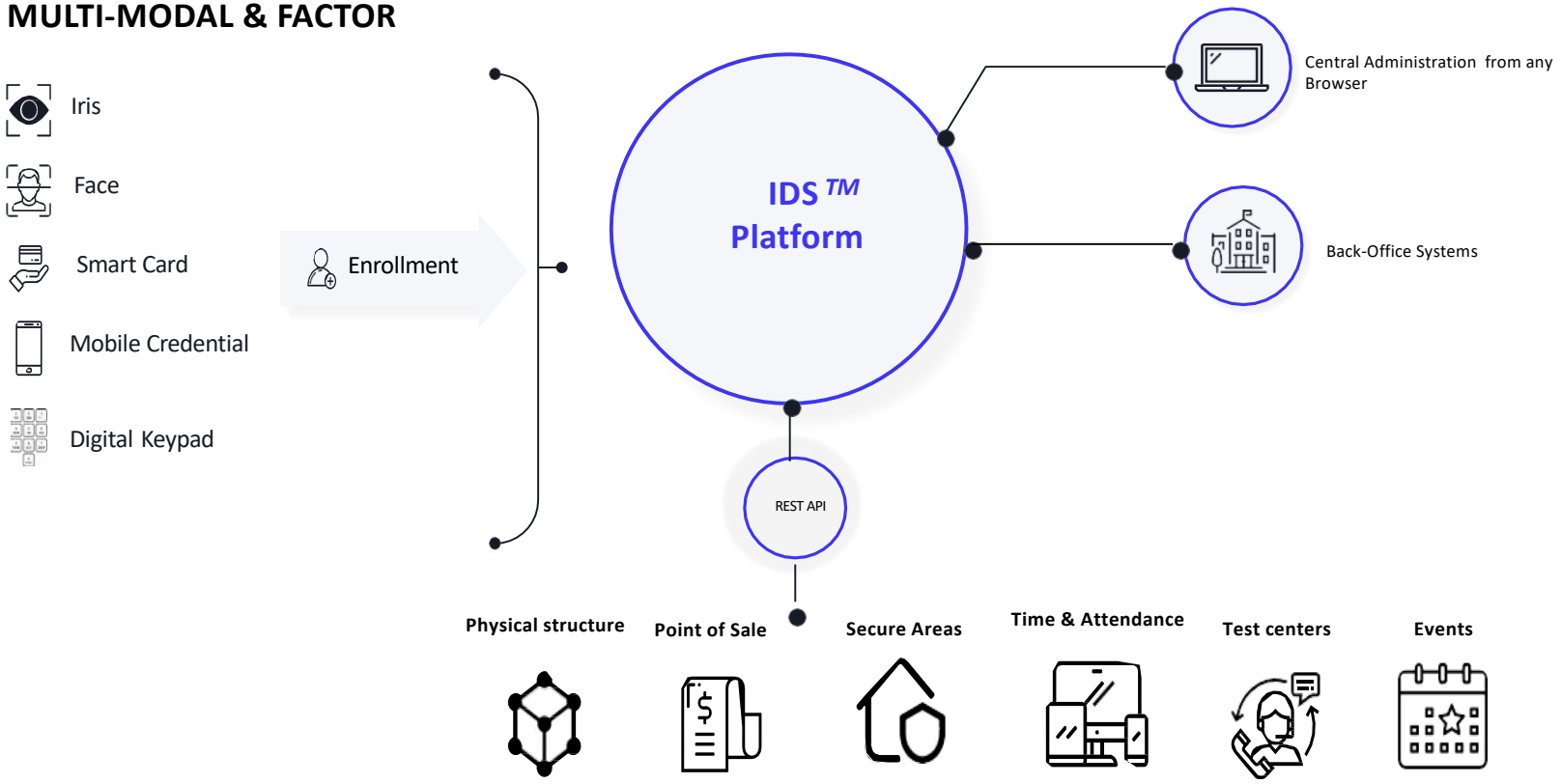
OR

Iris + Face + Mobile Credential — ***Biometrics & Mobile Credential***

HOW IT WORKS - OVERVIEW

Princeton Identity Biometric Solution

MULTI-MODAL & FACTOR



Arai
DUNLOP
KWS
VISION
WHEEL
DISCOUNT
TIRE

BUSINESS MODEL

EMBRACE-ID ™

CAPX/License/Device

1. Access 200 Device
2. IDS ™ Platform
3. Iris & Face Algorithms

SaaS/Device

1. Access 200 Device
2. IDS ™ Platform
3. Iris & Face Algorithms

Princeton Identity 2024

princeton IDENTITY

TRUE IDENTITY

THANK YOU!

Westin R. Wolfenden
Director of Business Development
Westin.Wolfenden@princetonidentity.com