INFORMATION TECHNOLOGY AUDIT

A – INFORMATION TECHNOLOGY OPERATIONS REPORT

B – NETWORK VULNERABILITY REPORT

CITY OF KILLEEN

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Submitted to:
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Mr. Ron Olson:

Centex Technologies has completed its audit of the City of Killeen's (CoK) information technology (IT) department.

CoK's Information Technology department is responsible for maintenance, support, server operations, telephone systems, and information security.

The objectives of this audit were to:

1. Analyze and provide recommendations regarding contracts currently in place.
2. Perform a general information security review.
3. Review the current networking infrastructure, helpdesk performance metrics, backup policies and architecture.
4. Determine the skills necessary to operate and maintain the current information technology system and compare them to the existing skills within the department.
5. Evaluate the inventory of current software and hardware to determine what capabilities exist; what is being used; and what additional, unused functionality exists.

Included in this review were key findings from interviews with CoK IT staff members, both generally and within the following departments:

1. Utility Collections
2. Finance
3. Human Resources
4. Police Department
5. Aviation
6. Purchasing
7. Public Works/Solid Waste
8. Transfer Station
9. Water and Sewer

The methodology for this audit was devised by the Centex team in the beginning stage. Our goal is that CoK will use the results of this audit to continue working towards establishing leading practices within IT operations.

We have divided this report in to two parts:

A. **Information Technology Operations Report**
B. **Network Vulnerability Report**

For more information regarding our findings, please review the rest of the report which contains details about our team, specifics about each of the areas reviewed, and recommendations for improvement.

Thank you for working with us on this audit.

Please contact us with any questions.

Abdul Subhani

Abdul B. Subhani
Certified Fraud Examiner
President & CEO
Centex Technologies

ABOUT OUR TEAM

Founded in 2006, Centex Technologies is an information technology IT consulting company based in Killeen, TX with offices in Austin, TX; Dallas, TX; and Atlanta, GA. Our goal is to provide innovative IT solutions that exceed expectations. We assist our clients through a wide range of comprehensive and cost-effective services to advise, install, service and repair, configure, maintain, and teach information technology. Centex Technologies recently ranked #22 for Small Business 100 from the Small Business Expo.

Team Leads

Abdul B. Subhani, President & CEO
Mr. Subhani is the founder of Centex Technologies. He has more than 15 years of progressive experience as an IT executive, project manager, and systems engineer, leading and managing personnel in delivering IT projects for nonprofit and corporate sectors. He has extensive computer training, including knowledge of multiple networking environments and business software packages. His primary emphasis is the care and supervision of technical personnel and equipment. He has been responsible for advising multi-million dollar budgets for corporations and is recognized as a leader in information technology, cybersecurity, and internet marketing – advising key corporate, and nonprofit constituents. Abdul was accepted into the Forbes Technology Council in 2018, an invitation-only community for world-class CIOs, CTOs, and technology executives. He was recently named CEO of the year from the Small Business Expo. Online profile: http://abdul.subhani.net

Sarah Untalan, Project Manager
Ms. Untalan has experience in personnel and project management. She has managed full lifecycle project planning and management, budgeting and oversight for corporate projects, multiple multi-media presentations including website, video and content management system projects.

Marlon Shepherd, Business Analyst/Special Projects
Mr. Shepherd works with Centex clients in the design and modification of their business IT systems. He interacts with the business stakeholders and subject matter experts of various Centex clients in order to gather, document, and analyzes their business needs and requirements. Marlon also oversees special projects on behalf of Centex's President/CEO.

PART - A:

INFORMATION TECHNOLOGY OPERATIONS

As part of the audit process, we conducted extensive interviews with the City of Killeen IT staff and department management team. We also requested documentation to further study the information provided to us.

Key Points

1. Staff had various opinions of the Executive Director, with generally, low satisfaction overall. Specific comments included:

   - Poor communication skills
   - Lack of delegating work to subordinates
   - Semi-technical abilities
   - Not a problem-solver

2. Thoughts of IT within CoK departments include:

   - There is no IT
   - IT is a roadblock
   - IT is nonexistent
   - IT lacks skill
   - IT operates with outdated technology
   - IT is not making progress

3. Departments report issues when calling first thing in the morning. Phone calls either go unanswered, or the caller is told that technicians are in a mandatory meeting and cannot assist them until they are available. Urgent issues are not addressed in a timely manner.

4. Meetings are typically conducted on a weekly or bi-weekly basis within each department. These meetings last, on average, up to an hour and occasionally extending to two (2) hours. Topics during meetings briefly touch upon CoK's projects/current events while a majority of the time is used for social interactions.

5. Helpdesk is understaffed and, for that reason, not used appropriately. To avoid creating a ticket, staff members often call or email the helpdesk.

6. Staff describe the office environment as lax and unprofessional. Low morale is reported, as well as dissatisfaction with leadership and department processes.

7. Communication between divisions is low; staff are often unaware of existing projects and procedures, which decreases the potential for tasks to be completed effectively and efficiently. In addition, respect between colleagues is lacking and inappropriate language is used. The lack of leadership has created a rift amongst some staff members who are unclear about who they report to. Counseling is done in person and it is seldom for any written counseling records to be saved.

8. Staff have requested additional training. No formal training classes or certifications have been made available due to lack of budgeted training dollars. Some staff have resorted to acquiring training with their own personal budget, but said training is not always adequate for continuing education.

9. Because purchases under $3,000.00 are allowed without going through an approval process or notifying the proper staff, software and hardware may be purchased within departments that may be outside the organization norm (i.e. computer type that does not meet the approved list of CoK's computer types) and/or are not properly managed due to lack of knowledge of that item (i.e. computer program from a third party unknown to CoK's IT staff).

10. Staff have requested to have a desktop and laptop, but have been told that a single employee cannot have both a desktop and laptop. Should an employee acquire a new laptop, for example, when they previously had a desktop, the desktop will be exchanged for the laptop.

11. Departments feel that there is a lack of knowledge of the systems and software used. They are unaware of any training programs for new employees and feel that employees begin their jobs without understanding each department's equipment or software needs.

12. Certain phone lines in departments do not meet the necessary operating needs. For example, only five (5) lines are present while seven hundred (700) calls are received daily in the Utilities department. Customers unable to reach the operator are disconnected rather than placed in a holding queue.

13. Water/Sewer and Airport have IT technicians who do not work for IT.

14. There is no shared vision or plan for IT needs in CoK.

15. There is no communication to the departments regarding downtime, upgrades, and other ongoing technical changes.

16. Departments explained when new computer systems are installed, their old systems are removed, despite coming out of that specified department's budget. Requests to keep these systems are denied, and department staff are unaware what is happening to the old equipment.

17. Some departments have reported that telephone systems have outdated extensions names. While this may appear to be a minor inconvenience, this wastes valuable time in locating various staff members.

PART - A:

INFORMATION TECHNOLOGY OPERATIONS REPORT

Recommendations

1. Consider finding a replacement for the IT Executive Director.

2. Eliminate or reduce unnecessary meetings. Limit meetings designated for project and task updates to a maximum of 30 minutes per day if necessary.

3. The IT department, as well as other department managers, should have the ability to monitor activity on CoK owned property.

4. Expand the number of helpdesk technicians beyond the one (1) current position.

5. Avoid purchasing hardware and software without IT department approval.

6. Move GIS division from the IT department. GIS is self-sufficient and would be more beneficial under Public Works.

7. Revise department salary structures and compensation to avoid losing current and potential employees to competing nearby cities.

8. Additional printers need to be in stock, specifically for departments that critically rely on printers for their jobs.

9. IT should have a budget for each department, to avoid requiring authorization for small items like printers, memory, etc.

10. Any new or existing changes to the system that could result in any downtime should be communicated to all departments affected.

11. The telephone system needs to be revised for each department. Update the extensions to the proper names, review the needs of each department and add additional phone lines as necessary, and add a queue for Cisco phones in the departments that require it.

12. IT tech positions outside of the IT department need to be redefined. All CoK IT workers should either work for the IT department or be given access to do the job themselves instead of waiting for the IT department to address items when called.

13. Each department needs to develop an individualized IT plan to determine what can be accomplished budget-wise within one year.

14. IT executives should have quarterly meetings with department executives to discuss the needs and updates for upcoming IT projects.

15. Cross-training between staff should be a priority so that IT knowledge regarding specific systems and departments can be shared if someone is out of the office.

16. An IT trainer needs to be assigned to train new and existing employees on their hardware and software equipment.

17. Departments need an online evaluation/request form to submit when new hardware or software is needed.

PART - A:

INFORMATION TECHNOLOGY OPERATIONS REPORT

Priority	Recommendation
High	
	Consider finding a replacement for the IT Executive Director.
	Expand the number of helpdesk technicians beyond the one (1) current position.
	Avoid purchasing hardware and software without IT department approval.
	Revise department salary structures and compensation to avoid losing current and potential employees to competing nearby cities.
	Additional printers need to be in stock, specifically for departments that critically rely on printers for their jobs.
	IT tech positions outside of the IT department need to be redefined. All CoK IT workers should either work for the IT department or be given access to do the job themselves instead of waiting for the IT department to address items when called.
	An IT trainer needs to be assigned to train new and existing employees on their hardware and software equipment.
	Any new or existing changes to the system that could result in any downtime should be communicated to all departments affected.
	Conduct staff meetings once a week within each division.
Medium	
	The telephone system needs to be revised for each department. Update the extensions to the proper names, review the needs of each department and add additional phone lines as necessary, and add a queue for Cisco phones in the departments that require it.
	Cross-training between staff should be a priority so that IT knowledge regarding specific systems and departments can be shared if someone is out of the office.
	The IT department, as well as other department managers, should have the ability to monitor activity on CoK owned property.
	Each department needs to develop an individualized IT plan to determine what can be accomplished budget-wise within one year.
	IT should have a budget for each department, to avoid requiring authorization for small items like printers, memory, etc.

Low	
	Move GIS division from the IT department. GIS is self-sufficient and would be more beneficial under Public Works.
	Departments need an online evaluation/request form to submit when new hardware or software is needed.
	Conduct quarterly meetings between IT executives and department executives to discuss needs and updates for upcoming IT projects.

Centex Technologies
Technology Audit for City of Killeen