

COMMON MUNICIPAL IT MISTAKES

AND HOW TO ADDRESS THEM

BY DAN ADAMS

Year after year, municipalities across the country are battling to balance budgets and doing more with less. One byproduct is that new information technology systems and data upgrades often take a backseat. “We’ll budget for it next year,” resonates through the halls of local governments. The problem, though, is that next year something more pressing takes priority.

The unfortunate reality is that many communities have systems so outdated that local charities wouldn’t accept them as donations. Here’s another sobering thought: The value of a four-year-old computer—still common in many city and town halls—is less than \$100 in the used market because of the performance and reliability issues associated with it.

It’s clear that technology enables us to be more efficient, keep better records, invoice with confidence, streamline accounting systems, update voter registration lists, and create and maintain meeting minutes. But when it comes to municipal technology spending, there are varying opinions about what needs to be done, how much should be spent, and which hardware or software to buy. Just throwing money at the problem is not the answer. Allocations that aren’t adequately mapped out result in systems that cost too much to support and don’t improve effectiveness. Communities need a well-defined plan—a clear system with a prioritized timeline for investments.

THE PROBLEMS

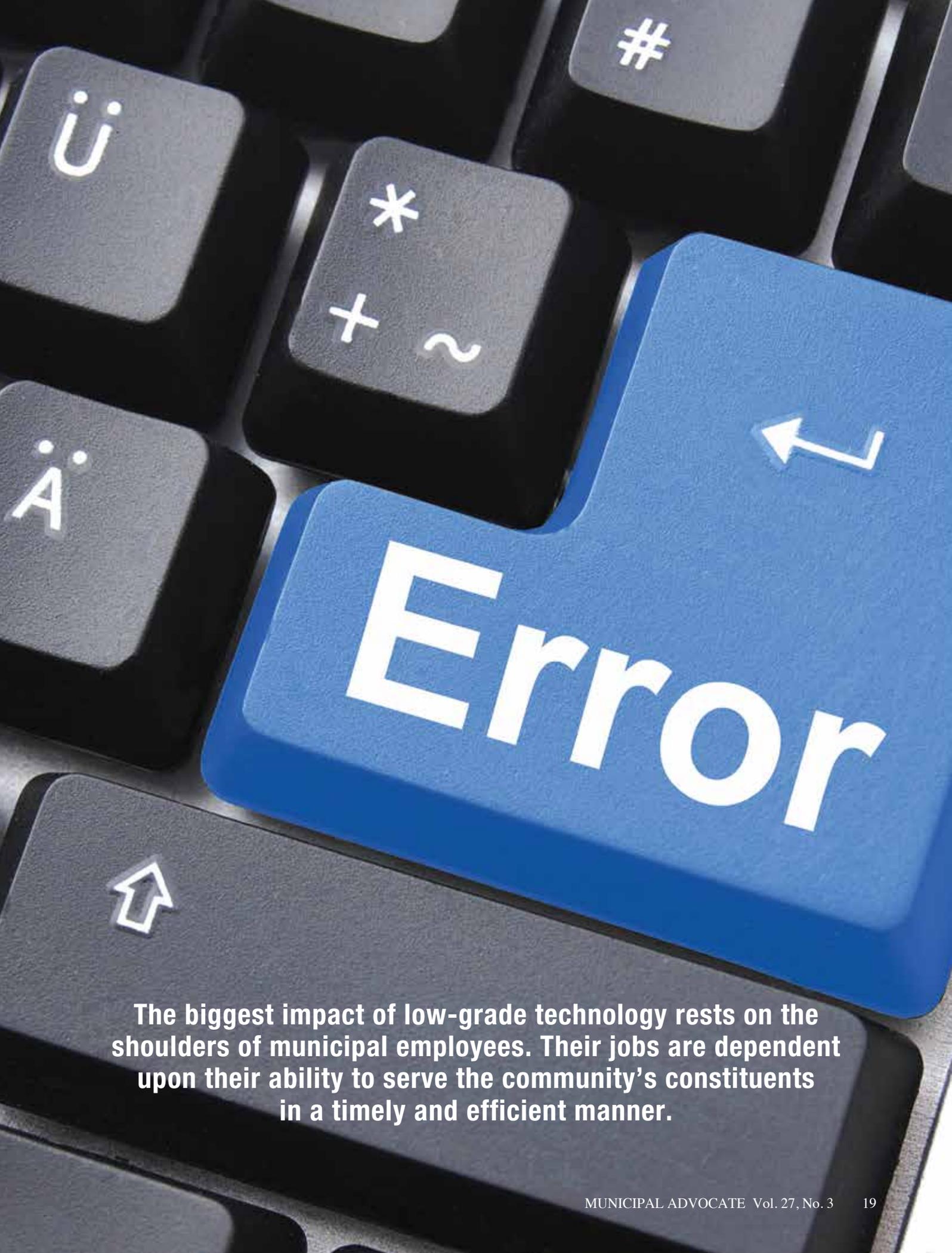
The following are some of the information technology issues that are common in the city and town halls of Massachusetts:

Data Security: Local governments were exempted from state regulations, adopted in 2010, that require any company or individual who stores or uses personal information about a Massachusetts resident to develop a written and regularly audited plan to protect that personal information. Of course, municipalities store a good deal of their residents’ personal information on their systems, but many are using consumer-grade security products and software to protect this valuable data. It’s not enough.

Malware and virus issues increase exponentially as operating systems age. Older systems go for months without updating their virus protection. The assumption that data systems are protected may be incorrect. It’s not a big expense to fix this issue, but it’s certainly expensive to recover lost or damaged data.

Firewalls is another area that needs shoring up. A firewall is the main security component between all of your data and the outside world. It should be patched and updated regularly. It needs to be monitored. Firewall logs provide a wealth of valuable information about vulnerabilities, but they often are not read.

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Without improving these areas, municipalities are opening themselves up to security breaches.

Aging technology: When it comes to IT hardware, a new system is only performing at full capacity for eighteen months before the next generation of improvements hits the market. So any system that is three to four years old is subject to more breakdowns, loss of productivity, lost technology resources, and compatibility problems.

Failure to forecast: Communities that keep outdated systems in place should be budgeting more money each year for upkeep and repair. Yet most municipalities do not increase their IT support budget to keep older systems functioning—in fact, there’s usually no budget increase for IT at all. This growing technology deficit is going to cause extreme pain in the not-too-distant future.

Outdated software: Take common bill-paying software like Munis or Fundsense. Many cities or towns purchased these programs five, ten or fifteen years ago. Although the software manufacturers have issued updates to improve their products, some communities are still using the original versions. Failing to upgrade in a proactive manner increases the likelihood of frequent technical glitches that hamper employee productivity.

The good news is that IT systems can be improved, and it doesn’t have to happen all at once. The first step is to make a commitment to improving what’s already there.

Consumer-level systems: Email, back-up and archiving systems should be evaluated to see when they were last updated. And they should be appropriate for use by a local government. Here’s one example why: One town with 20,000 residents was using a holdover email platform when they hired a local college student for some technical help. He simply enabled some basic email addresses. These emails, however, weren’t being backed up, archived or protected, and when clerks needed to produce all transactions and information regarding a certain account, there was no accurate picture of what transpired.

Unreliable Internet: Some cities and towns access the Internet at speeds that are only slightly faster than dial-up connections. Local government employees need to conduct research and access information on demand, without having to wait for an unreliable, slow, improperly sized Internet connection.

Non-standard, low-end desktop computers: There are people out there who build desktop computers using components from a variety of vendors and sell them in

an unmarked white box. Don’t go there. These systems may save \$50-\$100 in the short run, but they will be far more costly over time.

Wires, wires everywhere: Sometimes the problem is in plain sight. In some IT areas, the cabling is so bad that you can’t see the floor. Are surge protectors full and leaning precariously against a wall with their cords so tangled that it would take hours to undo? This is one of the most obvious signs of a disorganized approach to technology.

MULTI-YEAR PLAN NEEDED

When homeowners purchase a new home, they typically have a budget for the mortgage, insurance and maintenance. At first, the house is new, so maintenance needs are minimal and money is available for new projects. But a few years later, appliances are starting to have problems, the driveway has developed cracks, and the heater needs major service. The household budget needs a new category: repairs. The other needs of the growing family, meanwhile, have put pressure on the maintenance budget, and the budget for new projects becomes minimal.

Further down the road, the budget shrinks again, as times are tough all over. Repair work skyrockets as the home shows its age. Very little is left for maintenance, and new projects will have to wait. It becomes a situation of crisis repair and workarounds. Now comes the big question: How well is this house going to take care of the needs of its family into the future?

All too often, municipalities fall into the same trap as these homeowners. At first, everything’s working well, but without long-term planning or continued investments, the house—or the IT—eventually fails its owner. In cities and towns, leaders need a plan for technology investments and upgrades.

When it comes to technology, consumers have high expectations, and they become frustrated when those expectations aren’t met (e.g., no bars on a cellphone, a WiFi network that can’t be accessed). If a city is using outdated systems, and a resident is held up at city hall due to a slow computer, that resident will recognize that there’s a serious technology gap. When recounting his experience to family and friends, that resident may even express concerns about the safety and security of his data. There’s no bigger lightning rod for taxpayers than data failures or security breaches. Local government leaders need to make sure their IT systems are trustworthy.

The biggest impact of low-grade technology, however, rests on the shoulders of municipal employees. Their jobs are dependent upon their ability to serve the community’s constituents in a timely and efficient manner. When systems are inadequate, they cannot provide the information that people want. Slow performance and inefficient systems handicap workers, erode their morale, and hurt their productivity. You can only tell people so many times to get a cup of coffee while they wait.

When a leader can offer greater efficiency, it's a gift. Nothing touches employees more than the technology they use every day to do their jobs. Making sure they have what they need is a direct way for managers to show they understand what it's like to be in their shoes, and that they want to do something about it.

DEVELOPING THE IT PLAN

How can a city or town improve its technology without busting the budget? The good news is that IT systems *can* be improved, and it doesn't have to happen all at once. The first step is to make a commitment to improving what's already there.

Here are six suggestions to start the process:

1. Create a complete IT plan: This task is often best performed by someone who is not the internal technical support person. IT support people are typically better at fixing than planning. Creating an IT plan requires vision and experience.

A complete IT plan will outline the status of everything as it stands and lay out the long-term objectives. It will entail the initiatives that are needed to improve the quality of the services the city or town provides to its constituents.

The plan should include the age and capacity of all existing components (e.g., servers, workstations, firewalls, key applications, operating systems, software). A detailed accounting of where IT staff are spending their time will provide priceless insight into what is and isn't working to plan.

The "future initiatives" part of the plan should cover the following:

- An evaluation (where we stand)
- Acquisition needs (what we must get compared to what we have)
- Implementation (how, where and when we are going to implement the technology)
- Training (who needs to know how to use it?)
- Maintenance and updates (who performs and how often)
- Security (how we are going to protect it)
- Retirement (when does the technology approach or exceed its usefulness, and how are we going to phase it out?)

2. Look at cost of ownership, not just acquisition costs:

A car that increasingly costs more to keep on the road eventually becomes more expensive than a new one. Leaders must ask the question: What is the cost and effort to maintain all current and proposed solutions? Missing the real goal of the IT solution can cause problems in the coming years.

3. Gain efficiencies: Most communities have multiple departments that could benefit from resource sharing. Individual departments are often isolated from each other, however, causing higher operational costs and lower productivity. Some buildings are not connected to others, and some departments have redundant equipment that could

be shared. These details should be part of an overall municipal strategy. There may be undiscovered commonalities among the various departments that can generate efficiencies. The IT needs assessment will provide a better idea of where departments can combine resources. If "must-have" items continue to be addressed on an ad-hoc basis, there will never be a single strategic solution for IT.

4. Be patient but steady: Technology costs money, but it does not have to be bought all at once. A detailed obsolescence cycle that addresses each component can work within budget parameters and still demonstrate measurable improvements in effectiveness and efficiency. Looking at where the needs are greatest and following the strategic plan will, over time, get you where you want to be. Planning and execution avoids crisis in the end. Ignoring the problem and allowing systems to "run to failure"—not taking action until there's a catastrophe—will cause headaches and a greater financial exposure.

5. Prioritize the 3 S's (Server, Systems and Security): It's important to target the greatest threats and liabilities. A good place to start is looking at the 3 "S" areas and identifying where you are with each category.

Servers affect a large group of users. How well do they meet your needs? Are they in warranty? If the server has a problem, what services are affected? What is the recovery plan, and when was it honestly tested? Is there a maintenance schedule in place, and are diagnostics run on a regular basis?

Systems directly affect staff efficiency and morale. How do you know they are running efficiently? Are antiquated systems wasting your employees' time? Do employees understand how to use the systems, and is there training in place for those who don't?

Security threats are increasing exponentially, and what was once adequate is now obsolete. The last thing anyone wants is a security breach that causes a local crisis. It's important to review how municipal data is stored and backed up. Does the municipality have a disaster recovery plan? Is all information that should be kept private more-than-adequately safeguarded?

6. Do not be afraid to ask for help: Many communities have governing boards that make technical decisions. While it's true that many of them have business experience, that doesn't mean they understand the scale of technical need that exists in their community. They need guidance from someone who has outlined a process by which to measure needs and success, rather than hoping the undersized or large "solution" is the right one.

The role of technology is only going to increase in our communities. Approaches need to be refined and updated to match the growing challenge. Inaction will lead to even greater problems in the future. When municipalities take control of their technology, the technology, in turn, will take care of their departments, constituents and employees for a long time to come. 🌟