

# Get mobile with tech

Getting mobile has never been easier with new tech tools designed to increase your efficiency at home, the office or the truck

BY JASON STAHL /  
MANAGING EDITOR

It's no secret that landscape professionals are busy these days. It pays to be everywhere at once, to get back to clients instantly, to be in constant contact with crews...and to do all of this anywhere. Let's face it: landscape work is outside work, so anything that can get you out of the office but maintain your level of productivity is a good thing, right? There's a host of hot technology toys you can use on the road or in the office, and they're not only increasing productivity and efficiency but boosting the bottom line.



## Efficiency is Job 1

When you talk high tech toys with Dwight Hughes, president of Dwight Hughes Nursery in Cedar Rapids, IA, the first thing he'll tell you is that they don't even make his top three list of most valuable tools.

"My most valuable high tech tool is my Kubota backhoe loader. My second most valuable high tech tool is my Power Trac 1430 with all the attachments," Hughes says. "Make no mistake — we make money by putting plants in the ground."

But Hughes didn't build an industry-wide reputation as an innovator by being hard-headed. He has recognized how new technology can help landscape managers do their jobs better.

"You have to decide what's going to be good for your own operation," Hughes says.

In his case, it was PalmPilots and cell phones. He has four





Dwight Hughes

PalmPilots, which are located in different places: his desk, his wife's desk, his nightstand and his truck. So far, having them on the road has been invaluable.

"They have all of our customers' addresses and phone numbers in them," Hughes says. "They are very simple, store a lot more information in a small space and help me manage my time more effectively."

Their cost wasn't an issue with Hughes, as money, he said, comes in third in his decision making process. "The expense wasn't so much an issue as trying to find the correct version."

While he can't transfer invoice information from the PalmPilot to his computer en route to the office, he can once he gets there by plugging it into the computer.

One thing Hughes and his employees can do while driving is make phone calls, since each truck has a mounted cell phone. And they're mounted for a reason.

"I prefer not to be obsessed with the phone," Hughes says. "We try not to abuse it. A lot of people aren't being efficient in their usage. When we make a call, we make sure it is important and has some value to the sender and receiver."

When the phone rings, it activates the truck's horn so someone is alerted. Usually, the call is about client concerns, a change in a job or an update on a job completion.

If anyone appreciates cell phones, it's Hughes. He remembers staying on the phone at night from one to two hours and having to stop to use pay phones while on the road. Then, he bought radio phones for \$3,000 apiece that cost \$.60 per minute to use. "Now, those two hours are saved every night," he says.

Hughes doesn't have a Web site, and it's not because he hasn't had time to construct one. "My customers are not going to react to a Web site," Hughes says. "They react when they see our trucks in their neighborhood or see me at a civic event."

Hughes' rule for buying technological tools is simple: if they help you become more productive, then they're worth it. He says busi-

nesses have to be wary of being blinded by the technology craze.

"A lot of leadership people in this industry have pagers, cell phones and fax machines, while the guys on the job have nothing to work with," he says. "That's why they're not reaching their goals."

### Mobile with a purpose

With a large landscape company with four satellite offices in Laurel, MD, being able to communicate wherever you are is important to Bozzuto Landscaping. Each manager has his own PC at the office, and half have company-supported computers at home.

"We have three in-house computer people to support our managers at home, plus we give them all the software and hook them up so they can operate, get e-mail and run bids," Davis says.

Critics might say that all those computers add up to too much office time and not enough field time. That's why Davis says that in October, the PCs will be phased out in favor of laptops his managers can take on the road to work up estimates and contracts.

Each branch also has a digital camera, which managers take with them in their trucks to snap photos of properties. A designer then downloads it into a computer and, through the use of design software called Micrographics, adds landscape plantings to show a client how the property might look prior to doing any physical work. All of the designing is done in the office, sometimes in front of a client.

"It has been a huge sales tool for us," Davis says of the company's digital design services. "We've seen our enhancement sales grow at 20% a year. How much of that is attributable to designing is hard to say, but it's a lot."

All 10 managers are supplied with PalmPilots to help them keep their customer lists, leads and schedules organized while driving from site to site. Everyone also has a Nextel phone, which has not only increased communication but saved the company a bundle.

"The Nextel phones eliminated our pagers because we can get text paging. They can also send us messages rather than calling us,"

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"We get one-third of our business from getting back to clients quickly." — Larry Brinkley, president, BLT Landscape Services



"You have to integrate all of this technology carefully because there is a lot of junk out there. There are cool and fun things, but whether they can be used to make your operation more efficient is the question."

— Bruce Allentuck, owner, Allentuck Landscaping



Tom Davis

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Davis says. "We were saving about \$1,200 a month, and those savings have increased since then because we now have more units."

Even though Bozzuto's truck mileage is tracked manually by a fleet manager who regularly e-mails his reports, the company is currently looking at tracking devices that work off the Global Positioning System

(GPS). The GPS involves a terminal in the truck that would read coded signals from satellites and determine its location.

"With increased fuel costs, it's huge to be able to conserve wherever possible," Davis said.

No one has to convince Davis about the Internet's power. That's why Bozzuto has its own Web site: to market the company, allow people to apply for jobs on-line and sell used equipment.

"We'll send the potential buyer a digital picture of the equipment," Davis said. "We recently sold 11 pieces of equipment and shipped them six states away."

Davis encourages his managers to stay out of the office as well. "E-mails are quicker than having lengthy conversations, so sometimes it saves time," he says. "In some cases, if you take out personal communication with a client, it's a problem. Some love talking through e-mail, others don't."

Davis believes there is such a thing as relying on technology too much. "We realized that the people who needed to see certain things like job performance and bids didn't see them because it was all done on computers," he says. "We now have tracking boards or scheduling boards so crews can see whether they're winning or losing."

#### Apt to try anything

Larry Brinkley, president of BLT Landscape Services, Dallas, TX, says he has a liberal approach to technology, with a "try anything"

attitude. And it's no surprise, given that he conducts half of his business on a cell phone, usually on the go. BLT used to have radios in all of the trucks, but now it has the Nextel communication system.

"Radios were okay, but now we can get Johnny on the spot and handle things instantaneously," Brinkley said. "We do pay for air-time, so the expense for calls has gone up, but our overall efficiency has improved."

Brinkley says his \$2 million company doesn't have laptops yet, but will soon because he feels everyone would be more productive if they could take their computers on the road. He is eager to get those laptops so design software can be taken on the road and customers can see instantly what the addition of a tree or mulch bed in their yard might look like. He says his design software, his is Green Thumb, has accounted for a 37% increase in sales.

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## Tech tools—one step at a time

Before deciding whether to invest in the latest technology for your operation, ask yourself a few questions:

1. Is it right for my service mix?
2. Is it cost effective?
3. Can it be as effective outside the office as inside?
4. Will it help the overall operation become more efficient and productive?
5. Is it a top priority now or can it wait?



"I prefer not to be obsessed with the phone. We try not to abuse it. A lot of people aren't being efficient in their usage. When we make a call, we make sure it is important and has some value to the sender and receiver." — Dwight Hughes, president, Dwight Hughes Nursery

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Responding to people quickly, either on the road or at the office, has a huge impact on business, says Brinkley. "We get one-third of our business from getting back to clients quickly. We get calls in the spring and fall from people who say we were the only one to call them back." He averages about 20 e-mails a day, and says he has sold two or three large jobs just through e-mail.

"We don't just communicate with them through e-mail," Brinkley says. "We make sure our foremen talk to clients on site or leave a note explaining what we're doing. If there's a problem, we call instead of e-mail."

### Changing times

When Bob Rennebohm bought Heard Gardens Ltd. of Johnston, IA, nine years ago, the company had no computers, cell phones or fax machines. "If I look back, I see that we haven't grown much with people but we have with equipment."

Now, all project managers have computers at work and at home where they can log into the company network any time. Rennebohm himself has a laptop, which has helped him manage the company's finances and communicate through e-mail either on the road or at the office.

The company, which has 42 employees and grossed \$1.7 million last year, recently began using design software, SoftDesk Landscape Assistant, to boost sales.

Rennebohm is currently looking to buy PalmPilots to help all crew supervisors manage their time more effectively. He's also looking to acquire the Asset software program by the end of the year to download crew work reports and job times.

Heard has a comprehensive Web site with the primary purpose of providing information. However, Rennebohm hinted at selling landscape plants online one day through a retail garden center, not to mention his world famous lilacs, which are currently ordered through the mail.

Rennebohm has also investigated using GPS, but decided it

wasn't for his company. "What they're working on right now is integrating the equipment right in the cab of the truck," he said. "The pricing right now isn't cost effective for what we're doing."

## On the verge

Bruce Allentuck, owner of Allentuck Landscaping, Gaithersburg, MD, recognizes the value of designing landscapes via computer. It's one of the things, like doing estimates, for which his managers use their computers.

"It's a time saver because it allows you to move things in the landscape around quicker," Allentuck said. "Hand drawings are okay, too, but doing it on the computer presents an air of professionalism to clients and prospective clients." He says the use of design software to create virtual landscapes has boosted sales, especially of big jobs.

What also helps with sales is access to hortocopia.com, a database of 3,800 plant pictures. Allentuck and his managers can download the pictures and print them out in color on glossy paper, ready for the client to view. When they add laptops in the future, they will be able to take them in their trucks to make instant sales on site.

He is currently exploring PalmPilots and the GPS, but is not ready to commit just yet.

"You have to integrate all of this technology carefully because there is a lot of junk out there," Allentuck said. "There are cool and fun things, but whether they can be used to make your operation more efficient is the question."

"We absolutely rely on these technological tools," Allentuck said. "We could survive without them only if our competition didn't have them as well."

# Turf goes 'Space Age'

GPS isn't just for golf courses anymore.  
Find out how it will streamline your operations

BY GREGG BRENINGMEYER

Remember when all you had was a citizen band radio to communicate with crews and a hand calculator to price out jobs? All that is changing as the Space Age comes down to Earth. Advances in technology have made cell phones commonplace, while personal computers store business data and calculate job specs at the speed of light. The next phase of change will unfold in navigation technology, mapping from space and machine diagnostics.

#### Relics of Cold War thinking

Research on satellite navigation began in the 1960s, dreamed up by Cold Warriors. For the commander of a Polaris submarine to launch a nuclear-tipped missile accurately, he had to know his sub's precise location. In 1968, the United States launched 23 Navy Transit satellites — the first navigation satellites — to pinpoint submarine positions anywhere on or under the seas.

The U.S. Air Force pursued a similar idea with the Global Positioning System (GPS). The idea was to place 24 satellites in orbit, which is what the United States did in 1995 at a cost of \$10 billion. These Navstar satellites weigh 210 lbs., look down from a height of 12,000 miles and circle the world every 12 hours. To determine an exact location, readings are needed from four satellites: three for triangulation and one to fix altitude above sea level.



## Down to turf

Now that civilians have access to Navstar satellites and GPS, all kinds of interesting projects that can solve chronic problems in the lawn care industry are under development. Here are just a few of the ideas on the drawing board at places like John Deere Special Technologies, a subsidiary of Deere and Company:

**1** *You know the exact location of your large mowing machines.* The key word is "embedded." A GPS terminal can be embedded in the engine area of a machine so it can't be removed or disabled easily. The terminal can read coded signals from four Navstar satellites and determine its precise location. A computer screen will show the exact location of every major piece of equipment overlaid on a map of your community so you, as manager, know where every crew is working. You have the "big picture" right in front of you.

**2** *You know if something is missing and how to find it.* If a wide-area front mower disappears from your inventory, you can track it down without using bloodhounds. Just snap on your "big picture" screen to locate machines. In the evening, all your machines except one are shown clustered around the shop. And there, on your screen, will be the missing machine at the corner of Main St. and Elm Ave. Send the cops to retrieve your stolen mower.

**3** *You can collect important data about crew routes and mowing times.* Connect the GPS to your personal computer, log in and find out all kinds of information about routes that crews take to job sites, time it takes to mow and trim each job and the use of trailers. All this knowledge stored in your computer can be evaluated by smart software, or expert programs that can give you tips on how to load trailers more efficiently and create routes that help crews cover more jobs in a day. The result is increased productivity and improved profitability. Someday, a system such as this will help you price jobs more effectively to counter competition and increase your income.

**4** *You can eliminate downtime.* In the not-too-distant future, on-board sensors will monitor key components and high-wear parts to detect telltale signs of fatigue. Engineers currently use stress gauges when testing components for durability, so the next step is logical — build sensors into a machine so that it can diagnose its own problems.



**GPS will change the way you allow monitor operations. Better data will help you increase productivity and limit equipment downtime.**

But don't stop there — design the machine so it even orders its own parts. For example, when a sensor notices wear on a belt, it can send a message to a dealer who can then deliver the part to you with information about how to install it. Better yet, the dealer can send a mobile service unit to your machine and make the preventative maintenance repair on the spot. The dealer can find the machine through GPS.

**5** *You can map jobs from the sky to price more accurately.* It's said that the CIA has spy satellites that can read a newspaper headline from space. Landsat satellites have been mapping the surface of the world for years. Someday, you'll have access to that kind of technology and be able to use satellites to map each job

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site and determine mowing areas and trimming work precisely. This kind of information will help you price jobs more profitably and determine time-at-job more precisely for higher-volume scheduling.

**6** You can spray material with the precision of an eyedropper. Spray units guided by GPS and mapping satellites that monitor soil and plant conditions can help you meet government regulations and document every job.

**7** You can make full use of your assets with a total management system. With

satellites tracking movement from space and software keeping track of your costs and revenues, you can sit in front of your "big picture" computer screen and make



Portable GPS units communicate with satellites, giving you constant data for managing.

key decisions with more facts at your fingertips. You can ask the right questions about equipment inventory, parts storage, preventative maintenance and equipment replacement, profitability of each job, overall profitability, cash flow, wages, taxes and insurance. Plus, you can make the important decisions with a sense of confidence.

That's the promise of satellites integrated with computers. The Space Age comes down to turf by giving you more information to help you make tough business decisions with confidence.

— The author is manager of commercial mowing for John Deere, Raleigh, NC.

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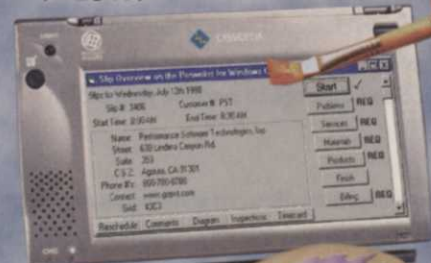
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Circle 119

ASPs:

# Outsource services on the 'Net

Application service providers can simplify your operations. Their on-line services let you concentrate on what you do best — service your customers

BY DAVID WEINSTOCK

If your operation has grown quickly, you may discover that keeping your budget on Excel just doesn't cut it any more. Perhaps you're located in an area that doesn't attract many computer professionals, but you need one.

Maybe you have several computer applications already, and the headache of keeping up with new products, as well as product updates, is more than you or your staff can handle. Or maybe your IT operation is just too expensive.

Where can you get the expertise or business management software you need? There's help, and it comes in the form of a new kind of company called an application service provider, or "ASP."

#### Just ASP for help

ASPs buy network-based business software packages and some combine general computer applications such as accounting, payroll and benefits. Others are more industry-specific and tailored, for example, to equipment maintenance or irrigation scheduling.

An ASP puts those programs on a server (a large computer with techno-gurus managing it) located on the Internet. The ASP then rents the programs to firms like yours that want to be spared the expense of buying, maintaining and upgrading them.

As a subscriber, you provide your ASP with data, which it stores in very secure "data centers" interconnected on a network running 24 hours a day, seven days a week. Your authorized employees can access whatever reports the software generates at any time on any day via the Internet.

What ASPs sell is their expertise in choosing and running computer applications. Managers in landscape and lawn care firms or



grounds organizations who contract with an ASP wouldn't have to worry about maintaining computers and software they don't want to purchase, or going through the process of constant upgrading.

### ASP for small businesses

One current ASPs offering services suited for smaller businesses such as yours is Interliant. The list will most certainly grow as this system catches on in popularity.

Interliant (<http://www.interliant.com>) of Purchase, NY, may be one of the oldest of these firms. It was started in 1995 and has more than 1,000 employees worldwide. For the most part, it services larger companies, but its division, AppsOnline ([www.AppsOnline.com](http://www.AppsOnline.com)), focuses on small business customers.

"AppsOnline targets companies of 50 employees or less," says Brad Nickel, vice president. "Sixty percent of our customers are either retail or mom-and-pop firms."

Once customers surf into the Web site, pick a computer application they want to use and provide Interliant with their credit card information, the application instantly becomes accessible.

All applications at AppsOnline are Web-based, meaning the only equipment you need is be a computer, a modem, Internet access and Web-browsing software.

Users are billed on a per-use or per-user monthly fee basis. "Individual packages cost from \$9.95 to \$24.95 per month; we have some software bundles whose costs range from \$49.95 to \$99.95 per month," Nickel says.

The division is constantly looking for new software to add to its current listing of 10 packages. One of its hot sellers is a small business accounting program that handles invoicing, general ledger and payroll functions. It also has a business-based service package that covers human resources, benefits and payroll.

### Juggling projects

If you juggle several projects at once, you might be interested in "collaboration" or project management applications.

AppsOnline rents access to a Lotus program called QuickPlace, which handles elementary project scheduling, tracking and oversight functions. For more detailed reports, consider using project management software with several functions.

### The auction option

Thinking about setting up an industry auction site? AppsOnline will rent access to a program called AuctionPool that does everything from displaying goods and setting minimum bids to notifying

bidders of when the auction begins. It even has a Web-based, cooperative buying service.

"We'll even host your Web site," Nickel says. "That's the business we were in before we became an ASP."

— David Weinstock is an assistant professor of new media technology at Central Michigan University, Mt. Pleasant, MI.

## Are ASPs right for you?

There are a number of things to consider before engaging the services of an ASP.

**Security** Any ASP worth doing business with should have a security officer, written security policies, regular security audits and audit reports. Above all, they should take steps to assure that only the ASP, you and your firms' employees have access to your data.

**Access** Be sure the firm you engage offers 24/7 access to your data via Internet. Anything less is unacceptable. Odds are you'll want to access payroll, personnel or scheduling information at strange hours and you can't be bound by someone else's schedule. Look for firms with applications used by the Green Industry.

**Focus** The operation profiled above caters to small business, but it has purposely chosen its applications to appeal to a broad business audience. As this industry continues to grow, other firms will offer programs used more frequently in the Green Industry.

**Definition of responsibility** When your rented application crashes or doesn't work for some reason, be sure the contract defines whose responsibility it is to seek technical support. Some firms take full responsibility for this function, while others only troubleshoot as long as it is believed that the problem is software-based and not a problem with your hardware or network.

— David Weinstock