Lessons Learned from a Major University Campus Electronic Security System Deployment

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POLICE
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CMTA
Technology
Objectives

- Understand key trouble points in planning
- Automating access control processes
- Importance of following ITS standards
- Improved Management, Student Success, and Operational Efficiency
- Safety must be a priority for all facilities/campuses, large and small
- New threats come in many forms
- New tools are proactive – not just for monitoring
- Today’s ESS practices leverage technology over human power
“Security is an amazing benefit of access control, but the true value is in its operational efficiency”

- Major Brown, UKPD
Having a robust access control system allows UK to automate actions that used to take thousands of working hours.
Since UK added access control to the individual residence rooms theft from residence halls has almost disappeared.
Are your existing ESS Practices working to your best advantage?

Do you have multiple legacy systems?
Are your legacy systems aware of each other?

Do you have many manufacturers and models?

Do you have central management?
Do you have School or Campus Security Standards?

Do you have an Electronic Security Master Plan?
Existing Conditions Found:

- 72 Legacy Systems
- 1,500 Cameras
- Many Makes / Models
- No Central Management:
  - DVRs, NVRs, VCRs, CCTV
- Outdated Security Standards
- No Electronic Security Master Plan
- No Central Ownership
University of Kentucky’s Dilemma:

• Who owns Security?

• Who is Responsible?

• How can UK justifiably “throw away” existing security infrastructure?

• How can UK manage the disparity of upgrades between student and staff services?

• How can UK control procurement?
Planning for Safety and Security

- University Strategic Plan
- Capital Asset Plan
- Hazard Mitigation Plan
- Emergency Operations Plan (EOP)
- Business Continuity Plan (BCP)
- Building Emergency Action Plan (BEAP)
- Event Action Plan (EAP)
- After Action Report (AAR)
What is being done on other campuses?

Convergence!

Video + Access Control + Panic Alarms = Analytics
How is this Accomplished?

Convergence of Data into “Events”

- Video Forensics
- Adhere to ESS Standards
- Qualified Team Partners
Does this Detection Enhance Security?

- Threat Deterrent
- Improved Response Time
- Situational Awareness
- Improved Safety for First Responders
- Video Forensics
- Reassurance / Peace of Mind for Parents, Staff & Visitors
What Triggers an Event

Camera Information
Access Control
Emergency Call Boxes
Contact Closure Devices
Audio Detection Devices
Fire Alarm Systems
New Methods for Central Monitoring
Early Concept - Veterinary Diagnostic Laboratory (formerly LDDC)

UK Police

First Responder

Status of Local Cameras

UK Facility Staff
Open Standards Multi-Layered Approach to Safety

- Identification
- Cameras
- Single Source Info
- Access Control
- Mass Notification System
- Area-Wide Broadcasting
- Interior Notification
• Form an Executive Security Committee
• Assess legacy campus security systems
• Engage users and assess needs
• Review of current and future needs with UKPD and Administration
• Evaluate current industry security technology solutions available
• Determine security feature sets desired
• Issue a RFP for Integrated Security System
• Select Security Integrator
• Integrate Video, Access Control and Emergency Notification
• Based on Open Architecture Components
• Utilize standardized BICSI compliant ITS Infrastructure
• Smart Pro-Active System
• Event Driven / Alert Based
• SMS / VMS to work as one platform
• Web Based System
• Fully Integrated Mobile Devices
• Bandwidth Impacts / Local and Wide Area
• Distributed over Centralized Topology
• Integration of Key Legacy Systems without the use of PSIMS
Hierarchy Objectives

• Develop Delegated Authority Administration Model
• Develop Business Units
• Assign Systems Administrator (UKPD)
• Assign BSA Business Security Authority
• Delegated Authority to Local Building Users
Emergency Notification
Emergency Phone Stations
Emergency Phone Stations (Camera View)
Emergency Phone Stations (Speaker Range)
Existing Building Security Systems
Updated Building Security Systems
Camera / Video Management
Camera / Video Management
SMS (Access Control) System
SMS Features

• Improved records for facility access
• Decreases costs associated with physical key issuance
• Improves daily operations
• Increases life safety options for lockdown and panic
• Allows facility owners to control ingress pathways
• Automate schedules, room access, and other administrative processes
Campus Lockdown Zones
Campus Lockdown (Buildings)
Building 10 Lockdown
Lessons Learned

- ID Card central focus of security system
- Stakeholders provide input not decisions
- Leadership must make the critical decisions
- Create the Security Standard immediately
- Incorporate into short and long term planning
- Educate Facilities / Capital Construction
- Respond to concerned community
2019 KY State Senate Bill #1
School Safety and Resiliency Act

- Unanimously Passed

- Programs, Prevention & School Security
The General Assembly hereby authorizes the establishment of the Center for School Safety. The center's mission shall be to serve as the central point for data analysis; research; dissemination of information about successful school safety and school security programs, best practices, training standards, research results, and new programs; and, in collaboration with the Department of Education and others, to provide technical assistance for safe schools.
Summary

• Understand key trouble points
• Automating access control processes
• Importance of following BICSI & ITS Standards
• Improved management, student success and operational efficiency
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