Evaluating Construction Software

Computers Are Automating Many Construction Tasks But There is a Proper Procedure For Obtaining the Software That Will Perform the Tasks.

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Computerization/automation of tasks we perform in our business is receiving such attention in the business world today. Even small companies are being considered “backward” or “behind-the-times” if they have not computerized their operations. More importantly, computerization has become a necessary competitive tool.

As well as other contractors, the drywall contractor also needs to sharpen his competitive edge in the marketplace. Obviously, one way to do this is to produce a job bid as close to target as possible. In order to do this, he must have complete confidence that the bid he has produced “covers all bases.” Trying to obtain these results through a manual estimating process can take significant time and lend itself to considerable error.

Knowing this, we dash out to the local computer store to buy ourselves a computer to “make our lives and work easier.” I think we are all familiar with this story.

How much investigation did we do prior to making the purchase? Did we decide on the computer first (commonly referred to as hardware)? Or, did we decide what it was we wanted to accomplish, locate the software (the programs that make the computer perform), and then purchase the hardware? Many people are confused as to the proper decision process to use. If
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you made your decision based on the latter, you went about it in the most logical manner. After all, a “good deal” on a computer is not such a good deal if you cannot purchase a variety of software that can operate on it.

Software Shopping . . .

With the multitude of software available today, it is a wonder that we can choose the one that suits our particular needs. In shopping for the proper software package, a number of questions may subsequently arise:

1) How do we feel “safe” when we make our purchase? Safe from the standpoint that the software we purchased is indeed what we expected.

2) Will we have the support we may need in the future?

3) Should we buy for price i.e. should we feel more confident with the expensive package?

4) Should we buy the package produced by the giant corporation?

5) Once we buy that software, should we stick with it forever?

The questions can virtually go on and on making the purchase decision quite cumbersome.

To assist you in making the decision to purchase the right software for your needs, we have outlined some basic guidelines to follow.

Software, as you know, is the “brains” behind your computer. Without software, your equipment is a useless pile of electronics.

First, you should decide what it is you are trying to accomplish. Once you know this, you are armed with your first piece of ammunition. Be aware that just knowing what it is you want your computer to do is not enough. Other information such as your computer’s memory capacity, the language under which it operates, etc. is a must. You will find that software packages require that you have a certain amount of memory in order to run the package. Most current software operates on the MS DOS operating system. Prior to this language it was CPM, however MS DOS is the most popular now and promises to be for some time into the future.

Knowing this information about your computer and what your needs are, you can begin the search for the proper software.

Secondly, perhaps you don’t have a microcomputer in your office and you are also in the market for your hardware. Don’t place your software needs in second place when making your purchase. Be sure that the hardware you purchase allows operation of a wide variety of software applications. Again, MS DOS operated equipment is the latest available so you should make sure that you have done your homework regarding your software selection. Quite frequently, people will shop for that “good deal” on the computer hardware with the attitude that “they can always pick up some application software to run on it later.”

There is a variety of sources to obtain application software:

1) Hardware manufacturers

At one time, hardware manufacturers were your prime source of software for they needed various application software packages in order to market their computers.

Advantages

• If purchased from the company from which you purchased your hardware, certainty of operation on your computer.
2) Software development companies
Software manufacturers have since been born to create numerous software packages for just about any need. Until recently, these software development companies have produced application software in fairly “general purpose” form. Today, more software companies are starting to get on the “specialty software” bandwagon, developing packages for very specific needs for a variety of industry requirements. As in your case, software designed specifically for the drywall contractor with his needs in mind. This is why it is important to review in depth the offerings of software packages available. Find out just how specialized their package is with respect to your industry. Be sure that it does support your needs.

Advantages
- Reasonably priced.
- Applications to your specific needs.
- Better quality and continued support.
- State-of-the-art.
- Short installation and start-up time.

Disadvantages
- Documentation quality.
- Financial stability of company.

3) Independent consultants
Independent consultants are numerous and at times may seem to be a viable alternative but in the long run the cost of in-house development can be overwhelming. Usually, data processing personnel must be hired once the software has been written just to support the package and keep it updated.

Advantages
- Personalized service.
- Custom tailored.

Disadvantages
- Prohibitive costs.
- Documentation availability.
- Support.
- Increased staffing.
- Long development time.
- Inflexible.

Where do you begin your search?
Visiting your local computer store may lead you to various software developers as well as hardware manufacturers. With the increase in software development firms, computer hardware manufacturers are generating lists/catalogs of third party software which they themselves may distribute or may have evaluated. They can probably make a recommendation on a specific company.

Take advantage of trade journals for your industry as well as trade associations. This can be your best source for locating the software developers producing packages for your specific needs.

Once you have compiled a list of software sources, start inquiring about them. Most reputable companies with
a good product will be willing to send you a “demo” or demonstration software package so that you can try it on your computer, in your environment, using your data inputs. Don’t stop at this attribute however. Some additional information you should obtain is availability of a users manual. Does the system come with a users manual that gives you step by step instructions on how to operate the program in a language that you can understand? Do they leave it up to you to learn by trial and error? Do they offer follow-up support with revised versions or enhancements of the software as technology changes? You will find this all to be extremely important to serving your needs in the best possible fashion.

At the same time, be aware that Job Costing or Project Management software may not be the software you are looking for. This kind of software may be suitable for a general contractor in planning a project but may not have the capability of performing the estimating task especially for you, the drywall contractor. These packages may offer useful financial accounting methods however.

The Summary . . .

It would be wise to make a checklist of all your requirements and proceed to summarize your investigative resources. Keep the following in mind when constructing your checklist:

- Make a list of the tasks that you are currently performing manually and match these against your selections.
- Does the package perform the tasks that you require?
- Is it designed exclusively for your industry?
- Will the package operate on your current hardware or the hardware you may be considering?
- What are the editing features (if any) of the system?
- Is there documentation or a users manual written in a language that you can understand?
- Is the package “user-friendly” and easy to use?
- Does the company provide continued support and update of its product?
- Is the system flexible enough to be adapted to meet your needs or do you have to completely change the way you operate your business? How much change?
- What are the systems features? Do they meet your requirements?
- How will this system effect your productivity?

Remember, you are the best judge for your personal needs. If your main interest is to increase your estimating power by producing more bids, taking on larger jobs, and doing it with increased confidence in your “bottom line,” then the answer is obvious . . . computerize — with the right package!