The security industry response to market demands

Major Security Industry Trends

2006 - 2010

Global Security Forum

Milano 29 November 2006

Content

Change Drivers - Technology

Change Drivers - Need & Requirements

Industry Response

CCTV & Video

RFID, Smartcard technology

Convergences

Summary

Content

Change Drivers - Technology

Video Technology

- Digital cameras

- Mass storage of video

- Data mining & intelligent video

- Predictive video ?

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RFID

- 13.56 M HZ & UHF

- Biometric integration

- Micro controller technology

- Active & Active Intelligent

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- Remote host systems

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Biometrics

- New Sensors
- Algorithm advancement
- Next generation

Photo courtesy of Recognition Systems

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8

Change Drivers - Needs & Requirements

■ Terrorism

September 11th New York & Washington , London, Madrid, etc.

■ Knowledge Revolution

Today IT security is MORE vital than physical !

Global teams

Private / Public collaborative teams

■ Internet & e-commerce

Identity theft crimes

Security Pre & Post September 11

Transportation Security Administration

Electronic Code of Federal Regulations e-CFR™

FOR IMMEDIATE RELEASE
APA 50-99
April 15, 1999
Contact: Rebecca Trexler
Phone: 202-267-8521

FAA Issues Proposed Rule Change On Checked Baggage Security

WASHINGTON-The Federal Aviation Administration today proposed to strengthen ... estic aviation system. The proposed rule, ... implements a key recommendation by the ... ety and Security led by Vice President Al ... cant security enhancements recommended ... proposal would require airlines to apply additional security to the checked b... use of automated screening procedu... to apply additional security to all... include a massive deployment of so... carry-on bags, computerized tra... screeners, greater numbers of FAA c... airports, and expanded FAA-indust... "Domestic aviation security is at a ne... we've made in the last few yea... importance of the new procedure... forward to start instituting them," said FAA Administ... voluntarily imple... airlines made it possible for nearly every passenger flyi... ...would be required ... procedures and equipment have lessened passenger inc... the process. The Compute... instance, would replace a manual program subject to h... automated system that is ... sensitive security information. Scrutinizing all check... consuming, but the CAPS system will screen out the ma... and allow airlines to concentrate on only those autom... system. CAPS uses data from the airlines' reservations s... two ways: some baggage is selected through pre-programmed criteria, while other bags are chosen for screening on a random basis. For the most part, passengers will never

Homeland Security

THIS DATA CURRENT AS OF THE FEDERAL REGISTER DATED FEBRUARY 11, 2002

security procedures a... rights, Secretary of Transportation Rodney E. Slater said the Department of Transportation will put in place the DOJ recommendations to ensure that airline security screening complies fully with civil ... aviation ... e vigilant ... rs," Slater ... c Affairs ... s to listen ... screening ... a follow-up to the ...'s (DOJ) review of the ...)-mandated airline ... gs that the required ... of airline passengers. ... is moving swiftly to ... on on Aviation Safety ... senger screening by ... Garvey said. "I'm ... es will continue to

14 CFR
Aeronautics and Space
CHAPTER I
FEDERAL AVIATION ADMINISTRATION, DEPARTMENT OF TRANSPORTATION (Continued)

SUBCHAPTER F -- AIR TRAFFIC AND GENERAL OPERATING RULES

PART 107 -- AIRPORT SECURITY

Subpart A -- General

Sec.

U.S. Department of Transportation

FOR IMMEDIATE RELEASE DOT 4...
Wednesday, October 1, 1997 Contact: Bill Mosley

DOT ANNOUNCES ACTION ON AIRLINE SECURITY AND DISCRIM...

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Security Pre & Post September 11

- **Access control systems <u>did NOT perform</u> their intended function**

  " We successfully penetrated secure area on 117 (68 percent) of 173 attempts from the non sterile and sterile areas of the Airport"

  " Once we penetrated secure areas we boarded aircraft operated by 35 different air carriers 117 times"

  Report on Audit of Airport Access Control Federal Aviation Administration Report No. AV-2000-017 November 18, 1999

- **Integration of access control with video & advanced identification technology is critical for security**

- **Quality of training of security staff & employees is critical**

IT Security Needs

- **Up-to-date <u>employee</u> identity management & management of access privileges** for
  - Physical buildings
  - Storage cabinets
  - Files & IT database

- **Protection & management of <u>consumer</u> identity & records**

- **Control & security of company networks & infrastructure**
  - Video systems increasingly utilizing corporate networks
  - Interface between access control & HR / Personnel data base

- **Employee & consumer privacy concerns are serious issues**

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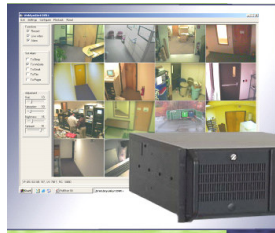
Integration of access control & video is the norm

Emergence of access control systems as "the integrator"

Multitude of DVR technology stand alone & PC based

Video analysis creating "behavior alarms"

Advancement in archiving, data mining & forensics

Great strides in IP & wireless technology enabling wider applications for video

Advancement in camera image quality for low lights

Industry Response ~ RFID & Smartcard Technology

- Accelerate move from low security - low frequency RFID credentials to more versatile read / write 13.56 M Hz technology

- Biometric integration & multi function credentials

- The power of contact chip card technology & dual interface technology

- Multi technology interim solutions

- Introduction of RFID Crypto memories & controllers

- Emergence of e-Passports, other identity cards & move from contact chip cards to RFID

- Emergence of NFC and applications for consumer access control

- UHF technology for Cargo tracking applications

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Convergence ~ Where are we now?

Physical & IT security

and also other convergences

Video management & access control

RFID & Smart cards

Mobile phones & consumer credentials
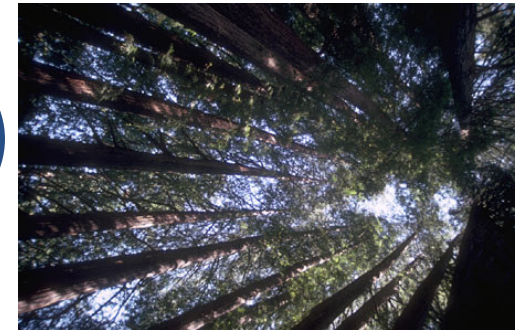
The **security need** at the user level for Physical and IT security is truly converged ...the industry is yet to catch up in a meaningful way

HSPD 12 & FIPS 201 have forced a level of convergence but unfortunately it is "compliance convergence" rather than creative or need / market responsive convergence

Smartcard Landscape

The World of ID & IT

Convergence Dead Zone

The World of Physical Security

IT

Physical

Component

Integration

Applications

18
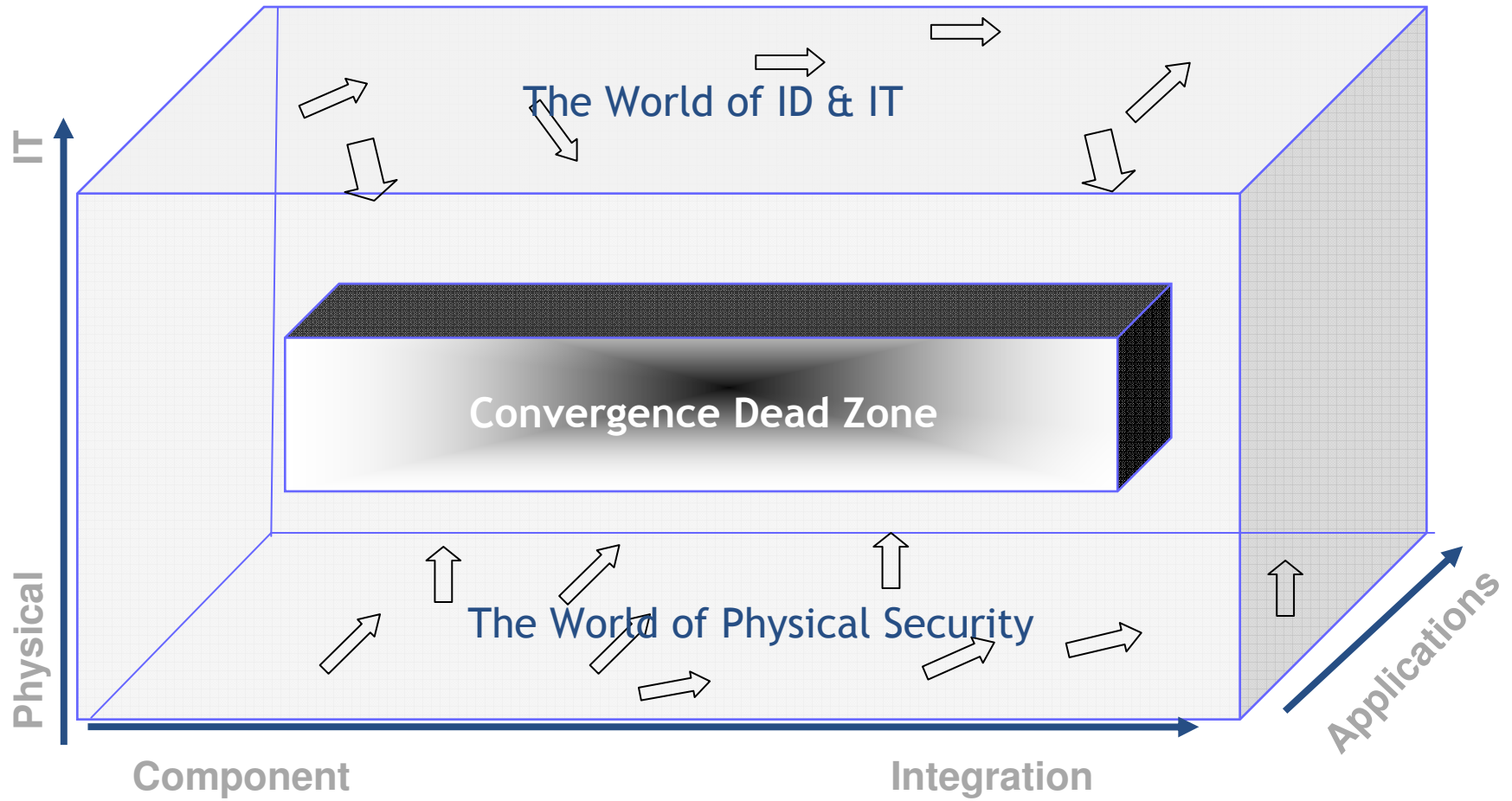
Evolution of the ecosystem of access control
….the unbundling of products and services is conducive to convergence

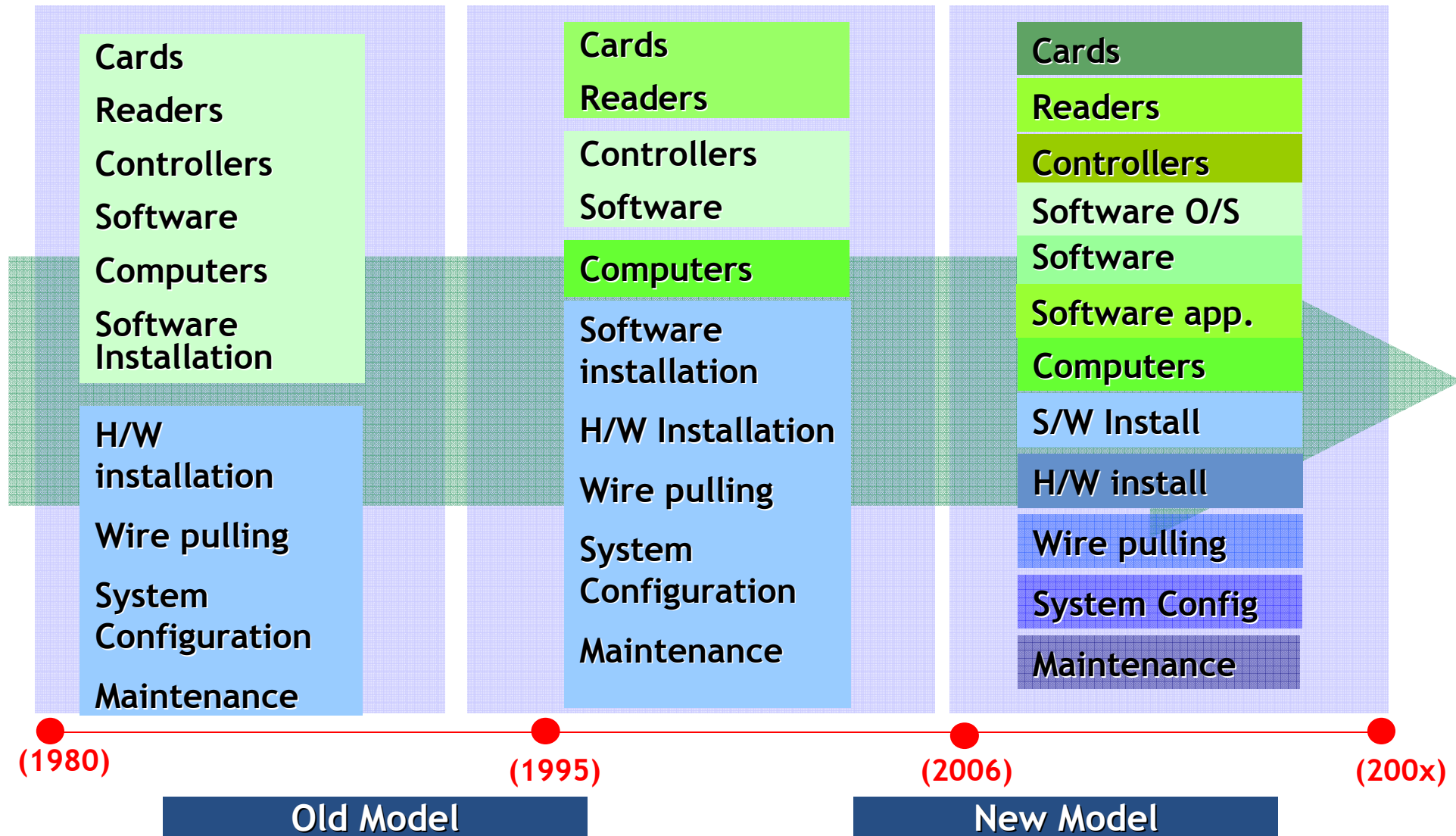| Cards	Cards	Cards
Readers	Readers	Readers
Controllers	Controllers	Controllers
Software	Software	Software O/S
Computers	Computers	Software
Software Installation	Software installation	Software app.
		Computers
H/W installation	H/W Installation	S/W Install
Wire pulling	Wire pulling	H/W install
System Configuration	System Configuration	Wire pulling
		System Config
Maintenance	Maintenance	Maintenance

(1980)   **(1995)**   **(2006)**   **(200x)**

Old Model   **New Model**

19

Technology makes it possible for physical security to evolve and integrate closely with other IT based systems

| Minicomputer/Proprietary PC	Client/Server	Web Native	Web Services
Bundled Hardware and Software (VMS, Unix, DOS, Windows) Proprietary Software Proprietary Field Hardware Proprietary Cards and Readers Limited, "hardwired" integration	Bundled Hardware and Software (Unix,WinNT) Proprietary Software Proprietary Field Hardware OEM Field Hardware Standard Cards and Readers Limited, software integration	Unbundled Hardware/ Software MS Web Platform – N-tier architecture Native Web Software Multiple OEM Field Hardware ISO Standard Cards and Reader IC's Open (API) software integration	-Service-Oriented Architectures -Heterogeneous Platforms (Linux, .NET) -XML Based Standards -IP based security devices
(1970-90)	(1990-2000)	(2000-2005)	(2005-200x)

Old Model

Potential New Model

20

Summary

- **Seamless integration** between video & access devices into new security management systems

- Continued development in **intelligent video**

- **RFID Crypto-controller** as ideal solution for converging physical & virtual access control

- Advancements in **scalable identity & privilege management technology**

- New class of **IT Based** vendor neutral **integration platform**

- Advancement in archiving, data mining & forensic security

- **RFID & video privacy concerns** will continue to require active cooperation between Governments, industry & advocacy groups

Newton International Management, LLC

Strategic consulting and more ...

- Focus on **Security & Identification**
- **Global strategic approach** to marketplace & and "Hands on" **implementation and execution**
- Market **strategy assessment** and development
- **Technology assessment**
- **Product positioning** and market segment analysis
- **Channel rationalization** and development
- **Acquisition / divesture** management
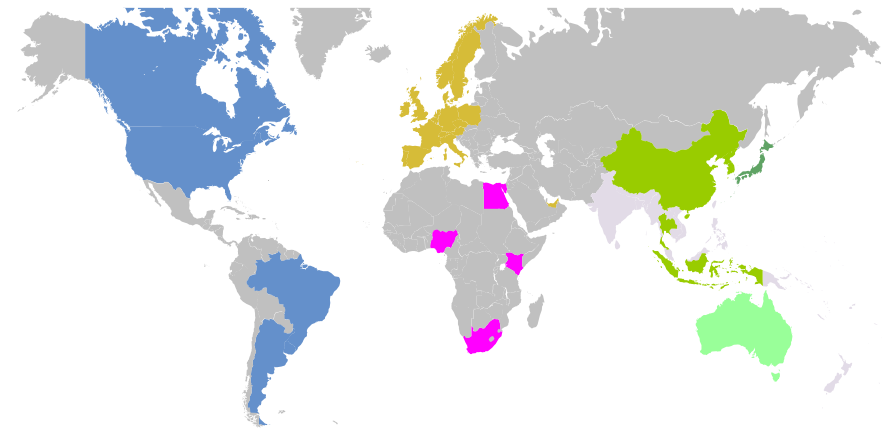
Global Consulting Services

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