VERTICAL MARKET BREAKOUT SESSION

EDUCATION

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Why Mobile?

Value it delivers to your campuses

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



Why Not Mobile?

Phone always with them

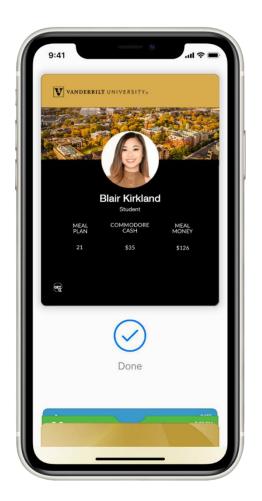
Most secure credential they have

Digital transformation happening

Expectation on User Experience

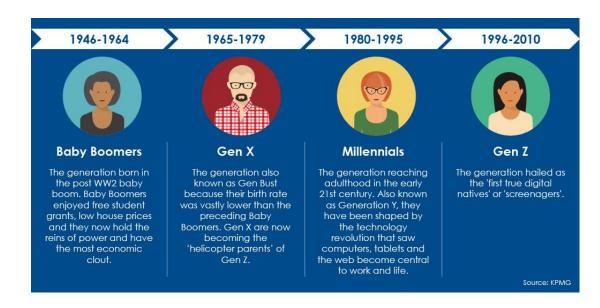
Expectation on Convenience

Gen Z & beyond



Gen Z and Beyond

- Gen Z will DRIVE demand today
 - Decision makers tomorrow
- Gen Z App World vs Carrying Plastic
 - Immersed in app centric world
- Gen Z much more environmentally focused
 - Gen Z making career choices on ESG initiatives
- Gen "Alpha" next after Gen Z
 - Super Users of Mobile
 - Enter Universities in 5 years





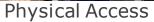
The role of mobile on the digital campus

- A more convenient, efficient, secure way of accessing places and spaces
- Data-based insights that help secure and optimize facilities
- Contribution to sustainability objectives and accreditation
- Support for lean operations
- Drive adoption of Apps designed to attract, retain, and engage



Use Cases for Mobile







Elevator



Smart Lockers



Vending



Turnstiles



Secure Print



EV Charging



Time - Attendance

Alignment with campus initiatives e.g., Climate Action



Reduction of carbon footprint vs plastic cards, which can have a footprint of up to 100 grams CO² equivalent each.



Signo readers use Intelligent Power Mode to reduce building energy consumption.



Reader Environmental Product Declarations support BREEAM and LEED building ratings.



HID is a member of the US Green Building Council.



HID Mobile Access is an accredited WiredScore solution.



Science Based Targets initiative

On 16 November, 2022 ASSA ABLOY has received validation by the Science Based Targets initiative (SBTi) for the company's emission reduction targets.

We believe that science-based targets will be beneficial for our business on several levels. By setting a net-zero target in line with a 1.5°C future, we are making a critical contribution to limiting the worst impacts of climate change.

- We will halve Scope 1 and Scope 2 emissions in our own operations by 2030
- We will reduce the footprint of our wider value chain, including raw materials, logistics and products by 28% by 2030, thereby addressing our Scope 3 footprint
- We commit to net zero emissions across the whole value chain no later than 2050



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

What does your institution value?

PORTRAY













REALITY - CREDENTIAL















STAKES are HIGH

Breaches caused by credential compromise

NEARLY DOUBLED

over past three years

61%

33%

83%

of companies had two or more data breaches since 2021 \$4.3M

Average cost of a breach



The Stakes Are Real

euronews.

Data of half of population of France stolen in its largest ever cyberattack



Casino giant MGM expects \$100 million hit from hack that led to data breach

FORTUNE

Microsoft AI researchers accidentally leak 38TB of company data



iMessage with PQ3: The new state of the art in quantum-secure messaging at scale



THREAT LANDSCAPE

Growing number and complexity of threats fueled by compromised credentials, ransomware, and phishing cost businesses \$10T annually by 2025

DIGITAL TRANSFORMATION

Al, cloud strategy, PQ, and observability needs driving CISO top priorities for identity, zero trust, and management solutions to mitigate risks

MARKET TURBULENCE

Cybersecurity market growing despite budgets tightening and sales cycles extending



Threats are changing

Disappearing Perimeter



Cloud, digital, work anytime/any device expands attack surface

Inevitable Breaches



It's a matter of when, no longer if

Lateral Movement



Attackers move laterally to maximize impact

Insider Threat



Vulnerabilities exposed by poor cyber hygiene



New Challenges Require New Solutions

Customer Pains

New Challenges

Entrust Can Help

Disappearing perimeter

Inevitable breaches

Lack of visibility and governance

Operational inefficiencies

Zero Trust

Perimeter-less ecosystem driving security investments

Multi-Cloud

Changing networks, where data resides, and protection

Post Quantum

Generational security upgrade required to prevent post-quantum threats

A Zero Trust foundation enabling trusted identities across users, devices, apps, & workloads

Uniquely supported by **strong end-to-end encryption** to protect data in-transit, at-rest and in-use

Security everywhere – on-premises, public, and private clouds – and backed by an ecosystem of tech partners

PQ ready solutions and services to mitigate risks and enable crypto agility

Stolen credentials attacks cost more and take 327 days to identify IBM - Data-breach report

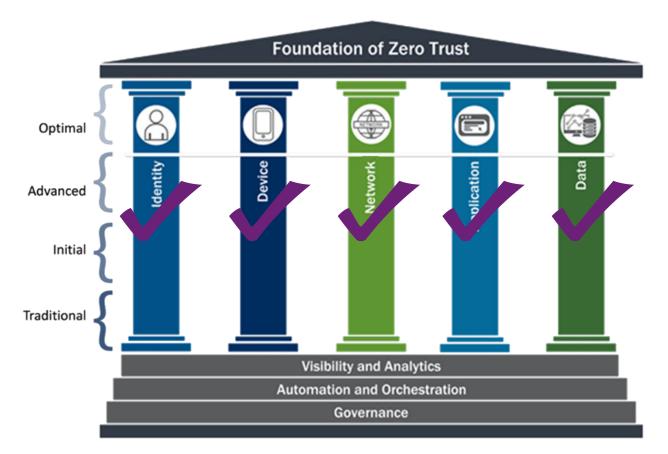
\$5.0M avg cost of data breach in organizations with public clouds

IBM - Data-breach report

By 2025, PQC risk assessment will be the top issue businesses will look for advice on Gartner - How to make money from Quantum report



ENTRUST COVERAGE



Zero Trust Maturity Model v. 2

Source: Cybersecurity & Infrastructure Security Agency (CISA)

- Zero Trust extends beyond user identity
- Entrust is uniquely positioned to help across
 each pillar with a broad portfolio of Identity,
 encryption and data security along with a strong
 partner ecosystem
- Achieve maturity across each pillar with a roadmap that addresses the most critical areas first



PHISHING-RESISTANT PASSWORDLESS MFA

CRITICAL PART OF ZERO TRUST ARCHITECTURE

Best

Entrust mobile smart login (PKI mobile smart credential + Bluetooth proximity)



Better

FIDO2 Key



User initiates login Application issues security challenge to registered device in proximity FIDO key signs with private key and sends back challenge Application verifies signed challenge and logs in user

Good

FIDO2 Credentials (aka "passkeys")



Userinitiate

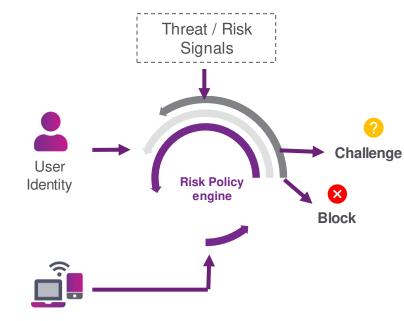
Application issues security challenge to registered smart device in proximity (confirmed via Bluetooth) User uses biometrics to authenticate passkey. Passkeyon mobile is used to sign and send

back challenge

Application verifies signed challenge and proximity of passkey device to log in user

High Assurance Identities

Device certificate + User Certificate + RBA



- Device Identity and reputation
- · Device Certificate



ZERO TRUST MATURITY MODEL COVERAGE

