



INMATE USE OF TECHNOLOGY

THOUGHT, DISCUSSION AND
DEBATE OF
PRESENT AND FUTURE
INMATE TECHNOLOGY

2011 Annual Meeting
Daytona Beach, Florida

**CORRECTIONS TECHNOLOGY
ASSOCIATION**

Inmate Use of Technology



Presented by:

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Chief Information Officer
Colorado Department of Corrections

Inmate Use of Technology



- 18 Years of Correctional Experience
- 9+ Years as Chief Information Officer
- Past President, Secretary, and Volunteer of CTA
- Attended all CTA Conferences since 2004
- First and foremost a technologist; constantly searching for innovative, practical, and cost-effective solutions to any problem in the business
- Not afraid to invent, design, and experiment with innovative correctional technologies
- Meet regularly with offenders to determine their wants and needs pertaining to technology
- Regular focus groups with correctional staff to learn and ask for input

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- Open Source Advocate
- Open Standards Advocate
- Believe government should use Open Source and Open Standards
- Advocate of Open and Versatile hardware that is economical and easy to manage

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- This presentation is:
 - Open for questions
 - Open for debate
 - Open for suggestions
- I encourage your participation !!!
- During this week, I have been called a visionary, crazy, clown, futurist, boring, interesting, smart and dumb! Think of some more...

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INTRODUCTION

- This presentation will address:
 - Rationale:
 - Wide spread use of personal electronic devices in our society
 - The rapid invention and implementation of inmate technologies
 - The expanded need for the inmate to communicate with correctional staff, family, and friends
 - Younger inmates accustomed to technology and older inmates that need to learn for re-integration
 - Additional revenue & capitalization strategies to replace or enhance existing revenue
 - Convincing correctional staff & management

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INTRODUCTION (CONTINUED)

- This presentation will address (Continued):
 - Rationale (Continued):
 - Is a problem being solved that doesn't exist?
 - Common and Personal Electronic Devices
 - Are Kiosks Obsolete?
 - Everybody has an iPad? Shouldn't the inmates?
 - Vendor partner participation
 - Types of common and personal electronic devices
 - Management, Security, Control & Maintenance of Common and Personal Electronic devices
 - High amount of complicated electronic devices introduced into IT infrastructure
 - Utilization of vendor partners to provide maintenance

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INTRODUCTION (CONTINUED)

- This presentation will address (Continued):
 - Management & Maintenance of Common and Personal Electronic devices (Continued):
 - Secure and control use and content
 - Integration with Offender Management System
 - Investigatory involvement

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INTRODUCTION (CONTINUED)

- This presentation will address (Continued):
 - Digital Content
 - Communication: eMessaging, video, internal messaging
 - Entertainment: Music, Movies, TV, eBooks, games, etc.
 - Storage of digital content: Inmate Digital lockers
 - Management and control of Legal content

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INTRODUCTION (CONTINUED)

- This presentation will address (Continued):
 - Emerging Trends
 - Rapidly changing technologies
 - IT Consolidation concerns
 - Collaboration with other correctional and vendor partners
 - Just One more thing...

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RATIONALE

- Wide spread use of personal electronic devices in our society:
 - Almost every person in our society is connected
 - People use personal electronic devices to:
 - Communicate
 - Voice
 - Text
 - Email
 - Consumption or creation of digital content
 - Remember when it was called input/output
 - Consumption primarily entertainment content
 - Creation primarily interaction with web browser

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RATIONALE (CONTINUED)

- Why does our society prefer to utilize personal electronic devices?
- These same reasons must be the basis of the establishment of criteria for inmates to utilize the same technology
 - General Criteria:
 - A device that allows communication
 - A device that allows the consumption and creation of content
 - A device that is affordable, easy to operate, manage, durable, and versatile
 - A device that creates passion

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RATIONALE (CONTINUED)

- **Criteria (Continued):**
 - **Inmate Specific Criteria:**
 - A device managed and controlled by correctional staff
 - Content managed and controlled by correctional staff
 - 3rd party participation (Vendor partners, etc.)
 - Ability to create revenue from services or content
 - CTA members & vendor partners establish the criteria
- There are numerous ways to communicate and consume or create content without personal electronic devices
 - **Communication:**
 - Current forms highly inefficient, slow, insecure, and very awkward for younger generations

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RATIONALE (CONTINUED)

- **Criteria (Continued):**
 - **Consumption or creation of content:**
 - **Books and other printed publications:**
 - Bulky, contraband risk, clutters inmate cells
 - Hard to manage, wears out, difficult for correctional staff to screen
 - **Music, Movies, TV shows, and other analog content**
 - **Music:** requires players with motors and physical music content
 - **Movies:** delivered over TV system; expensive and inefficient
 - **TV:** expensive to maintain, large TVs create security problems, not versatile, limited content

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RATIONALE (CONTINUED)

- Conventional system mostly works, why change?
 - Most forms of communication becoming functionally obsolete
 - Most forms of conventional content are becoming digital and there is no choice
 - XXXX
- How we start to prepare for the transition?
 - Convince correctional staff and management
 - Invent or acquire suitable personal electronic devices
 - Create or acquire suitable content
 - Create suitable areas of storage for digital content
 - Manage and operate the newly created ecosystem

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COMMON AND PERSONAL ELECTRONIC DEVICES

- Once the criteria for the rationale of inmate technology has been established, it is important to establish the criteria for common and personal electronic devices
- Common and personal electronic devices criteria:
 - When and where are kiosks needed
 - Where can personal electronic devices be utilized
 - Is the infrastructure in place for devices
 - Correctional staff and management approval
- Placement of Common electronic devices:
 - Where does society place kiosks?
 - Place in well managed areas with minimal enclosures
 - Vendor partners need to design several models

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COMMON AND PERSONAL ELECTRONIC DEVICES (CONTINUED)

- Placement of Common electronic devices (Continued):
 - Kiosks not primary use, personal electronic devices are preferred choice (Kiosks may be obsolete)
 - Kiosk hardware, enclosure, and infrastructure are expensive
- Deployment and Utilization of Personal Electronic Devices:
 - Explosion of options currently in marketplace
 - Criteria for personal electronic devices:
 - Flexible Operating System
 - Able to add specific security controls as required in a correctional setting

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COMMON AND PERSONAL ELECTRONIC DEVICES (CONTINUED)

- Criteria for personal electronic devices (Continued):
 - Flexible Operating System (Continued):
 - Allows remote control
 - Logging, monitoring, auditing
 - Allows applications created from correctional IT and vendor partners
 - Allows content creation and consumption
 - Meets ADA requirements (Sight & Hearing impaired)
 - Interfaces with inmate digital storage locker

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COMMON AND PERSONAL ELECTRONIC DEVICES (CONTINUED)

- Criteria for personal electronic devices (Continued):
 - Hardware:
 - Security Compliant
 - Rugged
 - Affordable
 - ADA Compliant
 - Wireless & wired networking (USB Host Compatible)
 - Numerous models, not one size fits all
 - Able to accept physical keyboard input
 - Battery management: Fixed vs. removable

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COMMON AND PERSONAL ELECTRONIC DEVICES (CONTINUED)

- Criteria for personal electronic devices (Continued):
 - Hardware (Continued):
 - Sold or provided to inmates
 - Camera, microphone, headphones

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MANAGEMENT, SECURITY CONTROL AND MAINTENANCE OF PERSONAL ELECTRONIC DEVICES

- **Criteria:**
 - User authentication of all devices
 - Close integration with Offender Management Systems
 - Back-end management control of all physical features
 - Remote control for investigation and support
 - Logging, monitoring, auditing
 - All digital content stored in inmate digital storage locker
 - Locker is secure and controlled for legal content
 - Locker can be accessed by correctional staff
 - Content can be transferred to inmate upon release

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DIGITAL CONTENT

- Communications is King!
- Content is King!
- Applications on devices to create or deliver content
- Criteria for Digital content:
 - Allow for numerous forms of communication:
 - Voice (VOIP Telephone)
 - Video (Visit or Encounters)
 - Written (eMessaging, Kites, Legal Correspondence, case management, medical, parole board, etc.)
 - All communication recorded, monitored, approved
 - IPTV Television
 - Free channels
 - Pay per view channels

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DIGITAL CONTENT

- Criteria for Digital Content (Continued):
 - IPTV Television (Continued):
 - Free and pay music channels
 - Video on demand movies
 - Correctional User Created Content
 - Educational content
 - Audio and video participation
 - Live and on demand education
 - Khan Academy
 - Computer based instruction
 - Commissary Ordering
 - Commissary Account Access

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DIGITAL CONTENT

- Criteria for Digital Content (Continued):
 - Pay Media Content
 - MP3 Music
 - Music Videos
 - eBooks
 - Audio Books
 - Movies
 - TV Shows
 - Law Library Access
 - General Library Access
 - eBooks
 - ePublications
 - Gaming

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DIGITAL CONTENT

- Criteria for Digital Content (Continued):
 - Applications
 - App store
 - Web based applications
 - Revenue generation
 - App store controlled by IT staff
 - Applications created by:
 - Correctional IT Staff
 - Vendor Partners

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EMERGING TRENDS

- Track society use of technology
- Work closely with vendor partners:
 - To share ideas
 - To provide the laboratory vendor partners do not have
 - To create versatile applications and services
 - Insure Offender Management System data interoperability
 - Co-Create services or applications
- Collaboration, Collaboration, Collaboration!!!
 - Create collaboration site to share ideas, applications, lessons learned, etc.
 - Make site available to CTA members and vendor partners

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EMERGING TRENDS (CONTINUED):

JUST ONE MORE ONE THING...

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EMERGING TRENDS (CONTINUED):

- Google Chromebook and Chromebox

- Description
 - Google Chrome OS
 - Browser based Operating System
 - Chrome OS can instantly run your browser-based apps, whether in the cloud or behind your firewall, and apps virtualized through technologies like Citrix
 - Chromebook
 - Google Chrome OS based netbook.
 - 11.6" screen, Atom Dual-Core CPU, Wi-Fi, HD Camera, Stereo Speakers, USB ports, trackpad, full size keyboard, minimal disk storage, 8.5 hours battery

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EMERGING TRENDS (CONTINUED):

- Google Chromebook and Chromebox (Continued):



- Cost: \$350

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EMERGING TRENDS (CONTINUED):

- Google Chromebook and Chromebox (Continued):
 - Chromebox
 - Google Chrome OS based desktop device
 - Same internal specifications as the Chromebook:
Atom Dual-core CPU, wired and wireless network connection, fanless, diskless, VGA connection, minimal disk storage

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EMERGING TRENDS (CONTINUED):

- Google Chromebook and Chromebox (Continued):



- Cost: Not disclosed

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EMERGING TRENDS (CONTINUED):

- Google Chromebook and Chromebox (Continued):
- Advantages
 - Chromebooks can be configured and managed centrally via the web, and don't require you to maintain any administration servers or software inside your network
 - Simple management model, with automatic, hands-off security and OS and application updating.
 - Boot from a dead stop in eight seconds and resume from sleep instantaneously
 - All authentication configured and managed centrally via the web
 - Back end administrative control of hardware and applications
 -

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EMERGING TRENDS (CONTINUED):

- Google Chromebook and Chromebox (Continued):

- Advantages (Continued):
 - All applications, documents, music, movies, content is stored in the cloud. No data is stored on the devices
 - Same experience everywhere, any device that an inmate utilizes will be customized to them
 - Can function as a communication device: audio and video capabilities
 - Web based security: automatic defense of virus and malware attacks

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EMERGING TRENDS (CONTINUED):

- Google Chromebook and Chromebox (Continued):

- Unique subscription model:

Google Chromebooks can be purchased via a three-year subscription program that will cost \$20 per user per month for educational and governmental organizations. These offerings feature support for no-questions-asked machine replacement for the life of the subscription, hardware upgrades, and a simple, centralized web management console for managing the devices, users, apps, and group policies. Unlimited Phone and technical support provided by Google. At the end of the three years, customers can transfer the subscriptions to a new Chromebook model.

- <http://www.google.com/chromebook>

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THANK YOU !!!

Please provide ideas, feedback, or constructive criticism!
For additional information, please contact:

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PLEASE COLLABORATE