Software Development
Lessons Learned

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Replacement for Inspection System Software

- 2008 Initiated project to replace our then current food inspection system (eInspector)
- Approach - task broken down into 3 segments:
  - Identify MDARD functional requirements and potential upgrades to existing system by workgroup of MDARD, MDIT and external users.
  - Identification of potential replacement systems
  - Implementation of chosen system
Identification of Requirements and Upgrades

- MDARD workgroup identified 79 functional requirements using a Business Process Review.
- A partial list included the following:
  - The user must be able to create/manage work orders.
  - The system will create work orders for inspections.
  - Online and offline versions are required due to connectivity issues.
  - Ability to be used with MDARD security requirements.
Upgrades to the system

- Ability for inspector to adjust inspection frequency
- Maintain the historical activities of an est. as they change over time
- Ability to attach photos, documents, etc., to an establishment record (letters, enforcement activities, plan review, manager cert. documentation)
- Capture electronic signatures
- Ability to leverage software application and support multiple local health departments
  - MDARD hosts the system, and local health departments would be able to use system with minimal development and implementation costs
Development of a RFQ and Showcase of systems

- The request for a quote (RFQ) was created using the functional requirements and upgrades developed by the workgroup.
- The workgroup identified the need to review potential replacement systems as a group in person, a “showcase” of the system.
- The showcase helped workgroup to get a feel for and a high level understanding of the systems presented and how they looked and felt.
Showcase reviews

- Five (5) Commercial off the Shelf (COTS) electronic food inspection systems, and
- One inspection system developed in-house by a local health department
- To determine if they met our basic functional requirements and upgrades
- Additionally the showcases provided an overview of how the systems worked and allowed for questions regarding data storage data management and access.
LESSONS LEARNED specifically for Michigan

- Regardless of the ease of use for an inspection system productivity will fall, in our case by 50% currently
- User interface with the system needed to be tested more rigorously
- How staff connect to the system also needs to be tested under real world conditions
- Is it critical that you manage the data within your firewall? Or would it make more sense in the off-site/cloud, we think in the off-site/cloud at this time
LESSONS LEARNED
Applies to all reviews of new IT

- COT systems offer advantages of multiple users working, reviewing, changing the system
- In-house developed systems can create inadvertent issues and are only as current as the developer
- Need to budget not only for installation but troubleshooting and additional support during rollout of new system, 6 months is not unreasonable, 12 is more realistic
LESSONS LEARNED
Applies to all reviews of new IT

Where the data resides may not be as important as you think,

- Do you really need to manage/maintain data inside your firewall along with all upgrades, hardware issues, storage costs etc.
- Or does it make sense to share those costs with other agencies and the COTS firm has the responsibility via contract to manage and maintain the data for you
Most important lesson

- When you complete your Business Process Review, answer this question?
- When reviewing inspection systems (COTs or Internal) is it easier to modify the COT
- Or adapt your business practices to the COT

- **Adapting/modifying your business practices is cheaper than developing and building an in-house system.**
Questions?

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