



By Joseph H. Bell, LS

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## cvlTracker by cvlSoft, Inc.

There are two kinds of surveyors/engineers – bosses and employees. If all you ever want to be is an employee, you can probably skip this review. However, if you ever want to open your own office or become the head of the organization you work for, then pay attention.

Many states now require a four-year degree for both surveying and engineering. With the race of advancing technology, there is not much room left for business administration. I suspect that survey/engineer graduates, like many graduates in other fields, are clueless about business management. And if truth be told, many also have no burning desire to learn about it. It is true that you can buy little isolated pieces of management software, like QuickBooks, etc., but they are not integrated for the survey/engineering office, and they do not free up any of your resources in time, equipment or personnel. Over the years, those who manage to *stay* in business generally learn how to manage a business usually (although perhaps not very well), but I suspect that the cost of that learning curve is far more expensive than anything we will write about in this review (forget the mental anguish).

For surveyors desiring to manage the daily projects that take place in a busy office, cvlSoft, Inc., has developed cvlTracker, “the surveyor’s software solution”.

### 2K Package

Pay attention not only to what this service does, but what it frees up of your existing resources. The first order of any business has to be finances. You have to

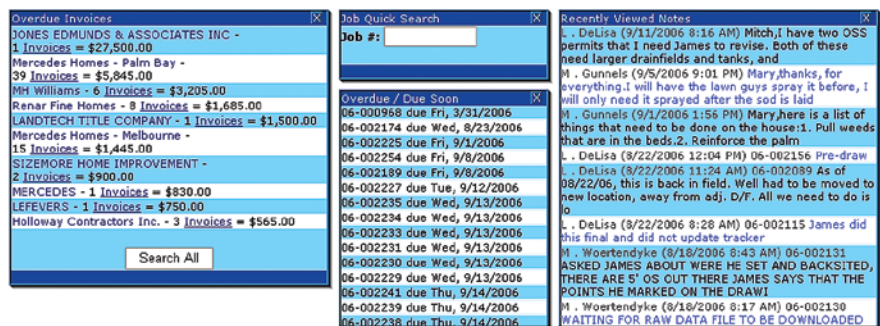


Figure 1 Overdue invoices and jobs; recently viewed notes

keep track of what is owed to you for your work. You have to make sure that your invoices go out in a timely manner (notice that since the service sends them automatically, computer time and personnel are already free to work on income-generating work). You must also keep track of what you collect and what

fail. There is an old story from my previous medical profession that the day after surgery the surgeon is the greatest doctor possible. After a while, he or she seems like a good doctor. After a few months, the patient wonders if the surgery is really necessary. After that you can guess how hard it is to collect the bill. The

“Your time as a professional surveyor can be devoted almost entirely to surveying with less time spent on business management.”

is overdue. Figure 1 shows the opening screen, consisting of report windows, for a sample company. You choose and control the reports you would like to see upon login. The first window shows a list of clients with the number of invoices overdue plus the total dollar amount. I do not have to tell you that overdue accounts have caused many a business to

same is true, unfortunately, in surveying. The job was done on time, under budget and solved the client’s problem. After a while, he thinks you are a good surveyor. After a couple of months he wonders if the survey meets all the standards. After that comes the complaint to the Board, bad word of mouth but not likely any money. Even though you do not have to

prepare invoices, you must keep an eye on this window. The second allows a quick search for a job number. This is a number generated by the host computer and ties all of the information about a job to a single secure online database (including field notes, data collection files, pictures, and drafting files). Each time a set of field notes or other notes are entered into your system a bar code is scanned and the information placed in the correct database. The client name or job name will be recognized by the host computer and bring up quick information about the project. The last window is a list of the recently viewed notes so that you can keep up with clients, employees, and projects.

Figure 2 shows your income and the bills you have paid. The jobs where you paid out more than you took in are indicated by red down arrows. The

Date	Income	Income Total	Bills	Bills Total	Fluctuation	
7/1/2006	1	\$300	0	\$	\$300	
7/3/2006	1	\$1,000	0	\$	\$1,000	
7/5/2006	3	\$1,250	5	\$5,315.89	-\$4,065.89	
Date	Account	Amount	Check #	Note		
7/5/2006	Taivah Realty	\$2,778.59	19996			
7/5/2006	Trimble Financial Servi...	\$1,545.74	19994			
7/5/2006	Diversified Cleaning, Inc	\$620.1	19995			
7/5/2006	Coastal Instrument & S...	\$201.4	19993			
7/5/2006	Staples Credit Plan	\$170.06	19997			
7/5/2006	Florida Exteriors	\$250	10430			
7/5/2006	KB Homes	\$750	097229074			
7/5/2006	NGUYEN	\$250	2083			
7/6/2006	1	\$1,185	0	\$	\$1,185	
7/7/2006	2	\$3,285	1	\$137.79	\$3,147.21	
7/10/2006	1	\$8,080	0	\$	\$8,080	
7/12/2006	1	\$300	0	\$	\$300	
7/13/2006	2	\$800	3	\$426.84	\$373.16	
7/14/2006	4	\$4,720	0	\$	\$4,720	
7/15/2006	1	\$2,125	0	\$	\$2,125	
7/18/2006	0	\$	2	\$681.21	-\$681.21	
7/19/2006	1	\$275	1	\$165	\$110	
7/20/2006	3	\$1,520	0	\$	\$1,520	
		29	\$37,555.00	26	\$35,881.40	\$1,673.60

Figure 2 Budget report

Job #	Survey Types	Billed Amount	Salary Cost	Overall Cost	Estimated Profit
06-002204	Final Survey	\$265.00	\$48.85	\$146.55	\$118.45
06-002205	Boundary & Location	\$225.00	\$107.09	\$321.27	(\$96.27)
06-002206	Foundation Location	\$100.00	\$54.99	\$164.96	(\$64.96)
06-002207	Special Purpose	\$150.00	\$19.85	\$59.54	\$90.47
06-002208	Special Purpose	\$150.00	\$7.06	\$21.17	\$128.84
06-002209	Special Purpose	\$150.00	\$7.06	\$21.17	\$128.84
06-002210	Boundary & Location	\$225.00	\$155.39	\$466.16	(\$241.16)
06-002211	Special Purpose	\$150.00	\$7.10	\$21.29	\$128.72
06-002212	Final Survey	\$265.00	\$42.00	\$125.99	\$139.02
Employee	Status	Time Spent	Pay Rate	Mgr's Estimate	
DeLisa, Leslie	Finished Drafting	0.67 hrs	\$20.00	2.00	
Date	Start Time	End Time	Hours		
9/5/2006	1:40 PM	2:20 PM	.67		
Employee	Status	Time Spent	Pay Rate	Mgr's Estimate	
Smith, Mike	Finished Field	1.33 hrs	\$21.50	2.00	
Date	Start Time	End Time	Hours		
9/5/2006	4:19 PM	4:00 PM	4:00		
06-002213	Demarcation	4:19 PM	4:00 PM	4:00	\$84.00
		\$72,198.00	\$12,913.11	\$38,739.32	\$33,458.69

Figure 3 Job profitability report

details of your outgoing money can be brought up by clicking on the little plus sign on the left. As a business manager you have to keep an eye on the bottom line, which here is called profitability. In Figure 3 you can see at once where you are making money (green) and where you are losing money (red). The blue indicates a higher percentage of profit.

### 4K Package

How do you evaluate your employees? How would you like to add a few objective criteria such as employee efficiency? How would you like some objective means of deciding what jobs he or she performs best? Figure 4 shows a list of employees, the jobs they have done, the time it took them to do the job, your estimate of how long it should have taken, and the peer average for the whole company for the same kind of job. Notice that the ones who took longer than the peer average are highlighted in

yellow and that the employee who bested those numbers is highlighted in blue and the details brought up for inspection. Of themselves, these numbers do not mean much, but they do point out where you may need to pay some attention.

### 6K Package

Imagine for a moment having all your filing cabinet contents scanned, organized, and uploaded to three independent and redundant servers automatically. cvlSoft has developed a way to do this. Load 500 pieces of paper in your document feed scanner, press the scan button, and walk away. That is about as fast and painless a changeover as I can imagine. Instead of months of manual scanning and manual input, think in terms of days. You will be operating smoothly before you know it, concentrating on running your business and supervising your survey work instead of being buried in a sea of paper.

Add a PDA wireless bar code scanner and eliminate the risk of reversing digits in a long line of numbers. Update the status of your projects instantly for automatic reporting. These wireless scanners can be used in the field, the office, the research facility, the client's office, etc.

### 10K Package

This is the first or second most time-saving innovation. How much time do you spend talking to clients and looking up information for them? With cvlTracker a password-protected website is instantly created for each client so they can view all the things that are going on and the status of their projects. New projects can be added. Notes regarding projects can be sent. And invoices ready for payment can be viewed. An e-mail portal allows you to e-mail invoices, jobs, deeds, plats, etc. to clients and employees.

With cvlTracker proposals can be generated automatically that design a schedule, assigns tasks, assigns due dates, and sets a budget. These are customized to your need. These proposals will give "due soon" and "close to budget" warnings.

### 20K Package

Picture coming to work in the morning, and with a couple of mouse clicks checking to see what jobs are scheduled for the day, what crew is assigned to each job, then sending to that crew the jobs assigned to it, the time expected to do each job, an electronic map that shows the location of each job, the fastest route

	Job #	Survey Types	Time Spent	Mgr's Estimate	Peer Average
Employee: King, Timothy					
			143.47 hrs	42.70 hrs	69.30 hrs
Employee: Knuth, Michael					
+	06-001829	Final Survey	1.50 hrs	2.00 hrs	1.81 hrs
+	06-001895	House Stake	1.00 hrs	0.50 hrs	1.52 hrs
+	06-001905	Final Survey	1.50 hrs	2.00 hrs	1.81 hrs
+	06-001910	Foundation Location	1.17 hrs	0.50 hrs	0.97 hrs
+	06-001911	Re-House Stake	0.67 hrs	1.00 hrs	
+	06-001912	House Stake	1.00 hrs	0.50 hrs	1.52 hrs
+	06-001913	House Stake	0.67 hrs	0.50 hrs	1.52 hrs
+	06-001916	Final Survey, F.E.C. (fi...	1.00 hrs	2.50 hrs	2.75 hrs
+	06-001923	Final Survey	1.50 hrs	2.00 hrs	1.81 hrs

**Figure 4** Employees, jobs and time


to each job, and priority of the jobs based on the shortest distance traveled. The crew chief simply accesses the program to get all of the survey information stored there about the job, work done so far, and previous jobs in the area of each job, local control, etc. If a rush job comes in, you can look on your web-based map and see the location of each truck at any time so you know which crew is the closest, as well as all the other information such as the importance of the existing jobs, the capacity of each crew, etc.

Since you are no longer obliged to keep books, send invoices, or answer client questions about job progress, you can devote yourself to managing your business.

This is included with the platinum GPS tracking package. This includes making your records secure, doubly backed up with copies in two separate locations.

### Optional Service Agreement Pricing

Instead of purchasing cvlTracker outright, you can also opt for a monthly plan. For a small activation fee (around \$750), cvlSoft will set up your cvlTracker database and website. Then depending on the features you choose to have in your program, you would pay a monthly fee (between \$150 and \$400). Included in this fee is the hosting of your website, cvlSoft's services, and storage of your data on cvlSoft's secure and monitored servers.

The point of this whole program is that your shop resources are not wasted on business matters and can be devoted entirely to surveying (and making money). For instance, your computers are not full of old drawings or files. They can be totally devoted to current jobs (income producing jobs). Your time as a professional surveyor can be devoted almost entirely to surveying with less time spent on business management. You get to spend almost all of your time on what you love to do and still retain a firm grasp of the business. You are not tied to the telephone or the files. Your data can go directly from the field to your draftsman in the office. Because cvlTracker is web-based, versioned updates are instant and free, and there are no licensing fees. cvlTracker will track projects, employees and finances with a click of a button. Visit [www.cvlSoft.net](http://www.cvlSoft.net) and arrange for a free web-demo. 

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