

Choosing the Right Production Software

By Jim Parrie

Today framers at all levels are embracing technology wholeheartedly. Computerized mat cutters are common; so are PCs, iPhones, and digital measuring gauges. As the technological revolution hits the industry, more and more production facilities are realizing that production software can reduce costs and turnaround time and also help grow sales. One common question is, "Which production framing software package is best?"

It would be easy for me to say that my favorite production software is this one or that. But it's not so simple. There is a process for choosing software to meet the needs of each production system/facility. Choosing software is not simple, and choosing the right production management software is even more complicated. When you tie in the order entry, accounting packages, visualization, inventory, and more, the process can become very complex. On the other hand, there are a few concepts that can definitely help you to reduce the risk in choosing software.

Choosing a Software Developer

As the old adage goes, when you marry a person, you marry the entire family. The same is true for purchasing a production software program. You are not buying just a program but are entering into a long-term relationship with the developer. That company is, in effect, your new partner in business. Production software is the backbone of a production facility; it will dictate efficiency, margins, profitability, and possibly your overall success or failure. Therefore, you need to do your homework carefully when choosing your new partner.

When looking at a software developer, look for one that has been around for a while and has experience specifically in the framing industry. Production framing is unique in many ways, and there are a few idiosyncrasies that make



programmers scratch their heads. Take, for instance, united inches. Programmers from outside of the industry say that united inches do not make sense and want to convert everything to square footage. To do that, they would also have to convert 10,000 framers and several hundred moulding manufacturers and

importers. Things like that are why a software provider needs plenty of experience in this industry. There are a myriad of other scenarios developers will encounter that are peculiar to the framing industry. You should be reticent about being a guinea pig for an outsider to learn the industry.

Next, you want a company that has a lot of customers. Having more end users means there's a better chance that your new partner will be around for years to come. Cash flow is vital to software development. It also means the company's business model is more viable, again making it more likely to survive.

It's also important to look for a developer with chain store and/or volume framing experience. Handling the issues and needs of volume framers is totally different than dealing with custom frame shops. Developers with volume framing experience understand the need for streamlined processes, user-friendly programming, and minimizing paperwork. They know why cost accounting is important, how to handle integration with multiple CMCs, and more.

Another important aspect to look for is a company that has people with production experience on staff—not just developers who have written software for volume framers but experienced framers themselves, preferably volume framers. Programming and framing experience are both vital to writing a well-rounded production framing program.

In-House Development

You may be one of those production framers who is considering writing your own program. No matter how many examples you hear about successful big-time framers who have wasted hundreds of thousands of dollars and years developing their own programs only to scrap it for an off-the-shelf program, you may still believe it will be different for you. Yes, there are a limited number of companies that have written their own programs that gets the production out the door and suits the needs on the specification sheet. Unfortunately, the fact is that those companies are few and far between. And just because such a program gets work out the door does not mean it is the best solution.

In-house development can be successful depending on how you define the word “success.” If it means the development of a program that turns raw materials into finished goods more efficiently than the current process, then success is possible. However, if the definition is to develop and implement an effective, efficient production system that reduces costs, decreases turnaround time, increases sales and customer satisfaction, and uses the best manufacturing processes available, then the chances of success are minimal.

Most in-house programs are developed from looking at just the production system in question rather than taking into account industry-wide best practices (or practices from other industries), the latest technologies available, and integration with outside hardware and software. In-house development does not provide for industry-best practices because development is typically done in a vacuum. It is hard to see your own shortcomings when working in isolation, and you can also miss obvious, simple solutions.

That's why it's important to ask your potential soft-

ware partner how much time its people spend in the field learning best practices and working with customers. Talk to a few of the company's large customers to see how hands-on the developer has been in integrating software into their production system.

There are also technological changes that have taken place both inside and outside of the industry that should be a part of most production facilities. These include such things as digital measuring stops for saws, visualization software for framed images, and e-commerce. Integrating such technologies requires a working relationship between the software developer and the manufacturers of the new technology. These relationships—partnerships if you will—take years to develop and sometimes require an exchange of

technology and even joint venture marketing partnerships. The average production facility owner does not have the expertise or the relationships that will allow a developer to share sensitive programming codes or expertise.

Developing your program in isolation means that you may develop software that may function as specified in your initial specification document based on your current practices, but it probably will not include best practices, outside technology integration, and the ability to keep with latest changes. If you

have bad practices, in-house developed software will ingrain those practices and may even amplify the errors. Using outside developers (and consultants) will help flush out bad practices. It can allow you take advantage of an outsider's years of experience of visiting hundreds of other facilities and seeing what does and does not work.

Development takes time. It takes even longer when you are working with limited resources. Some developers in the industry have as many as 15 developers under contract and it takes them years to develop a solid production management program. Generally, by the time your software is developed, technology and systems have changed, making your program obsolete.

Needed Experience

There are varying types of expertise needed for software development: database development, coding, systems programming, application programming, web-based develop-

If you want the best production software for your company, you have to find and build a good working relationship with the right developer

ment, and more. Then you need to combine the framing, business, production, sales, marketing, and other types of experience necessary to pull together all the aspects required for an effective system. The technology in this industry has come a long way. There are more changes to come as technology from other industries is adapted for picture framing, such as new technology integration with Smart Phones and Wi-Fi. In-house development makes integration of those technologies difficult.

One technology you may want to consider integrating is visualization software. Whether you are building custom one-of-items, volume custom framing, or making large runs, visualization software can minimize miss-cuts and missed shipments while enhancing customer satisfaction and increasing sales. If you develop in-house you will have to find a visualization developer willing to share time and expertise (and in some cases proprietary computer codes). If you are not buying your software from the developer, it will have to charge you sizable sums to compensate for its resources.

Next is another consideration, interfaces. An interface is a program that allows two other programs, each of which are written in different programming languages, to share information. For example, you may purchase a framing order entry program from Ectoplasm Developers, which is written in a particular programming language. Then you buy a production management program written by Morpheus Software, which is written in a completely different language and format. If you want to be able to pass orders from your order entry program to your production management program so you can run your production, you will need to have an interface that allows the data to be passed back and forth.

This is an oversimplification of the development process. Writing of an interface does not necessarily mean all the data will be able to be passed back and forth between programs. It's like a joke told in a foreign language that just will not accurately translate into English.

The same goes with programming. Some data will not move between programs; therefore you will lose functionality, accuracy, and efficiency. It is therefore important to find a developer that creates most of the key components you seek. No one developer will manufacture all components that most production facility owners seek—visualization, order entry, computerized mat cutter design, inventory management, and accounting. The accounting module is the most difficult aspect for developers, and there are no true picture framing accounting packages on the market at

this time. Therefore you will probably need to integrate an accounting package with your production software.

Most in-house development processes are not efficient in that there is no formalized procedure for developing software. There may be no process in place for developing an RFP (request for proposal), tracking changes, and allocation of resources, time management, or stakeholder management. The list goes on.

In-house development also typically hinges around one “guy.” Everyone’s guy is always the best and a genius. If he is so good, then why is he working in the picture framing industry for \$20 an hour and not at Microsoft for \$200,000 a year? Plus, what if your guy gets hit by a bus? The idea of tying up all of the intellectual capital in one developer also holds true for any software company you choose. It is a good idea to select a company that has a team of developers and a specific development process whereby every change, iteration, and version is tracked. You do not want to invest in having one person walking around with all of the information in his or her head.

Tech Support

You should ask the software company you are interviewing how many technical support personnel there are on staff. When your system is down, you need help immediately and cannot wait while the only tech support person gets back from lunch. There should be redundant systems within the software development process and tech support. The number of tech support people generally hinges on the number of end-users a software company has.

It is a valid question to ask the company how many framers are using its programs. The number of end users will provide for a certain level of cash flow generated by the annual technical support fees. If the company has 500 users and each user must pay \$300 a year in tech support fees, then there is \$150,000 a year in tech support fees. A portion of those fees must be used for future development, software maintenance, and hiring tech support personnel. The average tech support person earns \$40,000 to \$60,000 a year. A team of two tech support personnel could easily consume \$150,000 a year in wages, benefits, and overhead. The more cash flowing in, the more support as company can provide.

Having more end users also means more individual transactions are processed by the software, which translates into more resident experience. That creates intellectual capital garnered by years of hands-on experience, development, customer suggestions and interaction, and mistakes.

Do not sell customer interaction short. The larger the customer base, generally the more customer feedback a developer will receive. Customer feedback is only useful, however, if a developer has a process for channeling the customer feedback into actual process and software changes. Ask a developer what specific feedback process the company uses to make sure a customer's voice is heard and translated into meaningful change.

Integration and Consultancy

Integration is the process by which software is installed on your computers and meshed into your production process. You need to have a company with volume framing experience to work with you on:

- which of your processes are effective
- which ones need to change
- what the culture of your company is and how will it be affected
- how the software will change your company
- what changes need to be made to the software

This is only a sampling of the questions that need to be addressed prior to purchasing production software. After the software is purchased, you will have changes to make to your current production system, and the software will need to be integrated into your system. This process can take months. Be careful not to choose a partner that will just do a one-time installation and training then kiss you good-bye. Inquire about on-going training, webinars, support, and consultancy.

So many production framers get upset because the software they bought "doesn't work." They think that if they just buy a piece of software that their production nightmare will be changed with the click of a mouse. You have to change your habits; you may even have to alter your company lifestyle. If your production system is inefficient and chaotic, purchasing production software will not suddenly make you more efficient.

This is why the consultancy aspect of software is so critical. You will waste thousands of dollars and hundreds of hours if you do not do your due diligence upfront and have a partner that will work with you throughout the process. Installation of software takes longer than the initial 30 minutes; it can take months. That's because there will be changes needed within your production system and possible

customization to the program.

The consultancy process helps you and the developer. When a developer and a production framer do not fully understand the needs of each other, the relationship can be a wreck. The framer blames the developer for the failure of the system although some of the fault is the framer's because the framer did not accurately explain his needs, concerns, and goals. The developer can also bear some of the fault because he did not accurately explain his limitations and expectations of the customer. Then there are times when the fault is due to the process itself. Both partners enter into the relationship as if they are buying and selling a word processing program for a single user, not a full enterprise deployment of a materials, resource, and manufacturing planning program. The

process used should be one in which all parties explore and understand the needs, goals, and expectations of the other, and each of these is put into writing with timelines, milestones, and accountability.

In Conclusion

Whether you choose in-house development or partner with a third party, make sure you consider the long-term implications. Conduct thorough due diligence of the developer under consideration.

Then do the same of your own company, making sure you and the software developer are both coming into this agreement with your eyes wide open. Do not expect the process to happen overnight; rushing into it can often waste more time than if you take things slowly.

The production framing industry is small, and there are a limited number of true developers with framing industry experience. These developers have created programming based on certain assumptions and experiences for the mass market. An off-the-shelf solution can be inexpensive and often has certain limitations that you will have to live with for a long time. Investigate the cost effectiveness of the mass solution product versus a custom written program. Hopefully, by doing your homework you will find a software and developer that you can live with for a long time. ■

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