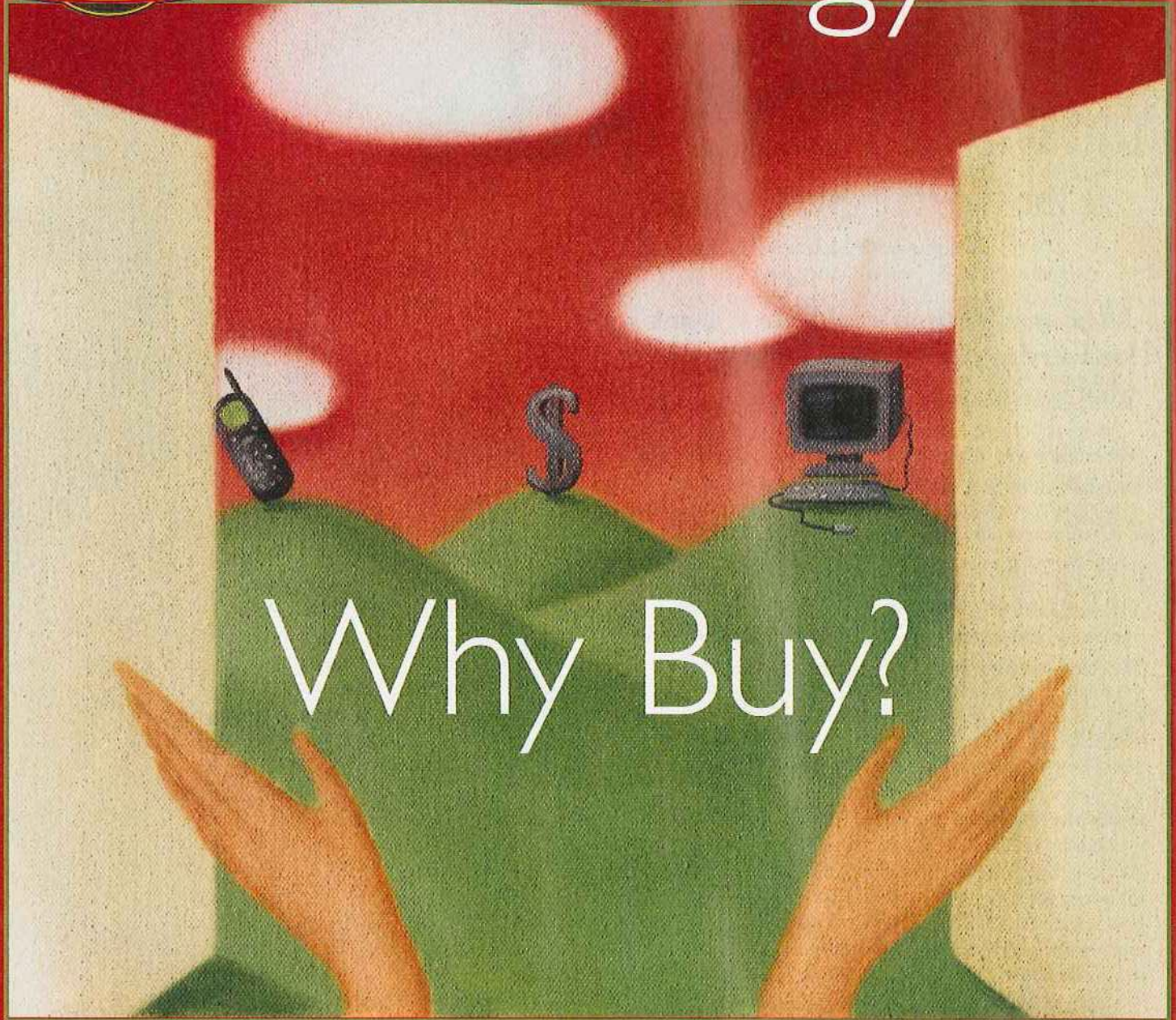




BY SUSAN DAVIS GRYDER

# Technology



That expensive new software system or computerized gizmo certainly has a high “cool” factor, but will it help improve your program’s bottom line?

## SNAPSHOT

- A cooperative relationship with the district's IT department can be an essential aspect of a successful technology purchase.
- It seems there is a technology-based strategy for almost any school nutrition challenge.
- Current technology choices can help to provide solutions for emerging issues.

**THE PUSH TO MAKE THE LATEST AND GREATEST TECHNOLOGY A PART OF OUR DAILY LIVES IS**

**EVERYWHERE**—in our homes (“smart” appliances, entertainment tools, home computers) and on the go (GPS systems, smart phones, e-readers, MP3 players). But the push is also being felt in school nutrition cafeterias, kitchens and warehouses (wireless inventory management, reimbursable vending, biometric POS systems, marketing “apps”). What’s driving the “gotta have” mentality when it comes to new technology?

On the consumer electronics front, the market relies on user hunger for and thrill with the latest “look what it can do” innovation. This is often what prompts customers to upgrade from one tool to the next, even when the former model works “just fine.” But in the workplace, where there are significant costs associated with applying technology on a wider scope than for an individual or family, the decision to buy cannot be a spontaneous or casual action. It better be an *investment*.

The primary definition of “invest” is to put money to use by purchase or expenditure in something offering potential profitable returns. Alternately, “invest” also means to use, give or devote time, talent, etc. to a purpose to achieve something. Either way, an investment—of dollars, planning, time and training—into new technology shouldn’t be made without a very clear expectation of what kind of return that investment will have for the operation. It might be improved efficiency, labor conservation, a reduction in specific cost areas, increased revenue opportunities, the potential for greater participation and so on.

And the magnitude of such an investment also requires a thorough determination of the “right” solution. You’d be hard-pressed to find a school district that can afford to apply *every* new school nutrition technology available on the market. Operators need to prioritize areas for improvement (such as point of sale, back-of-the-“house,” employee training, marketing to customers, etc.), as well as weigh the various opportunities in each area (for point of sale: wired or wireless, cash or cashless, number of points of service, etc.) and then consider the particular solutions offered by different vendors. And for most school nutrition operations, the decision involves multiple sites and other stakeholders. The planning and assessment steps alone require a considerable

investment of time that should be recouped at the end of the line!

Does this process turn you off about exploring new technology opportunities for your school nutrition operation? There’s no doubt that technology purchases need greater consideration than, say, adding a new variety of cereal to the school breakfast menu. But there is great potential for that return on investment—and many new technology solutions offer unexpected rewards, as well. In this article, four school nutrition directors share some of the decision points that influenced their decisions to take the plunge into new technology, factors that affected the implementation and some of the results that followed.

### Numbers Plus

Cindy Hobbs, executive director, child nutrition services, Charlotte-Mecklenburg (N.C.) Schools, is no stranger to using technology to improve her program. Her department implemented its first point-of-sale (POS) system 16 years ago. “And back then,” she recounts, “the system used the district’s mainframe, not like the Internet-based systems we have nowadays.”

Hobbs incorporates technology strategy into all of her planning for her operation, which serves 136,000 students at 172 sites. She uses a continuous improvement plan for the operation, one that features key performance indicators; technology is integrated into each of these and she relies on statistical data to make decisions. She notes that technology decisions aren’t based strictly on a monetary return, however. “A lot of times,” Hobbs says, “the return on technology investment is found in saving time and freeing up my staff to put their efforts into other areas.”

Return on investment also can be found in what you *can’t* foresee about the future. When the opera-



tion first implemented its POS system, cashiers were taught how to itemize meals, with the expectation that the data eventually could be tied into production records. Years later, since the school nutrition department launched online payment capability, the itemization data now can be used to offer parents the ability to monitor exactly what their children order. (And while there were initial grumblings about the "extra" time the process took, cashiers now find it to be second nature, reports Hobbs.)

For those, like Hobbs, who "get" the value that technology can offer a school district, there is frustration when policies or regulations interfere with taking full advantage of cutting-edge opportunities. For example, Hobbs is eager to make use of a new online free/reduced eligibility application, but state approval has been delayed due to concerns about the legality of

implementation depends on cooperation and support. "When I first came into my position," she recalls, "I didn't get good tech support for the POS system that was in place. This was a big problem in terms of acceptance [of the technology]; when you're dealing with cafeteria managers, good support is of the utmost importance."

Sims tackled this problem by working closely with the school district's IT department, an act that was, somewhat surprisingly, seen as a new tactic for the school nutrition operation. Sims made sure that the IT director was at her side to view the demonstrations of the new POS system she wanted to purchase. "I think IT was a little surprised when I approached them, but reluctantly willing!" she laughs. "After the demos, the director gave me his full support, and IT installed the new systems. It was a win/win for us."

This relationship proved even more critical when Sims began her next big technology push, lining up her POS system with the state's student database. "We needed to make both systems compatible," she recounts. "Having the

A lot of times, the return on technology investment is found in saving time and freeing up staff to put their efforts in other areas.

electronic signatures. In addition, "We wanted to cut the expense of monitoring temperatures manually when school is out," she notes of her hopes for the electronic temperature monitoring devices in place in more than 30 of her schools. "But food safety regulations may still require us to do the monitoring in person," she says.

But such obstacles won't prevent Hobbs from continuing to look to technology as a key factor in strategic solutions to thorny challenges, such as increasing participation. "My long-term goal is a web-based, comprehensive data dashboard" of information specific to the Child Nutrition Services department "that individual managers and I can look up in real time," she says. Hobbs sees such a data dashboard as an essential tool to track participation, as well as to evaluate which menu items are working in different schools. That would allow for an efficient way to replicate the model of what's working at schools with higher participation, she explains.

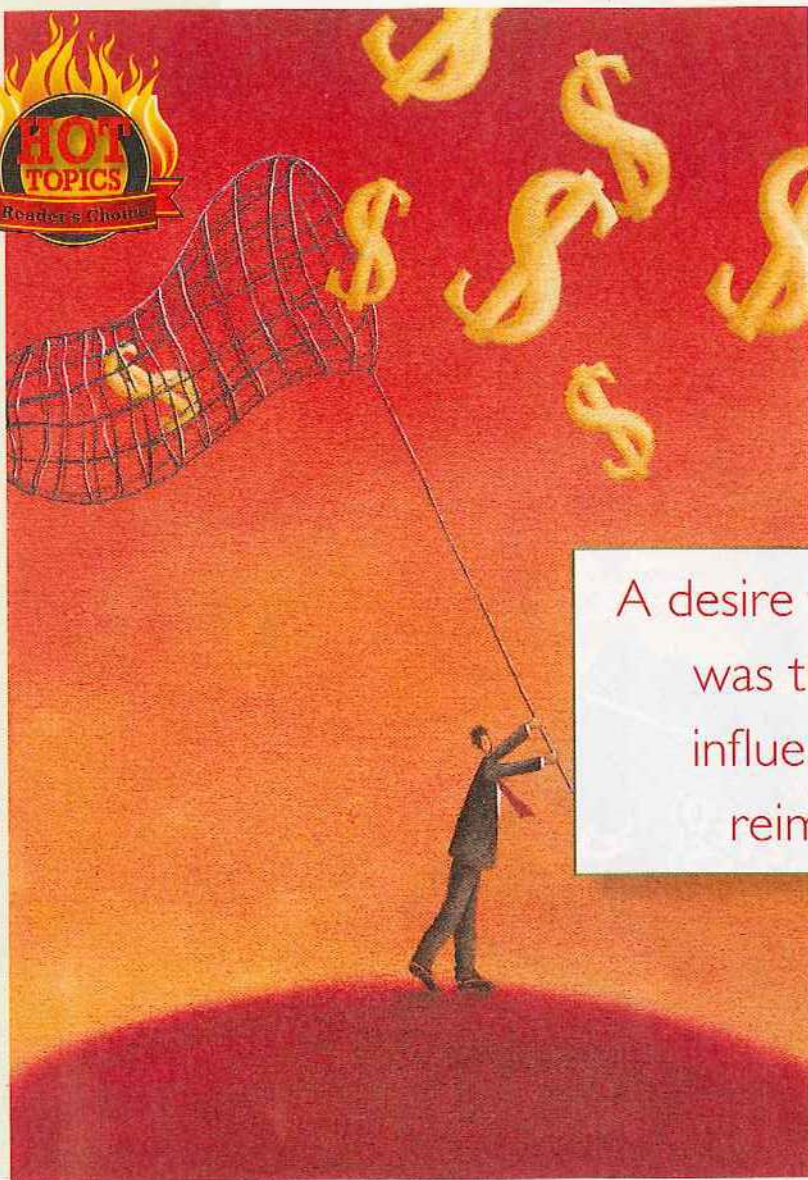
### Creating Synergy

Lisa Sims is director of school nutrition for Daviess County (Ky.) Public Schools, which enrolls 11,400 students at 18 schools. She has learned that successful technology purchase and (arguably more important)

student database information come directly into our system avoids duplication, incorrect information and human error." It meant her IT colleagues had to go through lengthy training to be "certified" to sync the systems.

Sims says she doesn't try to calculate a projected financial return on investment when making technology procurement decisions; instead she reviews her budget to see if it can absorb the additional cost of important technology. "For me," she explains, "the bottom line is that, if my budget is where it needs to be, [then a] technology investment is the way to go, because it will always make things easier and more efficient."

The most recent technological innovation for the Daviess school nutrition team is use of an online procurement system that allows individual school sites to place orders into the central office. Sims says there was some understandable resistance from managers anxious about learning the technology. Once it was a mandated process they had to learn, "Now they love it!" she reports. In addition to providing group training on the new system at the central office, "I always assure people that I will train them and come to their school if they ask. Training and support will always create buy-in."



A desire to capture new participation was the most significant factor influencing the decision to give reimbursable vending a try.

### Furthering Her Reach

Jefferson County (Colo.) Public Schools welcomes the use of technology, and Food and Nutrition Department Executive Director Linda Stoll, SNS, has invested in a variety of sophisticated software solutions to address such issues as perpetual inventory control, nutrient analysis and cost analysis. Her suburban district lies outside of Denver, and the school nutrition team provides service to 85,000 students at 150 sites.

Stoll's most recent technological foray involves a very old-fashioned method of food dispensing: automated merchandisers, better known as vending machines. The new-fangled twist that Stoll is exploring is the use of vending machines to distribute reimbursable meals. "The machines are tied into our POS system," she explains. Ensuring security for students who participate in this program through this service point is a priority. The machines feature a PIN pad for customers to enter first an ID number, then a birth date as a second form of ID, explains Stoll. Plus, a camera inside the machine takes a picture of every

single transaction. The POS system allows the vending machines to interface with the department's database to determine if the customer is eligible for free or reduced-priced meals and to deduct money from the student's account.

In the vending machines, meal components are individually packaged and offered by row; for example, meat/meat alternate entrée choices (such as sandwiches, salads, wraps) are on one row, fruits and vegetables are placed on another, milk on a third and so on. Students are prompted to select the appropriate number of items to put together a complete reimburs-

able meal. In addition, the machines feature food safety guards; if continuously monitored temperatures rise above 40°, the machine quits vending, sends an e-mail to a designated contact and must be reset manually.

A desire to target new participation was the most significant factor influencing Stoll's decision to give the new machines a try. "I wanted to capture some meals we wouldn't get otherwise," she notes, explaining, "The three sites with the machines have extended days for students in credit recovery programs. The Colorado Department of Education granted us extended serving hours for them, and most of these students are eligible for free and reduced-price meals." Stocking the machines allows Stoll and her team to tap additional customers, without the labor costs associated with keeping a cafeteria open late into the afternoon or evening.

In addition to the participation potential of the students in the extended day program, one site, despite being newly remodeled, has what Stoll finds to be an inadequate number of traditional cafeteria lines. The vending machines provide the equivalent of two additional serving lines, she reports.

To make the investment decision, Stoll and her staff calculated the break-even points for each machine. "We figured we'd need to serve 50 meals a day from each vending machine to recover our costs," she recounts. How's it going? "I think we're now doing 75 to 90 meals per machine." Preparing the items that will be sold in the vending machines has increased



labor time by only a small factor, she reports, adding that extra packaging equipment also was required. "We had to buy sealing machines, and the staff has to take some extra time to seal the items," she notes, explaining that to withstand the drop from the row to the dispensing area, each item needs a seal similar to that of a frozen dinner.

Remember the introduction to this article that cautioned against buying decisions solely based on the "cool factor"? Well, don't count it out, either. One unanticipated outcome of the reimbursable vending machines is, in fact, the "cool factor." Stoll placed the machines in a hallway, away from the regular cafeteria lines. The convenience and the novelty help to boost participation. "Kids don't think about [the vended meals] as eating in the cafeteria," she notes. "They grab the food and go, as they're heading out the door."

Don't rule out smaller tech companies. They may be more versatile, less bureaucratic and more willing to adapt to your needs.

#### **In Pursuit of a Greater Good**

Sometimes, technology is an important tool in supporting a fundamental change in a district's approach to child nutrition. This was the case for Henrico County (Va.) Schools. After 25 years of operating the district's high schools on an a la carte basis only, Tim Mertz, director of school nutrition services, returned those schools to the National School Lunch Program (NSLP).

Twenty-five years is a *long* time. "For most of this time, the seven high schools in the district were very profitable—they were cash cows," recounts Mertz. "But they no longer addressed the needs of the students." Over time, the suburban Richmond district, with 49,000 students and 67 schools, saw its free/reduced percentage rise from 20% to more than 30%. In addition, like many areas of the country, concern about rising rates of childhood obesity prompted harder looks at foods available in the schools.

Bringing secondary schools into the NSLP meant the elimination of sugary sodas and foods of minimal nutrition and offering reimbursable meals held to federal nutrition standards. It also meant replacing the high schools' old cash registers with computers tied to a POS system. Mertz seized this opportunity for change. "Since I had to bring in a new POS system

[for the secondary schools], I took the opportunity to upgrade *all* the schools' computers at the same time," says Mertz. "It was necessary; some of that equipment was over 13 years old!"

But, like the switch to the NSLP, it was not a casual decision. The cost for upgrading all 67 schools was significant: Originally estimated at \$600,000, the cost rose to almost a million dollars due to unexpected cabling upgrades and rewiring.

To meet this financial challenge, Mertz obtained permission from the school board to tap his county-mandated reserve fund. That first year, the school nutrition operation lost more than a million dollars, not only for the upgrade, but also due to retraining, mistakes and loss of participation by high school students angry at the loss of their a la carte offerings. But the following year, Mertz's program lost only

\$300,000, and the year after that—last year—once again was profitable. "We reduced expenses and strengthened our menu, and we had fewer kids who remembered the old menu and resisted the new meals," he reports.

Mertz is looking toward the future, and he hopes to find new technology options that will allow him to better manage his labor costs. "I want to convert hours from lagging data to forecasted [sales] data, like restaurants do. This would allow me to assign labor accordingly," he notes. He thinks he may have to reach out to smaller technology companies to help him find the right solution: "Don't rule out smaller companies," he advises. "They may be more versatile, less bureaucratic and more willing to adapt to your needs."

#### **Working for You**

The purchase and implementation of new technology for school nutrition operations can be prompted by a variety of different goals: cost savings, increased participation, better nutrition and greater efficiency, just to name a few. Although projecting the real costs—and similarly the financial payoffs—of technology is always an important step, don't overlook the unexpected benefits. There's some kind of challenge associated with nearly every area of a school nutrition operation—fortunately, it seems there's also an abundance of technological solutions. Explore the right fit for your team. **SN**

*Susan Davis Gryder is a freelance writer in Silver Spring, Md. Illustrations by Digital Vision.*