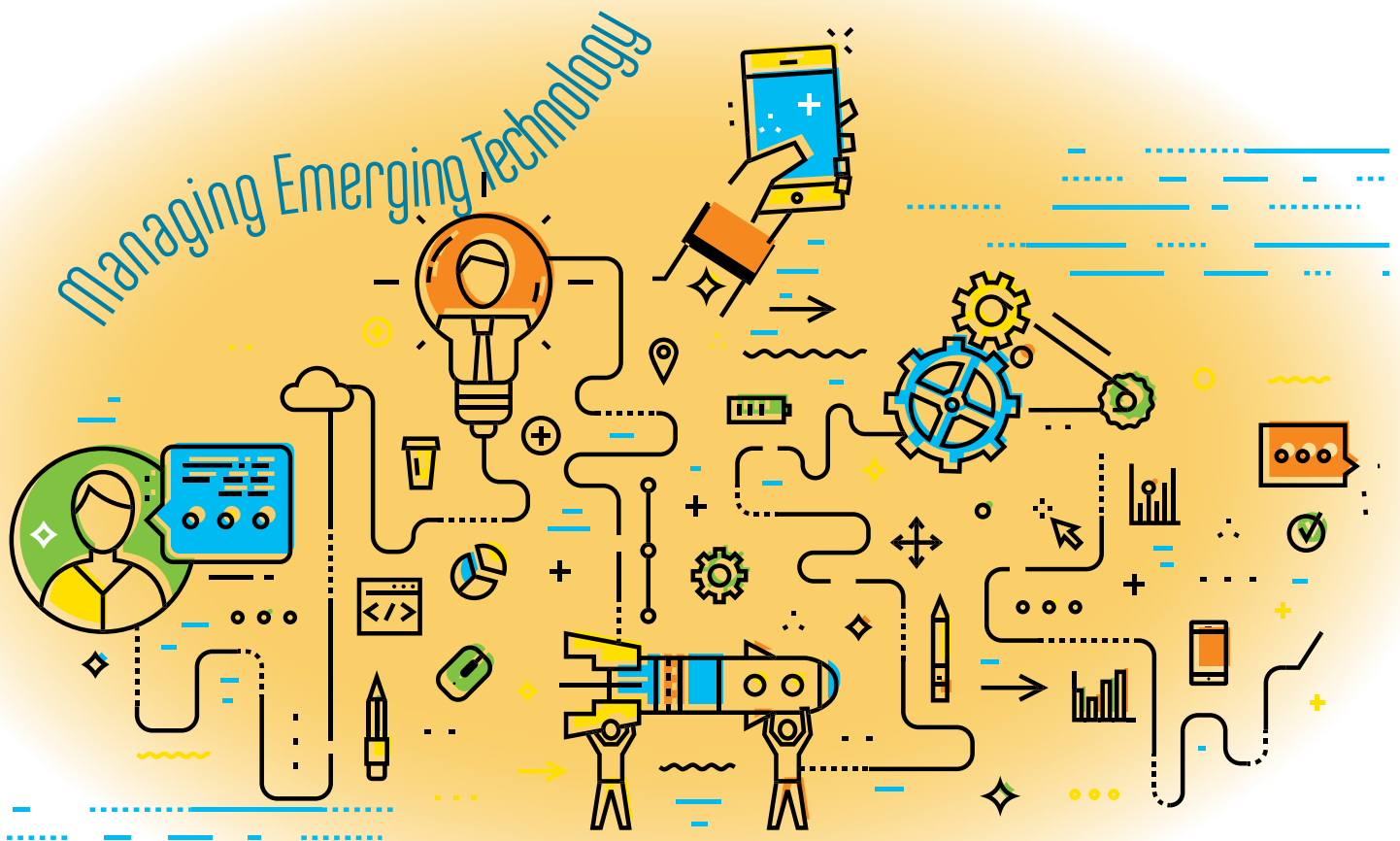


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In this issue of *American Jails*, we take a closer look at the core competency identified as “understand and manage emerging technology” and recommend several valuable resources related to leadership.

Understanding, Assessing, and Managing Emerging Technology: The Jail Leader's Responsibilities

Description: Remain aware of emerging technological innovations and their potential organizational applications.

Rationale: As part of their responsibility to visualize future organizational needs, leaders need to keep abreast of the rapidly changing array of jail-related technology and how it can be used to improve operations. Being an informed consumer of expensive technology is important to assure that funds are spent efficiently and cost-effectively. This includes identifying subject matter experts to evaluate, test, and assess new technology, as well as building a level of personal understanding of relevant hardware, software, and security devices in order to make knowledgeable procurement decisions.

Knowledge:

- Basic computer skills used in the industry.
- Laws pertaining to data-sharing systems currently in use by internal and external partners.
- Jail-related technology (e.g., phone recording, video visitation, equipment for attorneys, door control systems, cameras, CED technology, telemedicine, inter-connectivity with other agencies, etc.).

Skills:

- Developing basic computer expertise in hardware, software, and networks.
- Interpreting legal restrictions.
- Collaborating with partners to implement shared integrated data systems.
- Researching the capabilities of technology.
- Understanding strengths and weaknesses of products before purchase.
- Developing strong, positive relationships with IT staff.

Abilities:

- Analyze and evaluate.
- Adapt.
- Establish partnerships.
- Overcome impediments to data-sharing.
- Pursue unfamiliar territory.
- Visualize what you want to achieve.
- Make systematic comparisons.
- Distill complex information.
- Trust others with greater subject matter expertise.
- Maintain the capacity for continued personal growth.

Each day we are bombarded with “what’s new” in the technology universe. It is hard to keep up in our personal lives, and for the jail world it is even more difficult.

22 Core Competencies for Jail Leaders

- Anticipate, analyze, and resolve organizational challenges and conflicts.
- Assure organizational accountability.
- Build and maintain positive relationships with external stakeholders.
- Build and maintain teamwork; mentor and coach others.
- Communicate effectively, internally and externally.
- Comprehend, obtain, and manage fiscal resources.
- Develop and maintain a positive organizational culture that promotes respect for diverse staff.
- Develop and sustain organizational vision/mission.
- Engage in strategic planning.
- Enhance self-awareness; maintain proactive professional commitment.
- Establish organizational authority, roles, and responsibilities.
- Leverage the role of the jail in the criminal justice system.
- Make sound decisions.
- Manage change.
- Manage labor relations.
- Manage power and influence.
- Manage time.
- Obtain and manage human resources.
- Oversee inmate and facility management.
- Oversee physical plant management.
- Reduce jail-related liability risks.
- **Understand and manage emerging technology.**

Two years ago, would we even be considering technology to prevent drones from invading a jail's airspace? Often, when considering whether to adopt new technology, the questions are not only what the technology can do to improve operations, but how much it costs to purchase and maintain. Because the long-term costs of technology present a significant investment—along with staff training—our analyses need to be tightly focused. Too often jails rely on technology vendors to provide critical analysis of the desirability of a product—and we should be performing that assessment ourselves.

Those of us who have been stuck with technology that didn't function as promised (and either became more expensive to upgrade or required expensive tailoring) are often reluctant to jump onto that bandwagon again. As technology becomes less "smoke and mirrors" and more understandable to even Baby Boomers, we are more willing to consider options that appeared very "Star Wars" just a few years ago.

The safety and security of the jail are paramount—for inmates, staff, contractors, volunteers, and visitors. To achieve this priority, we are often faced with a lack of available financial resources. Technology promises some very appealing options to:

- Reduce staff time (robots).
- Enhance security (biometrics).
- Manage inmates (tracking).
- Enhance inmate programs (inmate tablets).
- Improve perimeter security (radio frequency identification).
- Increase inmate opportunities for family interaction (video visitation).

These are expensive promises weighed against limited resources, whose successful integration is almost always related to the buy-in of the funding authority, the sophistication of both staff and inmates, and the jail's mission statement.

By exploring this core competency that addresses emerging technology, the goal is to surface questions that jail leaders need to consider before purchasing or upgrading technology. Seeing snazzy technology at a professional conference should not be the extent of your research on possible purchases. Other options also need to be considered. [See the sidebar for examples of emerging technology.]

Jail facilities are not glamorous. They are often too cold or too hot, never comfortable, and constructed of solid brick with barbed wire. "Technology," on the other hand, just the word itself sounds glamorous. Shiny, clean, new, fast, and the greatest product invented. If your facility is thinking of technology upgrades—no matter the type—seriously consider, at a minimum, taking some of the steps outlined in this article.

Emerging/Existing Jail Technology

Here's a list of technology options that are—or soon may be—available for jails. (This is not meant to be an exhaustive list!) Are you prepared to assess and evaluate for your jail?

- Video visitation (remote or local)
- Cell phone detection
- Drug detection (surfaces and people)
- Hand-held scanners
- Body cameras and storage
- Body scanners
- Kiosks for inmate use
- Radio frequency identification (RFID)
- Inmate tracking
- Body armor
- Camera systems (internal and external)
- Iris recognition/biometric identification/facial recognition
- Less than lethal force
- Solar power generation/green technology
- Robotics
- Use of drones
- Counter drone strategies
- Tablets/internet access for inmates
- Inmate phone systems
- Human resources management software
 - Scheduling
 - FMLA management
- Investigation management software
- Victim notification
- Guard tour systems
- Criminal justice integrated information systems
- Jail management systems
 - Performance metrics
 - Mapping
 - Electronic logs
 - Paperless jail
- Electronic inmate medical records
- Virtual reality for training
- Artificial intelligence
- Intelligent video analysis
- Surveillance
- Smart phone technology
- Cyber-attack prevention
- Social media
 - Twitter
 - Mobile apps
 - Facebook
 - Blogs
 - Citizen questions
 - Reporting
- Hand-help mobile devices for staff
- Radio equipment updates
- Cloud services and networks

Resources for Your Leadership Library

Complimentary On-Line Subscription National Law Enforcement and Technology Resource Center

www.justnet.org (Sample: www.justnet.org/InteractiveTechBeat/index.html)

Explore

Corrections Technology Association

<http://correctionstech.org>

Their mission statement includes:

- Providing a forum for exchange of information, experience, and knowledge.
- Identifying emerging technologies related to the application of technology in corrections.
- Addressing the challenges and opportunities for improving corrections operations and promoting public safety through the use of technology.
- Promoting collaboration and information sharing among local, State, tribal, and Federal agencies.
- Developing and promoting standards for the deployment of corrections technology solutions nationwide.
- Providing continuing educational opportunities to technology professionals.

Read

“Contraband Cell Phones in Prisons, Possible Wireless Technology Solutions”

National Telecommunications and Information Administration, U. S. Dept. of Commerce (December, 2010)

www.ntia.doc.gov/report/2010/contraband-cell-phones-prisons-possible-wireless-technology-solutions

“Cell Phones in Prisons”

U. S. Dept. of Justice, National Institute of Justice (February, 2011) www.nij.gov/topics/corrections/institutional/contraband/Pages/cell-phones.aspx

“Detecting Drugs on Surfaces Quickly and Easily”

U. S. Dept. of Justice, National Institute of Justice (March, 2012) www.nij.gov/topics/corrections/institutional/contraband/Pages/drug-detection.aspx

“A New Role for Technology: Video Visitation in Prison”

Vera Institute, U. S. Dept. of Justice, National Institute of Justice (March, 2016)

www.vera.org/publications/video-visitation-in-prison

“How Philadelphia’s Prisons Are Embracing Technology”

CNN Money (October, 2014)

<http://money.cnn.com/2014/10/07/smallbusiness/philadelphia-technology-prison/>

Innovation and Emerging Technology

How can a facility innovate? When should a facility innovate? Simply defined, innovation is a new idea, device, or method, but is often viewed as “...the application of better solutions that meet new requirements, unarticulated needs, or existing market needs” (Schilling, 2012). The use of technological innovations by the public (including criminals) requires criminal justice agencies to adapt as well. Agencies are almost forced to improve technology or get left behind and jeopardize their ability to adequately protect the public.

Employing technology can improve and increase the safety of officers and inmates, in addition to improving the efficiency and effectiveness of a facility’s overall operation. Additionally, the use of technology can aid in detecting contraband, monitoring behavior, increasing intelligence information, and tracking inmate movement throughout the facility.

State of the Art Facility?

Are you and your jail ready for technology upgrades? Consider these steps to document your jail’s needs, options, costs, acquisition process, budgeting, implementation, and evaluation.

Current Status

- Provide a technology assessment of your facility. Inventory all technology piece by piece (but maybe not the typewriters), note the date it was purchased, condition, make/model, and if covered by a warranty. This information may already be available if the jail has an internal inventory system.
- Review fiscal documents and the budget to determine the costs of current technology, such as annually required software updates, warranty costs, and costs to replace equipment that is damaged or no longer functioning. Assess which specific parts of the operation are using what technology—security, support services, administration, etc. Describe the impact on jail security operations if the current technology fails. Analyze where problems and critical incidents have occurred due to the failure or downtime of existing technology. Can technology improve accessibility and accuracy of data for decision-making, including human resources and investigative functions? Reflect on the operational questions that you routinely can’t answer without having to expend considerable efforts to compile—whether those questions are from the funding authority, the media, or to satisfy that you are making data-driven decisions.
- Examine what staff training is needed to keep current on the existing technology.
- Look to other public safety agencies in your region and their current technology—what’s working, what isn’t, and if there are costs that can be shared or with whom you can partner.

- Evaluate the interest of the funding authority and stakeholders as to funding technology upgrades. It usually comes down to dollars, so document the cost-benefit of any changes. Involving justice partners and community leaders can also provide additional information about options and the ability to gain support for funding.

Plan Ahead

What are your jail's technology options?

- Identify what specific elements of your jail's operations could be enhanced by the adoption of new or updated technology. "The first step in deciding whether to adopt a technology is defining the benefit to be achieved and determining whether the technology in question is really the solution." (Rodriguez & Tillery, 2016). Assure that any such deliberations are tied to the jail's mission/vision. Make a list of needed improvements; be specific. Don't just identify an improvement in the jail management information system—describe what specifically needs to be upgraded and improved.
- Examine the jail's physical structure. Identify if there are potential installation issues with technology that require additional expenditures.
- Explore the benefits of going green. "...facilities can benefit greatly from sustainability-oriented technologies and strategies that reduce cost and increase efficiency" (Feldbaum et al., 2011). Renewable energies—such as solar, wind, and geothermal to produce electricity and heat for not only the jail, but other public facilities (e.g., schools, homeless shelter, etc.)—are considered high-tech approaches, and recycling programs, gardens, or farms (for growing low cost food) are considered a low-tech approach. Review if outside funding would support solar or going green; coordinate with local partners (<http://energy.gov/public-services/funding-financing>).

Technology and PREA Compliance

Many jails purchased cameras in response to certain PREA standards (e.g., 115.13 Supervision and Monitoring). Assessing how well the introduction of technology worked in this instance may inform the jail administrator of possibilities in other areas where technology can keep inmates and staff safe.

In this instance, the installation of so many cameras should have resulted in increased staffing to monitor the cameras. In reality, the cameras are more of a resource in investigations than in intervening to prevent incidents.

Study how these, and similar, projects impact jail operations, staffing, and inmate safety in your facility.

- Consider empowering a diverse multi-generational committee to compile what technology innovations are available; enlist help of subject matter experts—perhaps from your local business community and partner public safety agencies—who can guide you through the identification and assessment process.
- Estimate costs, such as acquisition, installation, training, annual fees/costs, repairs, replacements, oversight, etc. Beware of making promises to funders that purchase of technology will replace staff or reduce other costs. Be sure to include in your deliberations the costs associated with a project manager in your jail, who has the responsibility for this project. The amount of time required of such a project manager depends on the scope of the work; but failing to set-up accountability for this project can jeopardize its ultimate success.

Update or Fix?

Matching your jail's needs and expectations with the capabilities of proposed new or replacement technology puts the jail administrator's credibility on the line. To accurately ensure that what you plan to purchase will solve the issues you have identified, carefully list what *processes* or *systems* need to be upgraded and how the technology can address the issue.

Process re-imagining and re-engineering. Technological "solutions" provide the opportunity for a jail to critically examine and re-imagine and/or re-engineer internal systems. Automating current processes without examining these processes may be a waste of the new technology. This critical review will perhaps require new and updated policies, procedures, and staff lesson plans. How any processes will be changed is critical information to developing a request for proposal (RFP). Unless the jail's current systems are superb, replicating what you have (or simply automating it) is *not* a step forward.

Involvement of staff. Because new technology—small or large—impacts operations, keeping staff up-to-date and involved is crucial to success. This is your opportunity to communicate your change vision and identify the Generation Y or Millennial staff who are technology standouts. What are the consequences of failing to inform staff? Imagine if you can acquire funding for tablets for inmates to use as incentives to improve their behavior and increase educational attainment, only to hear staff complain that they don't have a tablet, so why should an inmate? Consider what happens if technology can update and/or replace certain jail intake processes, without asking those who do the job to assist with the changes? Technology is not the answer to these two examples. It is the commitment and vision of the jail leader.

Considerations of existing technology/capacity. How does the proposed new technology impact what's currently in use? Will there be costs associated with integration or upgrading? Will warrantees be impacted? Importantly, what are the abilities of tech support in your agency or in your jurisdiction to manage more and new technology? Will there be costs associated with "upgrading" the knowledgebase, re-training, and time for those who must support the proposed new technology? Are there sufficient human resources in tech support? If not, what's the cost to outsource to either a vendor or a third party?

Budgeting and Acquisition

Be thoroughly familiar with your jurisdiction's budgeting and purchasing requirements, as well as the development of RFPs. In some jurisdictions, the funding must be approved before the RFP can be drafted and published to potential contractors. Know the rules. The more advanced the technology, the more precise the purchasing document needs to be. Ensure that potential vendors are *not* involved in drafting the RFP or providing technical assistance during that process, thus creating conflicts of interest, opportunities for challenges to the award, and loss of your credibility.

With the understanding that you can't immediately get everything you want or need, develop a multi-year plan to phase-in purchase and lease of technology. Match the proposed acquisition and budget schedules. Identify if your proposed purchase is part of the capital budgeting process (long-term and/or cost defined) or annual process. Consider funding options. Can your acquisition of technology be folded into existing contracts, such as an inmate telephone contract? Are there other revenue sources?

Technology Resources

Here are just a few available resources that may provide additional information or assist you in making your decision(s):

- The National Institute of Justice (NIJ) provides the criminal justice community (State and local levels) with objective and independent research in a multitude of areas, one being advancing technology. NIJ is a valuable resource for the field of corrections (<http://nij.gov/topics/corrections/Pages/technologies.aspx>).
- The National Law Enforcement and Corrections Technology Center (NLECTC) assesses technology available to law enforcement and corrections agencies. The NLECTC reviews, demos, and beta tests emerging technologies, and publishes the results of these tests (linking research with practice). By conducting this research, the NLECTC's goal is to help State and local law enforcement and corrections personnel identify critical technology needs that will increase job performance efficiency and overall safety (<https://justnet.org/about/nlectc-system.html>).
- The Justice Technology Information Center (JTIC) of the National Law Enforcement and Corrections Technology Center System plays a key role in the success of the entire NLECTC system. If your agency is looking for proven and tested methods, equipment, or technology, the JTIC is a premier resource to help during the evaluation, selection, and purchase decision-making process. The JTIC has extensive technology resources for law enforcement, courts, and corrections (www.justnet.org).
- Most importantly, consider contacting other agencies who have experience with technology in their jail. Use your contacts within the corrections field to see if others have already experienced a similar technology assessment process. Learning firsthand what another agency has experienced is a tremendous and invaluable resource. Consider that technology isn't limited to just the criminal justice system—talk to local business leaders, and of course, your partner public agencies.

Additional resources are available through an internet search with the caveat that the products require independent evaluation.

Implementation

Oversight of technology implementation. The work of installing and using new technology does not stop when the funds are allocated and the purchase process begins. Many agencies have suffered from the collapse of technology initiatives because the jail administrator did not understand the implementation issues or failed to delegate to someone who was qualified to manage it. Hopefully a clear contract with the vendor spells out all the issues noted above. There still needs to be accountability for the project as it moves through each phase of planning, training, installation, roll-out, corrections, final acceptance, and evaluation.

Evaluating the impact of new and enhanced technology. A challenge for the jail administrator is to define the *quantifiable* impacts that are anticipated with the adoption of the technology. In other words, prove

that the technology makes a difference in the jail. This step is important to justify future expenditures and document for the funding authority that the jail is a good steward of the public trust. This data-driven exercise also helps the jail to identify other possible changes to systems and uses of technology.

Conclusions

Technological innovations are moving rapidly in all fields, especially in public safety. Jails have options to become more high-tech, with potential advantages of increasing efficiency and cost savings. Embracing new technologies often feels like getting reacquainted with a childhood friend; although awkward at first, in the end, you're happy with the result. Innovation is inspiring; it is creative; and it opens doors to so many opportunities. It truly is amazing, especially when we understand the process and use it to enhance

our lives into something better, even simpler.

Successful technology acquisition doesn't occur by accident. The initiatives must be planned, evaluated, inclusive, and data-driven. If the jail administrator fails this test, then technology innovation may be over for that jail with the equipment gathering dust and potentially jeopardizing public safety. ■

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