

Implementing an Evidence Tracking System: Key Considerations for Buy Versus Build

The information in this brief applies to cold case sexual assaults as well as current case sexual assaults. Mentions of sexual assault apply to both types of sexual assault cases.

When it comes to selecting an evidence tracking system (ETS) for sexual assault kit (SAK) evidence, a state or local jurisdiction must consider whether to purchase an ETS from a commercial vendor or to build an internal ETS using in-house technical systems and personnel. A jurisdiction's goal should be to make an informed choice when selecting and purchasing an ETS. This resource identifies the relevant issues an agency must consider before making the decision to purchase, implement, and use an ETS.

When determining whether to build a solution in house or buy a commercial off-the-shelf (COTS) system, you and your team must carefully consider the following questions as part of your agency's decision-making process:

Technology Considerations

- ◆ **IT staffing:** Questions to consider when assessing your agency's current and future IT staffing capabilities and needs.
 - Does your jurisdiction support its own public safety technology infrastructure?
 - Does a government agency outside of your direct control manage IT support?
 - Does your current IT support structure have programming and database staff members? If yes, have they accomplished similar projects in the past? (Consult Human Resources for this information, if needed.)
 - Will your agency require external contracted development support?
- ◆ **System support (post-implementation):** Questions to consider when determining your agency's IT support needs.
 - Will IT support staff members
 - ◆ be available to support the system at all times (i.e., 24 hours a day, 7 days a week)?
 - ◆ maintain all components—including servers, databases, and operating systems—to ensure

systems receive the required patches, upgrades, and updates?

- ◆ be responsible for version updates, including user-driven enhancements and capabilities?

◆ **Hosting infrastructure:** Questions to consider when evaluating your agency's current- and future-state technology needs.

- Does your agency manage its own servers and technology systems?
- Is additional hardware required to deploy the ETS?
- Will you be responsible for user access credentials and system/data security?
- Does your agency manage an offsite backup process for critical data recovery?

Costs

Questions to consider when evaluating and comparing costs among ETS options.

- ◆ How will your project be funded?
- ◆ Can you secure the upfront costs required to purchase a COTS system?
- ◆ How will contract maintenance costs be paid?
- ◆ Does your budget include projected costs for contracted staff members, if such resources are needed?
- ◆ Would paying a monthly subscription fee for access to a cloud-based COTS system be cheaper than purchasing an ETS?

Project Management

Questions to consider when determining your agency's need for project management, including availability of staff members who can manage the implementation process.

- ◆ Does your agency have staff members with project management experience and expertise, including the ability to design and drive a project timeline?
- ◆ Have you relied on external service provider staff members to coordinate major project deliverables in the past?

- ◆ How is project implementation defined and can full functionality of the system be implemented within this timeframe? If this is not feasible, will core functionality need to be delivered in phase 1, followed by added features in phase 2?

Processes

Questions to consider when determining how your agency's business processes and standard operating procedures will affect the way your agency uses an ETS.

- ◆ Have all of your business processes and standard operating procedures been defined/documented?
- ◆ Are your business processes based on best practices?
- ◆ Does the information/functionality outlined in your business requirements align with your business processes?
- ◆ Have you
 - sought feedback from staff members in different positions (e.g., individual contributor, supervisor) to

understand how these individuals will use the ETS to accomplish tasks related to their roles?

- updated your business requirements to reflect how different roles will utilize system functionality?
- designed use cases that ETS vendors can utilize for ETS product demonstrations?

- ◆ Are you building the ETS around your business processes or vice versa? (An ETS built around business processes will increase the ETS's level of customization and costs; heavily customized systems complicate upgrade/update processes in the future.)

Buying and Building Assessments

Details in the following two tables provide general guidance; no two systems or implementations will be identical. Pros and cons outlined in each table reflect key aspects of a typical technology system implementation. Each agency's circumstances and specific needs are unique and should be closely considered when evaluating buy or build decisions.

Buying a COTS Evidence Tracking System

Pros	Cons
Core system features and design are provided to you based on best practices and industry standards, market tests, and user feedback.	You may have less control over vanilla (i.e., out-of-the-box [OOTB]) features and functionality that your users may want. Adding features and functionality may require customizations that increase project costs and may complicate future system updates. You may have to accept that you won't get everything you want in an OOTB system.
Vendor support structures—including maintenance and security—are typically included in your license agreement and ongoing contract.	Maintenance contracts represent an ongoing cost per year as long as you use the system. Ongoing costs can be difficult for some agencies to budget.
Anytime support models (i.e., 24 hours a day, 7 days a week) are usually available to the public safety community as part of a COTS vendor offering.	Anytime support models, although convenient, include heavily structured service level agreements and can be very expensive.
Your users will have opportunities to offer feedback to the vendor about the system's existing features and functionality, and discuss additional needs and wants for consideration in future OOTB product updates.	Updates to OOTB functionality (1) may not be implemented on your agency's preferred timetable (because these new features will apply to all system users across all organizations) and/or (2) may require you to purchase an updated version of the ETS.
OOTB systems can be customized to fit your agency's needs.	Over-customized systems increase costs and jeopardize the success of future updates. To avoid heavy customization, revisit your business processes to determine if there are different ways to carry out the same tasks in the system without relying on customizations.
The vendor is directly responsible for system functionality and implementation based on the business requirements you provide.	The vendor does not always have the knowledge or expertise of your agency's day-to-day operations and business processes. If your business requirements do not accurately capture the system functionality you need in order to align with your processes and daily operations, your project's success may be hindered by ETS functionality.

Building Your Own Evidence Tracking System

Pros	Cons
You control a majority of system features and design.	You and your staff may not have implemented this type of system previously; therefore, you may not know what features you need until after the system is constructed and implemented.
Your staff members will be positioned to provide affordable system support after deployment and proper training.	Your staff members will need to deliver quality support for your users and provide system enhancements as needed. Your team may not have the necessary skills or time to do so.
You control costs as your project progresses and can adjust scope or schedule to combine fiscal limitations.	You may find that built technical systems have hidden costs related to key features; these hidden costs may reveal themselves at inopportune times.
You will get the system and features that your users want.	You will be responsible to upgrade, support, and secure all system features and functionality, which require qualified staff members and time to be managed effectively.
You are directly responsible for your project's success.	You assume all risk if the system isn't delivered within scope, schedule, or budget.

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