From Estimating to Payroll – Computer Programs Save Time and $$$

by Diana Lomont, Staff Writer

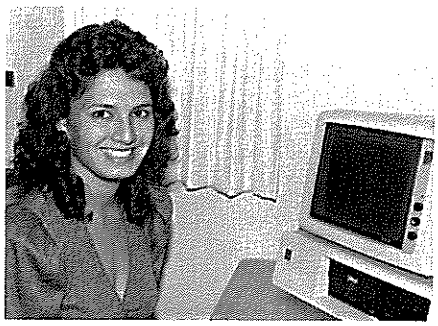
Contractors still doing manual accounting might be surprised to learn how much a computerized accounting system can increase a firm's efficiency and save it money – and how quickly those benefits can be realized.

When Kathy Thurston, vice president of Partitions Hawaii, purchased a construction accounting system two years ago, she recouped her $10,000 investment in less than a year's time from what she would have paid an outside payroll service to do the company's weekly payroll.

"I figured that within nine to 10 months, we would get back our investment, and that's what happened," Thurston recalled.

Doing the week's payroll now takes just four hours of computer time for the 100-plus employees of the two family-owned companies (Ideal Construction is the other family business).

With just one terminal, an IBM PC-AT, and a Software Shop package supplied by Construction Computer Tools, Thurston said her company was for the first time able to remain on top of the work flow.



Kathy Thurston, vice president of Partitions Hawaii: The software system she bought "enabled us to catch up...and know everytime we do things, where we're at."

"For us, it was a real shock to be current instead of behind all the time. This system really enabled us to catch up, to keep up with our work and know everytime we do things, where we're at."

Thurston's story is becoming more common in the construction industry as computerized accounting, estimating and job cost systems are put to use, offering contractors more ways to keep up-to-date and even ahead of their work.

Software developed for the construction industry is offering improved time-saving functions and customization capabilities, with more efficient system integration.

Best of all, prices are remaining relatively stable as accounting packages and hardware improve.

Contractors can expect to spend between $10,000 and $20,000 for a complete micro-computer system, including a PC computer, printer and software package. Just a few years ago a contractors had to pay at least twice that for less powerful and less versatile equipment.

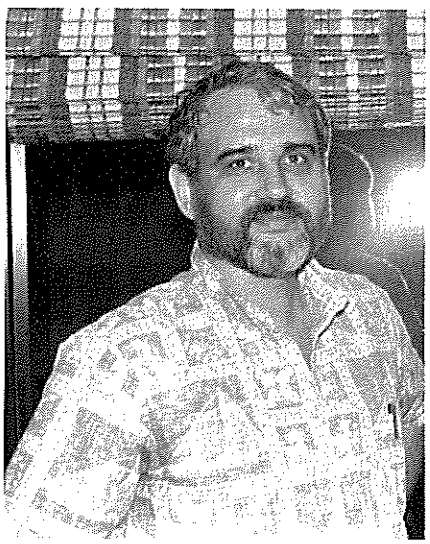
Ideal Construction's computerized accounting system includes the typical contractor package of software modules for payroll, general ledger, accounts payable, accounts receivable, job costing and report writing. Thurston said her most valuable software is the job cost program, which shows estimated versus actual costs, accounts for any variables, computes budgetary standings and provides cash flow reports.

Thurston's software system is also integrated, as any good system should be. This means that entries into one module are posted to all modules for consistent updating. For example, an entry posted to payroll is also registered in job cost and general ledger.

"So you don't have to make one entry for payroll, another entry for job cost and another for general ledger," Thurston explained.

In November, Thurston was researching the market for an estimating program, another software package valued by contractors. Estimating programs use digitized takeoff capabilities to transfer dimensions from plans to a computer. Software suppliers say computerized estimating can be four to seven times faster than manual estimating, with better accuracy.

Software dealer Jim Alexander



Software dealer Jim Alexander: He envisions the day when computerized estimating will make the difference between survival and failure for a contractor.

envisions the day when computerized estimating may make the difference between survival and failure for a contractor.

President of Jamark Inc., which supplies the Power Tools line of construction industry software, Alexander said, "Right now, contractors are in a healthy business, but a low period will come, and when it does, they've got to be able to reduce their bids to a point where they might not make a penny during that period, but they survive."

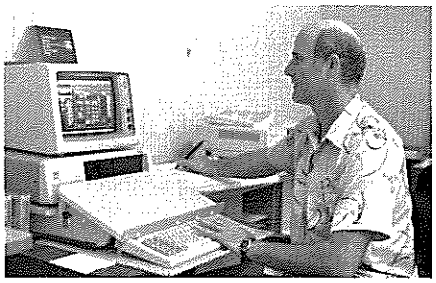
Choosing a System

With a growing number of software suppliers focusing on the construction market in Hawaii, local contractors have an increasing variety of software to choose from. But before selecting a software package, contractors should know what kind of operating system they want.

The two most commonly used operating systems are MS DOS, on which micro-computers are being increasingly run in networks, and XENIX, the industry standard system for the more powerful mini-computers. For the past two years, micro-based software suppliers have been at war with XENIX-based software suppliers over which system offers the consumer more bang for the buck.

Ed Roach, product manager at Construction Computer Tools, which supplies MS DOS-based software, thinks networked micro-computers are winning that war "because of the tremendous price advantage and the tremendous advantage in the availability of a lot of micro-computer-based products that are not available with mini-computers: a lot of personal productivity software, word processing and spread sheet activities."

The most advanced micro-computer network Construction Computer Tools has installed in the past few months is Novelle's Advanced Netware 286 on the IBM PS/2 line of hardware. The system offers some multi-user functions that have long been an advantage of mini-computers, such as enabling users to do more than one task at the same time, or allowing two or more users simultaneous access to payroll or accounts-payable files.



Don Raymond, president of Computer Construction Tools, demonstrates the Software Shop estimating program.

But micro-computer networks still can't really compete with XENIX multi-user systems in terms of capacity, computing speed and long-range costs, according to Peter Kay, vice president of XenTec Software Engineering. Kay said this is especially true for larger firms.

Micro-computers have a price advantage for firms that run only one or two, "but once you hit three micro-computers and a file server, that's where XENIX becomes more econo-

mical," Kay said. That's because a XENIX system operates from a central processing unit (CPU) with one package of software linked to as many as 30 computer terminals. To add a terminal to the XENIX system costs about $500.

A micro-computer network requires stand-alone computers each running off of their own software. IBM's current line, the PS/2, ranges in cost from $1,700 to $6,000 depending on the model. The more micro-computers there are in a network, the slower the system gets, said Kay.

Another advantage of a XENIX system is that its hardware can be more easily updated and enhanced by adding power capabilities to the CPU. A micro-computer owner, on the other hand, would have to invest in a whole new computer to keep up with the latest micro-computer hardware, Kay said.

XenTec and Jamark are two relatively new local suppliers whose software can run on a single MS DOS-operated PC or expand into a large mainframe XENIX system.

One of XenTec's strong selling points is the company's ability to create a XENIX system out of a firm's existing micro-computers, even if they are outdated.

"We use what you've got," explained XenTec Vice President Marcus Smaby. "We're just going to come in and put in the central server, the main box, that's going to house the accounting system, and we'll connect it up to everything you have."

XENIX systems also do automatic system management, where a system will back itself up during non-working hours.

Although XENIX may appear to have the overall lead on MS DOS for larger firms, it will soon be facing new competition. IBM this year is expected to come out with a "new generation" of micro-computers, the OS/2 line, which will have its own operating system, to replace its MS DOS-based PS/2 line.

With the new operating system, networked micro-computers will reportedly act more like mini-computers with greater power and speed.

Timberline Software Corp. is one of the software manufacturers IBM has chosen to sponsor its new OS/2 line. Timberline representative Lloyd Porter of Ledgerwood Associates said this means Timberline has a head start on other accounting software manufacturers in developing software to run on the new system.

A Variety of Software

For now, however, whether a contractor chooses to go with an MS DOS- or XENIX-based system, a variety of software is available for both. When looking for software, a contractor should insist on packages that offer flexibility and the ability to customize, because no two companies operate the same. Nowadays, software packages offer contractors an increasing number of options.

XenTec Vice President Marcus Smaby says his company is able to create a XENIX system out of a firm's existing micro-computers, even if they are outdated.

For example, the Software Shop job cost module enables set-up of unlimited cost codes and grouping of the codes into phases for progress billing.

XenTec's Deneb estimating package enables a contractor to enter costs of labor, material and four additional categories, each of which has available 10 sub-categories.

Jamark's Power Tools software handles up to 99 companies on its accounts receivable, general ledger and estimating programs.

Estimating programs are also becoming specialized to facilitate bidding on particular jobs. For example, Timberline Software has a Precision Cut & Fill estimating program that promises contractors accurate and quick estimation of earthwork quantities by using a digitizer pen to trace a plan's contours.

While such programs are equipped with their own databases, some software manufacturers are beginning to produce more powerful databases that can be added to compatible programs.

Timberline representative Porter pointed out that a contractor could use more than one database if the need arises.

"The prices could be totally different depending on whether or not you're doing a government job, or labor costs could be different, which would require more than one database," Porter said.

With an additional database, such information can be automatically loaded onto a compatible estimating program for speedier calculations, instead of updating the estimating program's database.

Whichever software a contractor picks, professionals suggest that buyers make sure the company supplying it provides the necessary training and support services. Service is an important factor emphasized by local suppliers.

"There's an awful lot of computer installations that have been done by Mainland firms, or representatives of Mainland firms, where they haven't gone anywhere because the support and understanding of the package wasn't there," said XenTec's Smaby.

Training programs vary from company to company. Construction Computer Tools and Jamark provide 90 days of training and support with purchase of its software packages. Jamark's Alexander sees good training as a benefit to both the seller and buyer. "We're very interested in making them use the system because if we can bring them up to 100 percent on it and using it, they're not going to call us," he said.

For a contractor in the market for a computer system, the best advice is to shop around, scrutinize software packages to see if they will meet your needs, contact other firms who are using the systems, and make sure the software supplier offers plenty of support and service. □