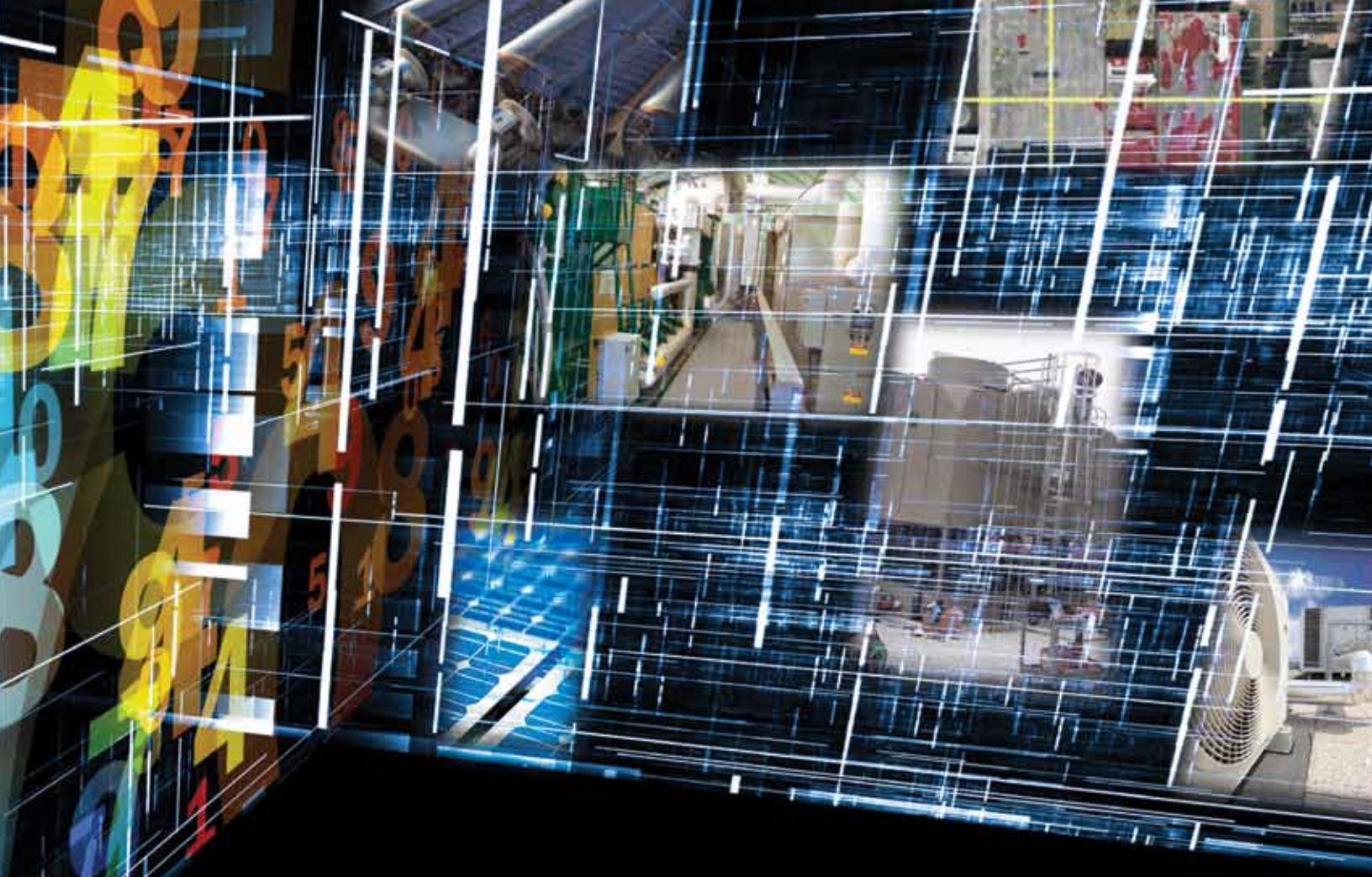
Compiled by Steve Glazner



Technology In Use

Technology touches our lives virtually every second of the day. Our work world is especially rich with changing technologies, new innovations, and continually revised processes for greater effectiveness and efficiency. You could easily say that a boiler is a boiler, or a carpet is a carpet, but the reality is that all components of all the systems we use in educational facilities are constantly being modified, improved, and upgraded—hopefully for the better.

Facilities Manager **generally avoids referring to specific companies, products, or services. We want the reader to focus on the procedures, decision points, or best practices that our authors share with you. However, in this issue on technology, we are naming names and sharing valuable case studies on a few products and companies that have done interesting work with colleges, universities, and schools. We hope you enjoy this issue.**

1

A key issue for our operation was providing accountability. We have instituted SchoolDude to be our work order system. We run inventory, daily maintenance, and preventive maintenance through this program. It has helped to make our operation accountable and run like a business and not with smoke and mirrors. This work is done at our shop levels with our entire department participating to make it work. The program is user friendly and manageable by staff.

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2

A recent technology improvement we have used here are iPads for staff members who aren't directly tied to an office, such as our custodial staff. Space is a premium commodity as well, so deploying computer access in common areas or mechanical type spaces wasn't realistic. Instead, each custodial supervisor is assigned an individual iPad (we used the first generation) and utilizes the campus wireless network for connectivity. This technology expansion contributes to better communication and more effective working relationships. Each supervisor and their employees are connected through this portable, wireless connection to other building groups, management, main offices, and customers. Training programs can be loaded on each iPad. Leave requests and time submittals are working well through the iPad platform. Campus news and information is readily available to all staff now through the Web interface, creating a more inclusive working environment. Training on the new technology was successful; learning to use an iPad was much less intimidating than learning how to operate a traditional computer work station. This use of iPad technology has been a successful, cost effective, and sustainable solution for SDSU's Custodial Services.

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3

We have continued our "green journey" in 2011 by implementing Activeion (ionized tap water) for all of our daily scheduled cleaning tasks as well as most of our project cleaning. By "cleaning" with water we have eliminated all but three cleaning products, and one of them is white distilled vinegar. We are also using Techno Vap dry steam vapor cleaning for all restroom tile/grout and floor work in tandem with the Activeion. We are using revolutionary and beyond cutting-edge technology to save valuable resources and to deliver "clean" cleaning to our students, staff, and faculty.

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4

Upon arriving at Georgia Tech, I found the renovation and lifecycle planning to be inadequate for 3 million square feet of residence halls across 40+ buildings. After months of due diligence and best practice research, we identified simple yet sophisticated computer models from VFA and Whitestone Research. Whitestone asked us to experience a no-cost 'beta-test' of their planned new product, CostLab. This Web-based program enabled us to accumulate accurate planning data. We are now assembling a compelling business case for the redeployment of funds toward large-scale renewal and replacement projects.

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5

At OCCC, we utilize digital photography to record most everything we do. Photos are included in our daily project reports, repairs being completed, and general dissemination of information. Each member of the management team has a Nikon Coolpix S4000 that they carry with them for this purpose. When providing updates to our campus administration, the attached digital images enhance our ability to garner support.

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6

Managing utilities for a large university campus has its challenges. In January 2010 we decided to automate the monthly meter reading data collection by choosing the Motorola MC-9590 series handheld device. Not only did we reduce reading times down to one day in most cases, but more importantly we increased the accuracy of our data tremendously. The data is now automatically pushed into our facility management system for monthly billing.

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7

We developed an automated key request application. Hard copy signature cards are digitized and requesters can see who their approvers are. Approvers see requests via e-mail and can accept or reject them. Customers can also see where their requests are in the system at any time. Approved requests electronically come into our CMMS and are routed to the lock shop for processing. We've eliminated paperwork, cut two days off processing time, and increased Web request use from 34 percent to 61 percent.

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8

Several years ago I started taking digital photos of code violations during annual fire inspections. Photos are e-mailed to users and supervisors of spaces involved. After making corrections I e-mail photos of corrections to the fire inspector, eliminating time-consuming return trips by the inspector. We put copies of our online MSDS data on thumb drives in each building's first aid cabinet for emergency use during power and network failures. In addition, I use my iPhone to e-mail pictures of repairs needed.

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9

Food-waste composting has been a perennial problem that has only grown over time with the focus on sustainability initiatives. I found a new solution in the eCorect Food Decomposer. The food waste is reduced in volume by around 95 percent and turned into a soil amendment. I have installed three of them in our dining halls. I selected this type of decomposer over other equipment because of its simplicity. You just put the food waste—even paper napkins—in and turn it on. Nothing else to add, like other equipment. When I originally looked into the eCorect model, they were being imported from Korea. Now that the company has created a manufacturing facility in Gardena, California, the price has dropped dramatically.

To me this is the silver bullet. Transportation of messy food waste goes away as do all the issues attendant to composting—smells, location, critters, manure source, etc. The only byproducts are distilled water and minimal odor. Check this link for information: *www.foodrecycle.org/03Product/12Model_ET-100w.php.*

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10

NMSU has been able to enhance the building automation and utility monitoring systems by leaps and bounds with the advent of open protocol communication standards such as Lonworks and BACnet. Efforts have been ongoing to migrate away from a legacy front-end application to the Tridium Niagara AX package. This decision has empowered the university with the ability to integrate HVAC, lighting, and utility monitoring systems with a single application. NMSU was on an upward trend of utility consumption prior to this implementation and has since observed reductions for the last five years.

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