

Powering the trusted identities of
the world's people, places & things

HID

HELUG- HID

July 16, 2024

Stanford University



Part of ASSA ABLOY

Partnership

- Over 25 years of collaboration
- Integration and Standards
 - OSDP
 - High Assurance
 - Mobile
 - Fargo Connect
 - Key, credential management





Intelligent Controller Hardware Lifecycle



12
Years



11
Years



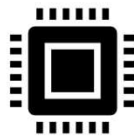
6
Years Production
10
Years Support





Continuity

A future-ready platform to increase edge processing, expand continuity and enhance security



New Integrated Circuit

Designs contain new integrated circuits with 10-year longevity programs



Multiple Build Options

Expanded real-time build options provided by multiple component configurations



Rapid Firmware Updates

Enabled by in-house managed Linux-based operating system





Security

A future-ready platform to increase edge processing, expand continuity and enhance security



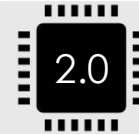
Secure Boot & Trust Zone

Ensure firmware comes from known source and applications contexts are isolated



Latest Cryptography

Latest secure crypto methodologies



Updated Firmware

Powered by Mercury's new 2.0 firmware (released November 2023)





MP-Series Controller – Edge Processing

A future-ready platform to increase edge processing, expand continuity and enhance security



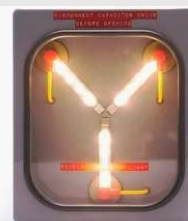
Future-ready
App development environment enables expanded edge processing



New integration option!!
Existing host API and future embedded APIs



Expanded Developer Program
Improved program for software and technology partners



Slide 6

- SEO** propose to change to: adds new integration options
Sowinska, Ewa, 2023-11-07T08:35:40.008
- SE1** slides 6, 7, 8 - maybe it's my poor english, but I find it difficult to understand those sentences. I need to read them couple of times to get a grasp... I guess it depends on target.
Sowinska, Ewa, 2023-11-07T11:56:34.056
- 1 0** It's probably just my blabbering on...HAHA. Thanks for the feedback. I'm working with our marketing team on simplifying our positioning statement. My English is worst than most :)
Dageenakis, Damon, 2023-11-07T17:36:04.544



MP Hardware Improvements

- Processor
 - Moving to the latest STMicroelectronics Arm Cortex A7 supporting TrustZone
 - The new processor is part of a 10-year integrated device longevity program
- Memory
 - Moved to DDR3L memory to better align with modern manufacturing and newer processors
 - Increased memory to support future app development environment
- Power Management
 - Now using a Power Management IC (PMIC) for timing and power efficiency
 - Dual power supply options for supply continuity
- Real-time persistent storage.
 - Moving from 8Mb SRAM (LP) to 128Mb NOR flash
 - Increasing transaction storage 10x from 50K to 500K events
- Battery backup
 - Default RTC backup has changed to a super cap – reducing maintenance needs in the field.
 - If desired, a battery can be added to the controller as further backup



Slide 7

SEO from Phil: "all processors have secure boot these days. Better would be "latest ST Micro Arm Cortex A7 supporting Trustzone".

Sowinska, Ewa, 2023-11-07T08:34:24.600

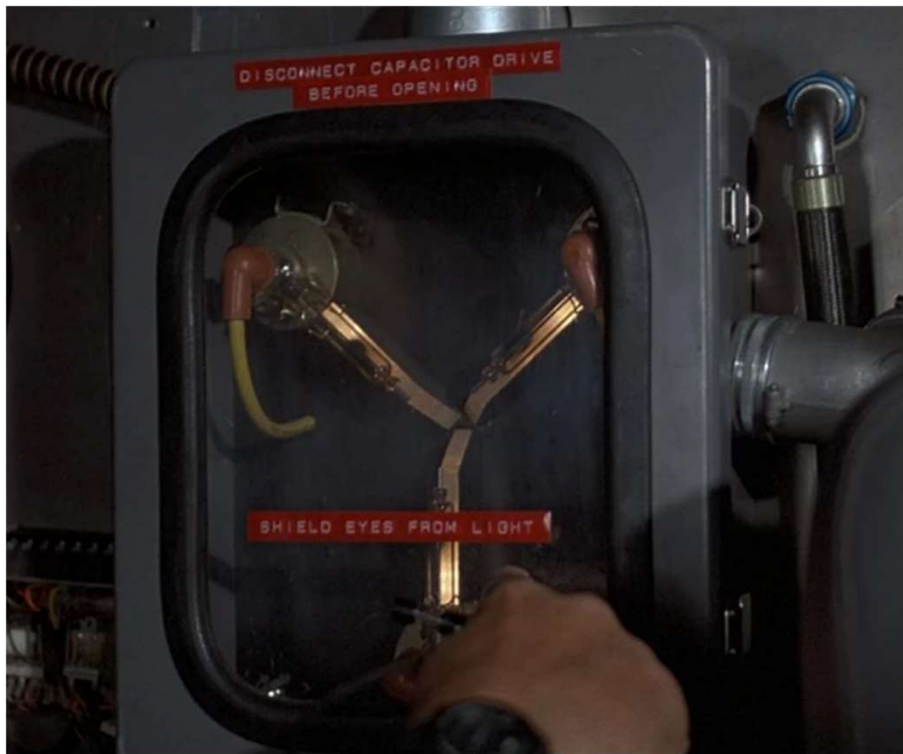
BACK TO THE FUTURE – Navigating Change Today; Reshaping Campus Tomorrow



HELUG CONFERENCE 2024
STANFORD UNIVERSITY



Flux Capacitor



Physical Access Control Trends

- **Convergence** - Physical & Cyber Security
- **Unification** – Access Control & Video
- **Cloud** – Scalable & Flexible
- **AI** – Leverage & Enhance
- **User Experience** – Security & Convenience
- **Mobile** – Standard & Expectation



Great Scott! (Why Not Mobile)

Phone always with them

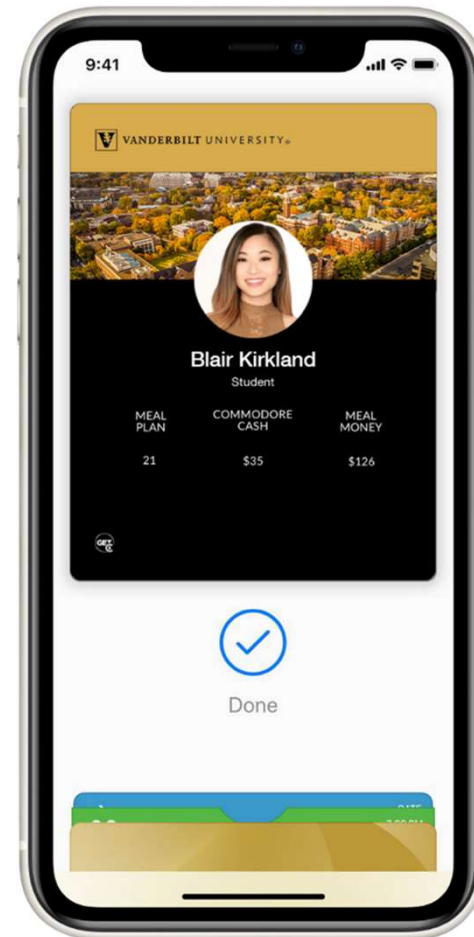
Most secure credential they have

Digital transformation happening

Expectation on User Experience

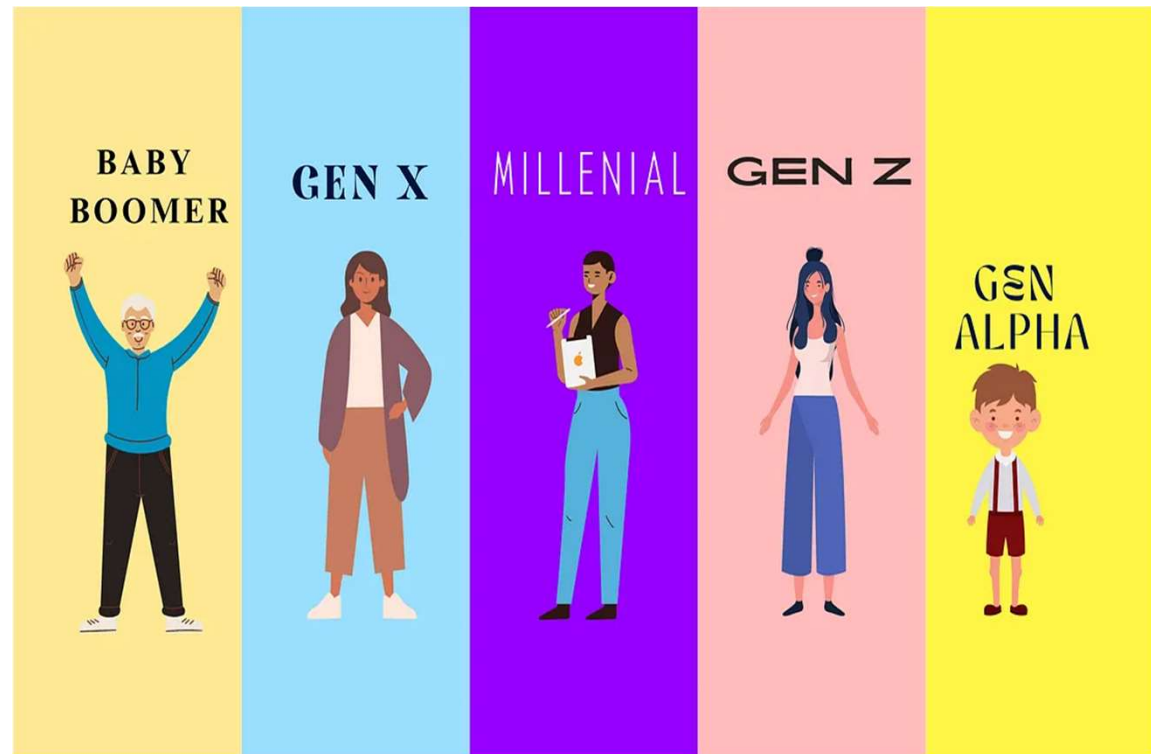
Can still use cards

Gen Z & beyond



Gen Z and Beyond

- Drive demand today
- Decision makers tomorrow
- Immersed in app centric world
- Much more environmentally focused
- Gen “Alpha” next after Gen Z



Gen Alpha



- All about technology
- Technology is extension of who they are
- Super Users of Mobile
- Instant Everything
- Expect Ease of Use
- Enter Universities in 5-8 years

Risk Taking and Innovation

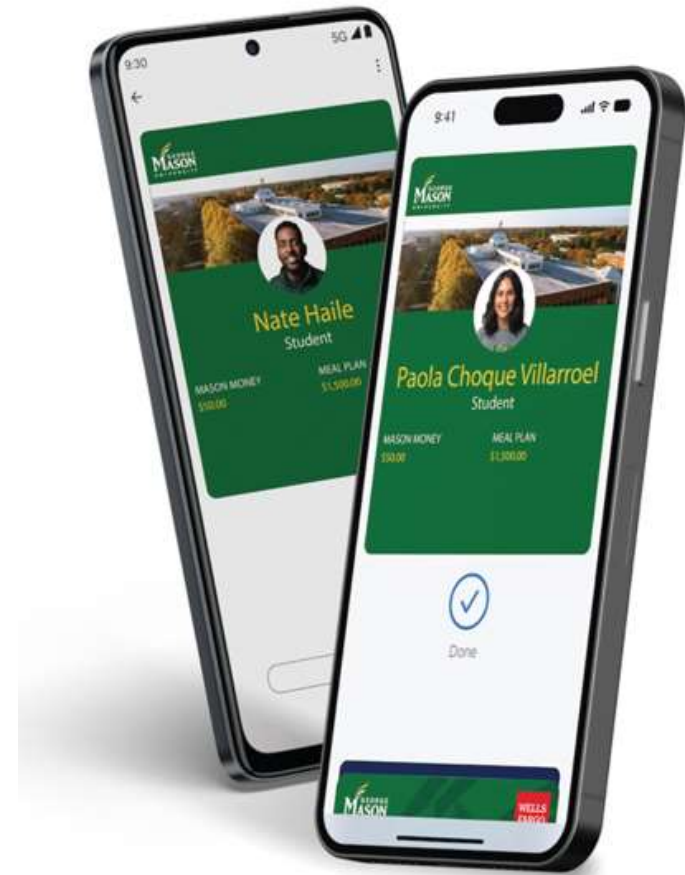


Everything in this picture is now in your pocket!



What the Students are Saying

- Nothing more personal and secure than my phone
- Emotional attachment to the phone
- Lose cards, keys & wallets – never the phone
- Don't leave behind phone
- Expecting Convenience
- Avoiding long lines
- Self-Service Offerings
- Sustainability Important
- Digital Payments
- What is my institution spending money on?
- FOMO

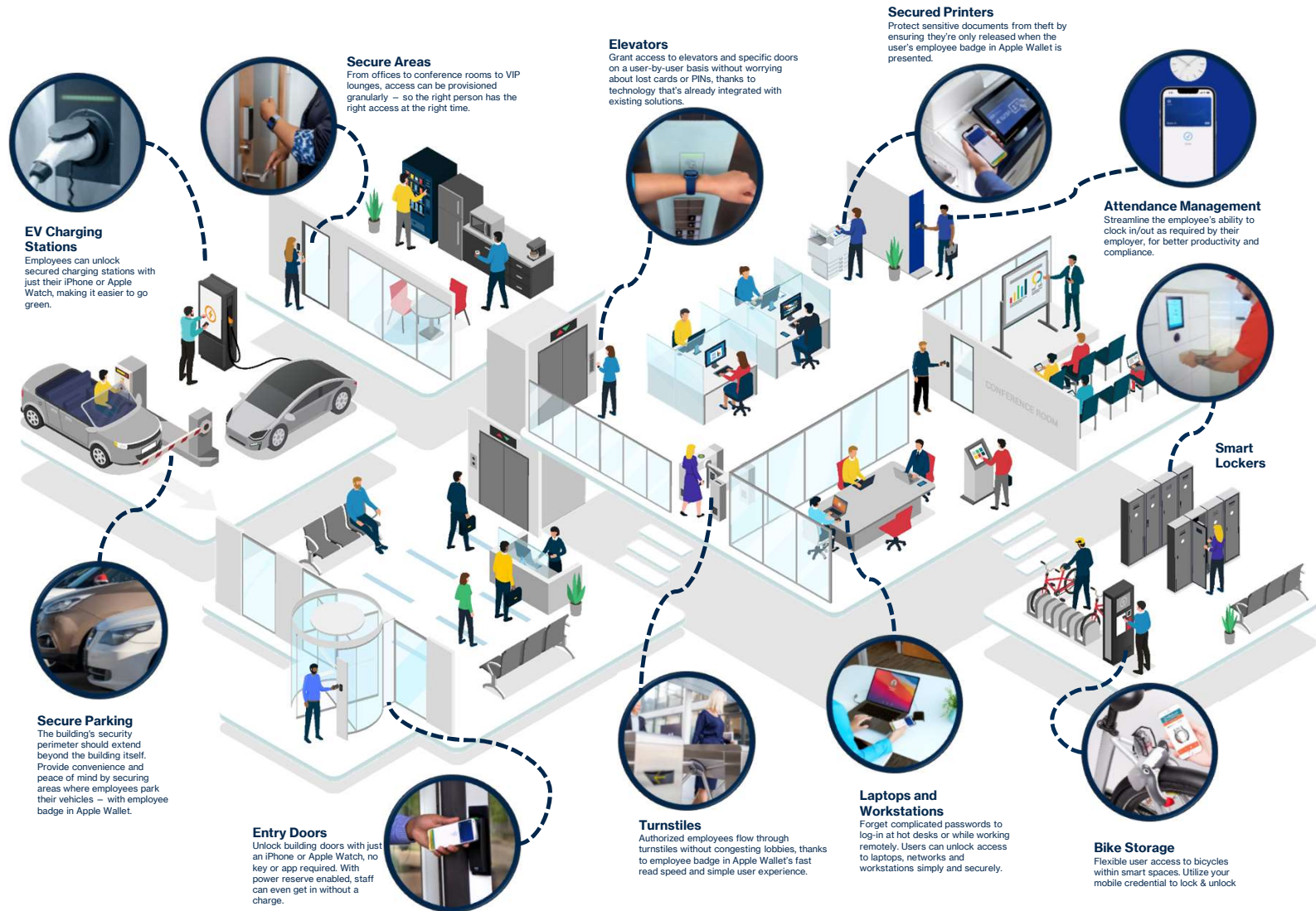
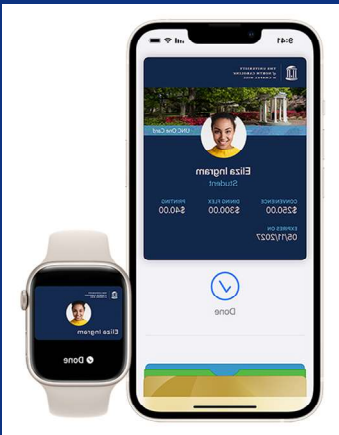


Time to Move Forward

- Orientation Heartburn
- Long Lines, Long Waits
- Card Printer Management
- Support & Troubleshooting
- Replacement Cards (Fees \$\$\$)
- Lack or Legacy Data Feeds
- No Self Service
- Poor Student Experience
- Staff Limited
- ID at the core of how a campus operates



Best Practice for Mobile Extended Use Case Support



ROI



Institutional Values

PERCEPTION



REALITY - ID



Campus Future

- Brick & Mortar vs. Self Service
- Maintenance & Troubleshooting Calls
- Physical Security & Access Control
- Automation & Integrations
- Staff Evolving & Learning
- Personal Growth & Opportunities



Next Steps

COLLABORATION

Use Case Assessment

Stakeholder Meetings

Identify a Champion

Build a Business Case

RESOURCES

Student Government Association

Strategic Planning / Mission

Architectural & Specifications

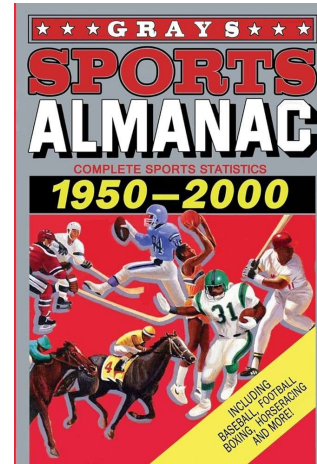
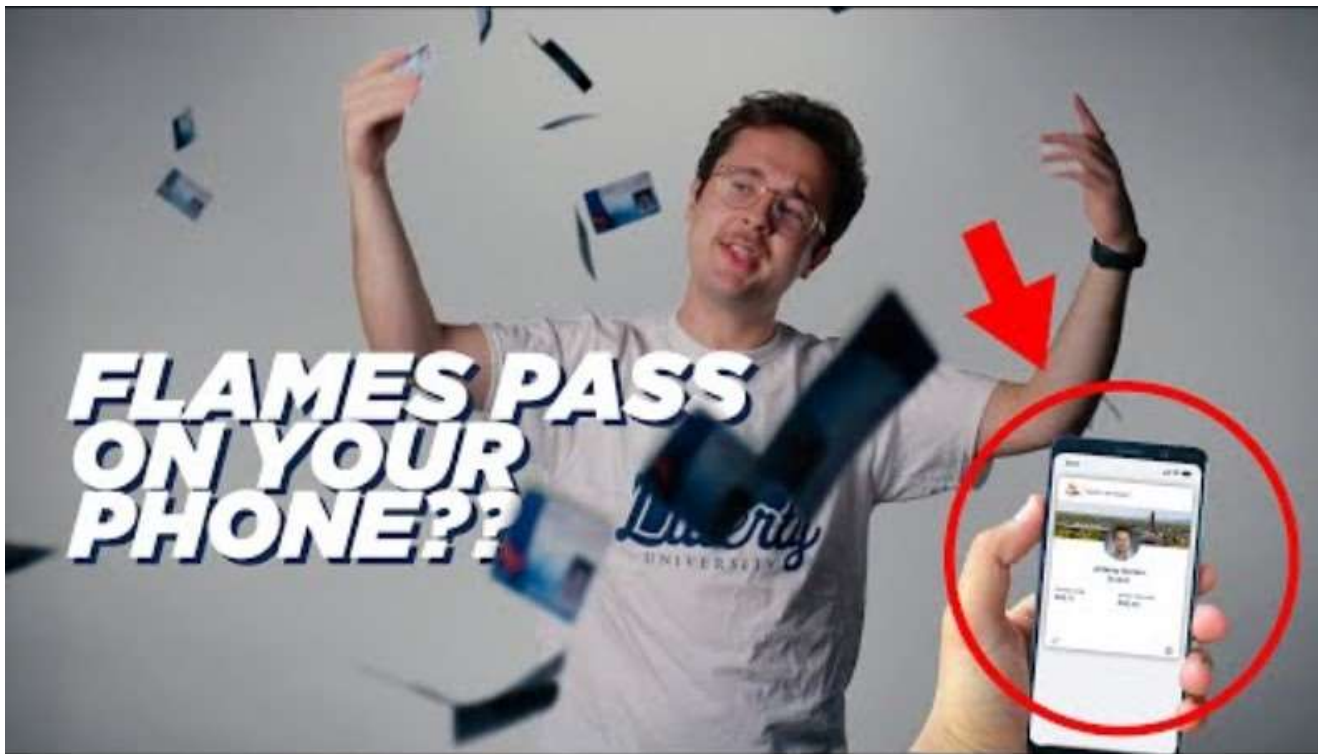
Sustainability Council



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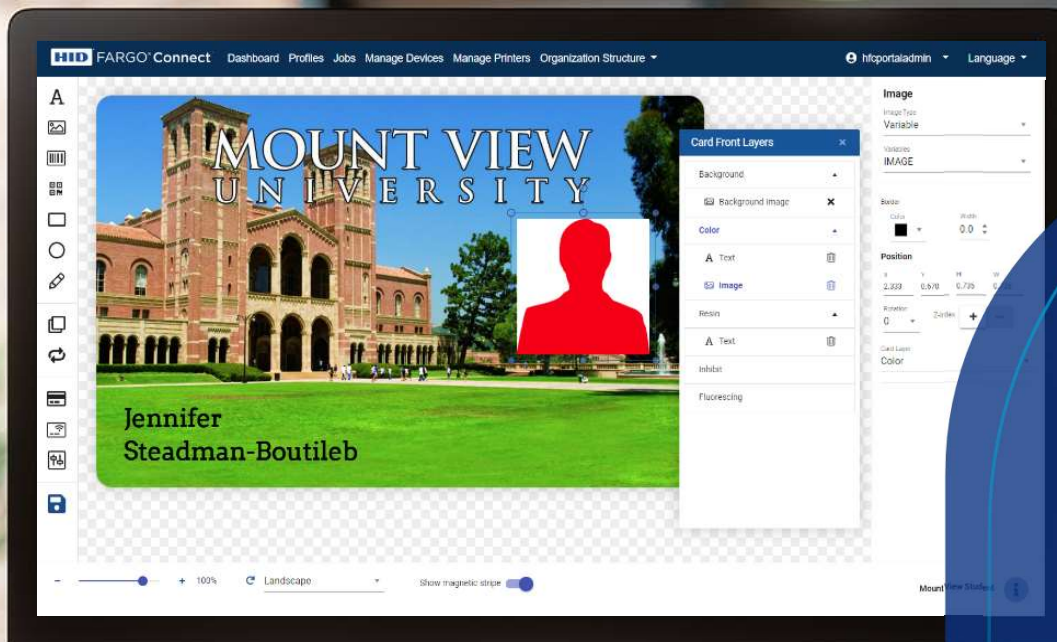


Change for the Better – Keep Up with the Times



HID FARGO Connect





HID FARGO Connect

- Cloud-based card issuance platform that simplifies the complex
- Bringing together all elements of a secure card issuance program
- Fully integrated to Lenel & campus one-card solutions

Don't Be Stuck In The Past!

SYSTEMS TODAY

OLD PARADIGM

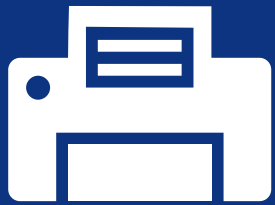
- PC and software management
- Shipping expenses to deliver credentials
- Locally maintained printers
- Issue from PCs
- Hours spent waiting on print queues
- Bouncing between applications

HID FARGO Connect

NEW PARADIGM

- No software
- Secure remote issuance
- Centralized visibility
- Issue from anywhere
- Intelligent Printer and Job Management
- Unified user interface

Credential Issuance Complexity



**Peripheral
Management**



**Multiple Identity
Sources**



**Credential
Modalities**



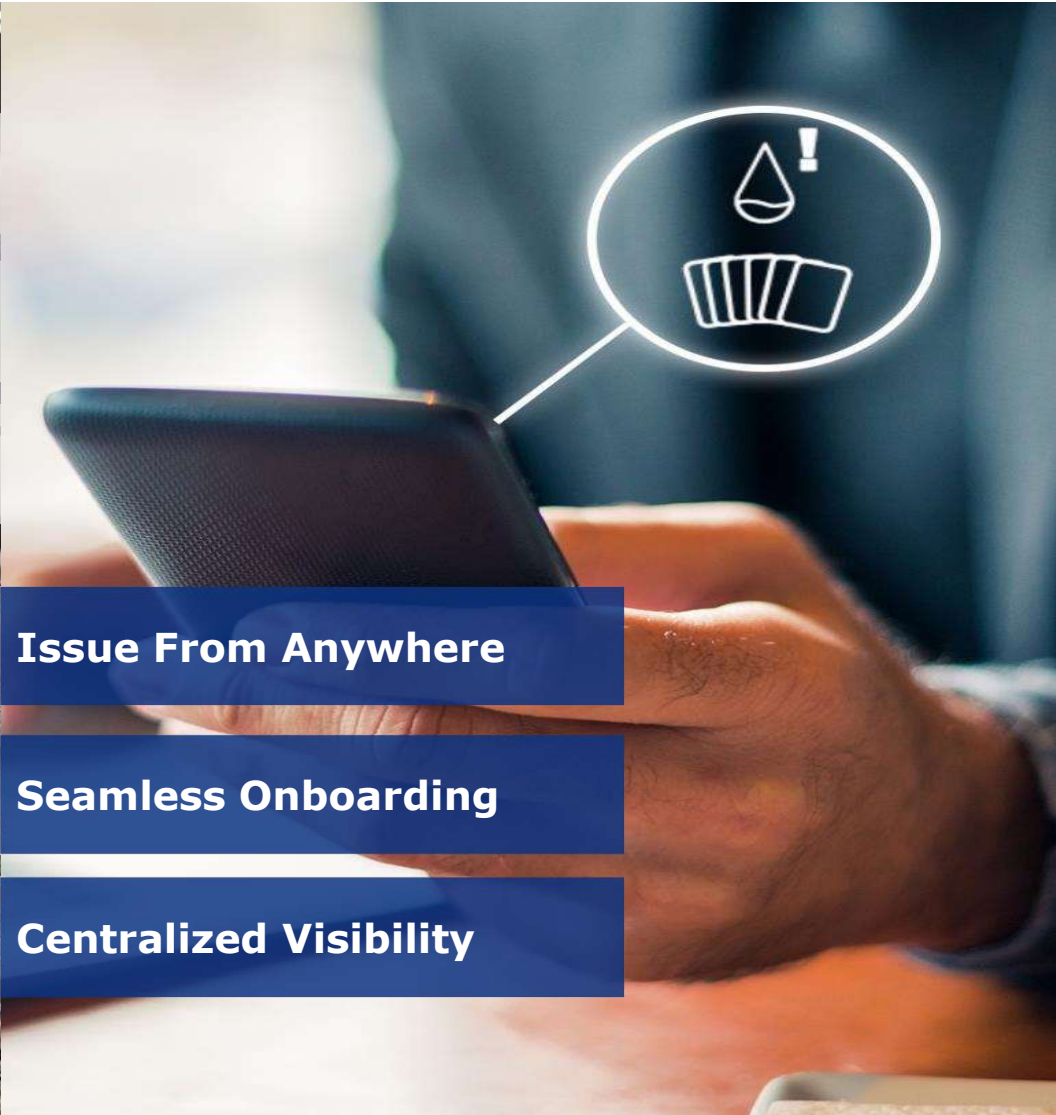
**Elevated
Experience**



Isolated Workstations

Complex Workflows

Offline Support



Issue From Anywhere

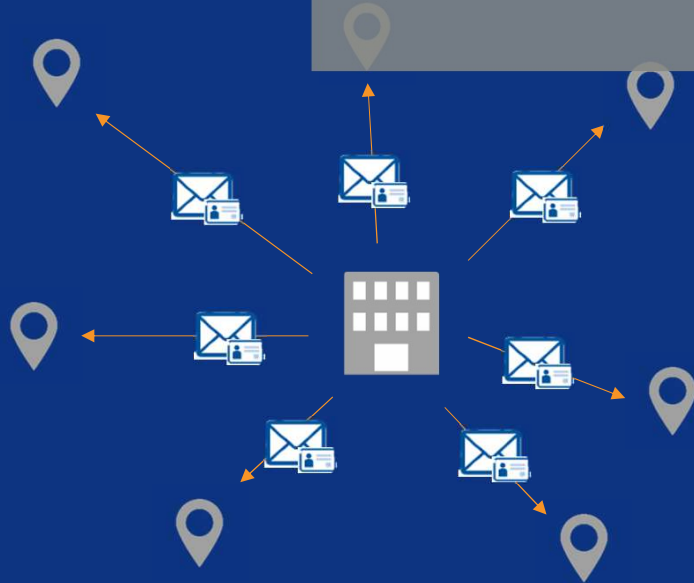
Seamless Onboarding

Centralized Visibility

Weak Security

No Visibility

Costly



Efficient

Flexible

Secure

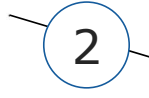
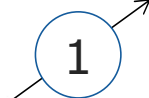




Intricate Manual Steps

Time Consuming

Error Prone



Simplifies the Complex

Automated Processing

Instant Access

HID® FARGO® Connect™ Architecture

Integrated, smart, connected

Web Portal Interface

Card Designer



Consumable Status



Dashboard



Printer Management



On Prem or Hosted Software



Services and Integration Endpoints



Issuance End Points



Console



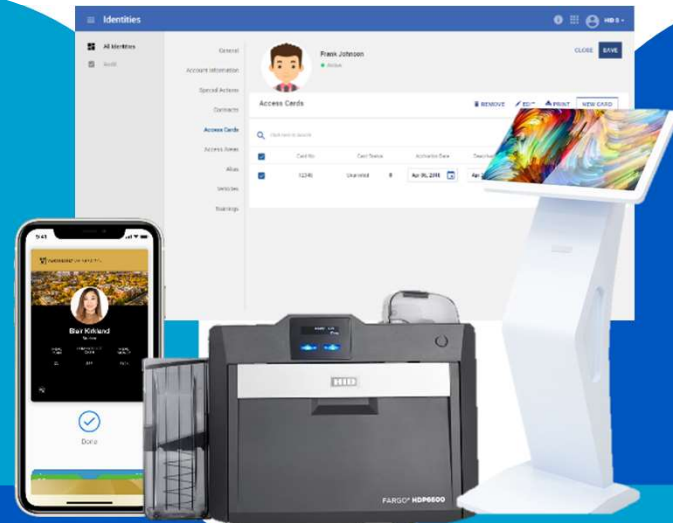
Printers



Digital Credential

Issuance Flexibility

Cloud Issuance



Self Service Issuance



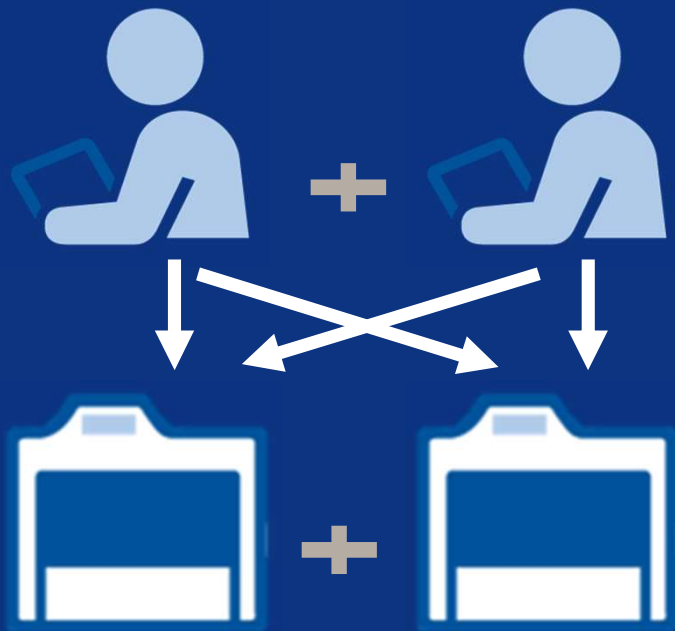
Mobile Issuance



Intelligent Printer Management



HID FARGO Connect Flexible Issuance



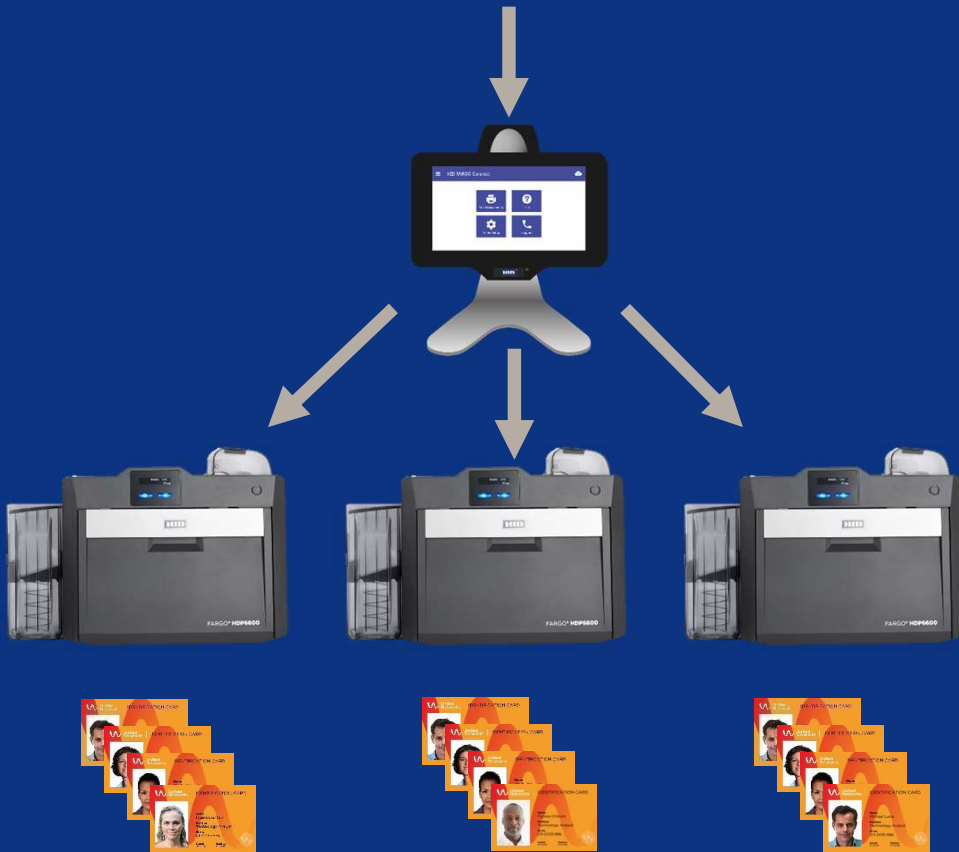
- **Traditional Issuance Systems**

- Users tied to one printer
- Unable to share printers
- If one printer went down that meant an entire workstation went down

- **HID FARGO Connect**

- Users can print to one or many printers
- Users can share printers even if not in the same location
- If a printer goes down, simply issue to another printer from the same workstation

Single Batch Job Submitted

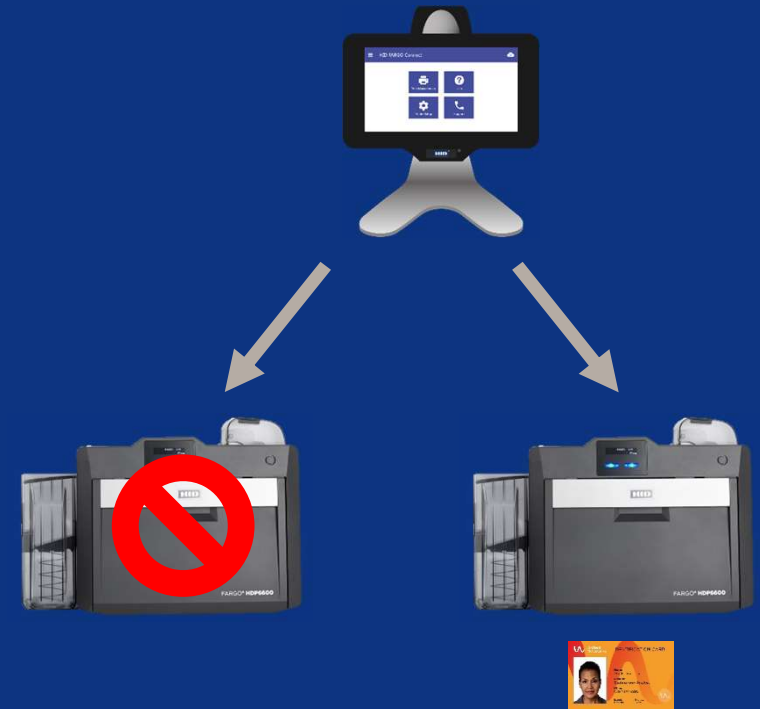


Load Balancing

- Efficiently distribute large batches of prints
- Accomplished via a single click
- Simple configuration of a Virtual Printer
- No EXTRA integration work by tech partner

Printer Failover

- Intelligently directs print jobs from an offline printer to an online printer
- Providing near 100% uptime



Self Service Issuance Workflow



Single Click Credential Issuance



1

HID FARGO Connect (HFC) issues physical card and communicates to Origo Portal

2

HID Mobile Access invite sent to student or employee

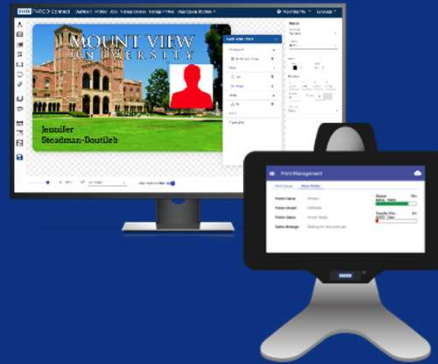
3

HFC enrolls Mobile Credential to One Card or PACS solution

Streamlined Credential Issuance

Superior Data
Protection

Secure Remote
Issuance



Simplified
Maintenance

Flexible

Present and Future





Powering
Trusted Identities

Thank You!

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