eCabinet Systems
MEMBER MAGAZINE

MARKETING
PREPARING FOR BATTLE

THERMWOOD

THERMWOOD'S
NEW OFFICE OPENS

A NEW LOW COST
CABINETSHOP CNC ROUTER

+ TRADE SHOW TIPS

eCabinet Systems

VOLUME 1, NUMBER 4, APRIL 2007   MEMBER MAGAZINE

MARKETING OUR PRODUCTS

BY KEN SUSNJARA

The theme of this issue of the Member Magazine is "Marketing". Selling our products is probably the single most important thing we do. It has been said that "Nothing happens until you sell something". Now that we have established the importance of selling, we must understand that marketing is not selling (we'll focus on selling in the next issue). If marketing is not selling, exactly what is it and do I really need it as a small shop? Can't I just sell my stuff without all this marketing?

To understand the role of marketing we will compare the entire process of selling your product to a military campaign. We are fighting a military battle inside the mind of our customer. The winner gets the order.

In this scenario, the selling process is the actual battle. Marketing is the process of selecting the site for the battle, procuring the weapons you will use, positioning your army and establishing supply lines. In the marketplace, all of this is done in the mind of the customer.

In a military battle, if you want, you can simply go where the enemy is and attack them, but he has probably positioned himself better than you, on a hill for example, reinforced his position and it's unlikely you are going to win, even if your army (budget) is big as his. In warfare, almost all the effort happens before the battle. It's the same with marketing and selling.

To consistently win you must choose the battlefield. You must find some high, easy to defend ground, reinforce it, position your army and be ready to defend it any time it is attacked. This same thing applies to marketing. You must create an image and benefits for your products, build collateral material and refine a selling technique and strategy that you will use to close orders.

A lot of small shops feel this is a giant waste of time and effort. "All I want to do is sell a few cabinets." "Marketing is for big companies."

The market battlefield exists whether or not you put any effort into marketing. If the other shops you compete with haven't put any effort into marketing either, it is a free for all, a street brawl, and the winner is a coin toss. If any of them have created a positive image in the mind

of the customer and you haven't, they will likely win and you will lose. There have been some postings on the forum from Members who sold business even though they were the highest bidder because they used presentation images from eCabinet Systems. That's Marketing! They were able to create a positive image in the mind of the customer and it won the battle over others whose only weapon was price. Just think how much more you could sell if you actually focused on developing this image and the marketing tools (weapons). It really doesn't take a lot of extra effort, just an awareness of its importance and some fundamentals.

For those politically correct readers who might object to the warfare analogy, don't kid yourself. Selling is a battle as is anything else that has a winner and loser. If you get in a battle and try to pretend you are not in a fight you will lose. The best approach to marketing is to recognize the battle and get your weapons ready.

The first step in marketing is figuring out exactly what you sell. Most of our Members would answer, "That's easy, I sell custom cabinets." This simple answer is only valid in a marketing sense if every custom cabinet made by every cabinetmaker in the world is exactly the same. Then you are selling a commodity and price is the only determining factor.

What you sell is not the product, it is the way the product you make is different from the product your competitors make. If you have nicer designs, better wood, faster delivery, better construction or a better finish it is the design, wood, delivery, construction or finish that you sell, not the cabinet. You sell the sizzle, not the steak. The first step in marketing is defining the advantage you want to promote to your customer. If you aren't promoting an advantage you are telling them that your product is like all the others, except perhaps, for the competitor who did promote an advantage over you and therefore whose product is obviously better than yours.

The next concept is difficult for a lot of people and that is that "There is no "Best" product." There is no absolute "Bestness" scale that determines which product gets sold. Your product is no better than your competitors and your competitor's product is no better than yours. There is no

scale that you can build to that will guarantee you an order. Most people would say that a Ferrari is a better car than a Chevy, but if that were true, everyone would be driving a Ferrari. Best, is a perception in each customer's mind and each customer is different. This perception is what you are fighting for. The shop that captures that perception captures the order.

The next step in marketing is trying to determine who your customer is. "I want to sell to anyone and everyone." Unfortunately, that doesn't work. If you try to sell to everyone you will probably sell to nobody. As soon as you start to give your product an identity you will appeal to some people and turn away others. If you sell quality high-end products you will appeal to wealthier clients but drive away those looking for bargain prices. If you build a quality low cost product, you will appeal to customers that want a low price but will not be acceptable to those that want high-end products and are willing to pay higher prices. Every decision you make is a compromise that defines the market you are targeting and how you make these compromises depends on the reality of your particular marketplace.

Again, there is no right answer for everyone. You must look at your market, the customers and the competition

and determine what type of product has the best chance for success in your specific circumstances. The only real rule is, "don't follow". If someone is already doing something well, don't try to do the same thing. It won't work. They already have the high ground, it is well fortified and the market likes them. They own the market. Unless they mess it up, you can't take it away from them. It is tempting to try to copy someone who is successful by duplicating what they are doing, but it seldom works. A lot of large companies have made this mistake and have failed over and over again. If you want to be really successful you have to go after the market from a different direction.

We are focusing on marketing in this issue, but one magazine can't possibly tell you everything you need to know. Marketing is important for any size company from a one person shop to a giant corporation. Marketing is what makes small shops into big shops. All we can hope for from this magazine is that it will introduce you to some basics and spur your interest. Then you can delve into it more deeply. Read some books on marketing and positioning your product. I promise it will make the selling process easier and after all, nothing happens until you sell something. ■

NEXT GENERATION CONTROL FEATURES

Here today in Thermwood's Gen 2 SuperControl

As a result of advancing computer technology, a new generation of CNC control is emerging, bringing important new benefits. Thermwood is the only major CNC router manufacturer that designs and builds its own CNC control which has allowed it to embrace many features of the next generation control philosophy in the development of its Gen2 SuperControl.

Next generation control technology promises to benefit users in three fundamental areas, better motion and accuracy, easier to program and run, and advanced communications.

Improved motion and accuracy comes from the fact that new processors are so fast. They can execute complex motion algorithms at high speed, providing better, smoother and faster program execution.

Next generation controls can also handle more complex, three dimensional volumetric compensation. Good quality first generation controls provide for lead screw compensation, that is, they use a table to compensate for any position inaccuracy along an axis. The table is created by measuring precise actual position along an axis using a laser. The only problem is that moving along one axis may cause inaccuracies on the other two perpendicular axes. Any slight mechanical variation or natural flex can cause these movements and there is no way to eliminate them through mechanics or structure. First generation compensation only corrects pitch error on each axis, ignoring any effect on the perpendicular axes. Next generation controls compensate all three axes at every position within the working envelope. Every inaccuracy or misalignment, regardless of its source, is automatically corrected.

Next generation controls also make program development and execution much better, but to understand how, you must understand how CNC programs are developed today.

There are several functions required to develop a CNC part program.

The first function is design. This requires human creativity and input. This is where the part or cabinet or piece of furniture is created in the computer. Software assists, but this still requires human input and the next generation controls will still rely on human input for product design.

Once the design is complete, if we want to run it using today's first generation CNC
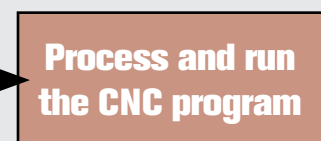
1st Generation Control

Office Design Computer

Design the Part → Nest and CAM the design → Post Process for this machine

CNC Control

Run the CNC program

Next Generation Control

Office Design Computer

Design the Part →

CNC Control

Process and run the CNC program

First generation CNC controls require that the CNC program be fully developed outside the CNC control, which then executes it.

The next generation of CNC control does everything except design the part.

controls, we need to convert the design into one or more CNC machine programs. This is because the current generation CNC controls do little more than execute programs, much like a player piano. You must develop a CNC program in a precise format, tailored for the particular machine on which the program will run.

This is done through two or more stages. Once we have the design, we need to select a tool and develop a path for that tool using data from the design. This function is commonly called CAM.

If we are going to group several parts in a nest, it is in this stage that the nest is developed. The resulting program will be a nest of several parts, not a single part.

These CAM and nesting functions are usually done using one or more software packages.

Once we have the tool path, we are still not quite done. Just like fingerprints, no two CNC machines are the same. Sometimes differences are major, like different table sizes. Sometimes the differences are subtle, like different head spacing. Regardless, no two machines are exactly the same so the CNC program needs to be tailored to the particular machine it will be run on. If you want to run the exact same part on a different machine, you need to create a different program tailored to EACH machine. In the current generation, you cannot freely exchange programs between machines.

The software that tailors the program to a specific machine is called a post processor.

And now you have a program that will make the part. Send this to the machine and run it. First generation controls execute programs developed somewhere else.

The basic idea behind next generation controls is rather simple. In the programming sequence, the CAM system, nesting and post processor all perform functions only needed to make the control work. There is no creative aspect to these functions. Once the part is designed, everything else is only required to make the control work. In fact, once the part is designed, there is no real reason for more input from the programmer. The idea behind the next generation control is to put the CAM, nesting, post processor

and any other functions needed to make the control work actually inside the control. In this approach, the part is designed by a CAD or cabinet design software and then that design is sent directly to the control. There are significant practical advantages.

The first obvious advantage is the ability to combine designs from multiple design sources and run them together in the same nest. Since nesting and creation of machine code is done in the control, designs from several packages can be easily combined, which is something that is not practical outside the control today.

In addition, since we are sending the design and not a machine specific program to the control, we can send the same design to any machine with a next generation control and it will run it regardless of its configuration. Designs can be freely shared between machines with no problems.

Also, you can feed multiple parts to the control as a single file which can really simplify file handling at the control. For example, Thermwood's Gen2 SuperControl accepts a job file from you eCabinet Systems software that may contain hundreds of parts in a single file. The control nests the parts on the appropriate material, tells the operator how many sheets of material are needed for the job and tells him what material to load. In fact, it guides him through the entire process, step by step.

This file also contains information for machining the back or flip side of certain parts. It prints a label for each part and parts that require flip operations have a bar code on their label. When the operator scans the label, it identifies the part to the control which automatically retrieves the correct program. From the operator's standpoint the whole process is simple, load one file and follow instructions. Now let's look at this same process using first generation controls.

In a first generation control, the actual CNC programs are developed outside the control. This means there is a program file for each sheet of material in the job and yet another program file for each flip operation. These files must, in most cases, are processed into individual CNC programs. A single job may require a hundred files or more that

must all be sent to the machine. Some first generation controls may only allow you to load one, or maybe a couple programs at a time. An operator will then need to sort through, identify, handle and load hundreds of files each day. This takes time, reduces productivity and is more prone to error.

Although we used eCabinet Systems software in our example, the advantage of the Gen 2 control is not restricted to this particular software package. Any design package that outputs DXF files can send them to a next generation control like Thermwood's Gen 2 SuperControl and get many of the same benefits, although you do need to send each part as an individual file. Thermwood is offering the next generation database transfer format for its Gen2 SuperControl to all other design software companies to allow them to output to the control using the full next generation format. This will give them full access to all the next generation features of Thermwood's control.

Another advantage of next generation controls is the ability to react to changes at the machine. For example, if you have a damaged sheet or a partial sheet of material, it is easy to tell the control what you have and it will nest on it. If the partial sheet is from a previous job, it is not even necessary to provide a description to the control. The control prints a bar code label for any material left from a job and all you need to do is scan that label.

Thermwood has also added some advanced CAM functions to its Gen 2 SuperControl which begin to show the real potential of the next generation approach. Profile modeling is one of these features.

When you have a design that has a profile edge, there are two ways to cut the profile. The first, and most common way, is to have a cutting tool made with the desired profile.

A second, less known method is to model the profile. Modeling is a technique commonly used to make prototypes from CAD designs. It uses a series of standard tools. The process begins by moving a ball nose tool back and forth over the surface, incrementing a small distance each pass. This creates the base surface of the part. Then a second and perhaps third tool is used which

machines away those areas that the first tool could not reach. With today's high speed machines this process is actually pretty fast.

Modeling requires a modeling program. Most CAD systems can create these modeling programs but seldom are used for this purpose. Thermwood's Gen 2 SuperControl has the ability to create these modeling programs, automatically right in the control.

If you send a part with a profile edge to a Gen 2 control, it asks if you have a tool for the profile. If you say no, it automatically creates a modeling program to machine the edge. This simple feature can be incredibly useful. It can be used to machine custom profiles on parts or machine moldings, even large complex or curved moldings without special tooling.

From these examples you can begin to see the benefits of the next generation approach in practical day to day operations.

This third major benefit of next generation controls is advanced communications.

This communication is primarily in two areas, the control communicating with the machine operator and the operator using the control to communicate with outside resources.

The key to this communications is that next generation controls are much more integrated with the machines they control. In tooling, for example, the Gen 2 control keeps a list of specifications for all tools in use. It also keeps track of how much each tool is used and tells the operator when tool life expires. It can even automatically switch to an alternate tool when first tool gets dull. When a new tool is loaded, it measures its exact length and automatically adjusts values so that it works properly on all programs.

Maintenance is another example. The control keeps track of machine use and tells the operator when routine maintenance is needed, or filters need to be cleaned or replaced. When an error occurs is shows the operator a diagram of the

machine pointing to the possible areas that might cause the error.

If the operator needs to refer to the operator's manual, an electronic version, fully searchable, is in the control. If a maintenance procedure or part change is needed, the control will show a step by step video of the process. You can even display a solid image CAD drawing of every assembly on the machine, move, rotate and explode the image to see how parts fit together. Place the cursor on any part and the correct part number displays.

We have already discussed the advantage of including all the parts in a job as a single file but an equally important part of this is the ability of the control to communicate to the operator step by step instructions of how to run the job. The productivity increases from this approach are truly significant.

These are all examples of how an advanced control communicates to the operator, but there is another aspect to control commu-

nications. Next generation controls offer communications between the control and advanced technical assistance. This type of communications uses either phone lines or the Internet connected to the CNC control. Several controls offer this type of communication, some providing real in-depth, real time data exchange and others providing little more than a video phone connection. Thermwood's program, called Virtual Service, provides an experienced control technician who can access virtually every piece of information that he could access if he were physically present at the control. He can change configurations, access error logs, adjust servo parameters and diagnose virtually everything in the control. He can also assist with debugging first generation programs, which are the most common source of problems.

Another area where Thermwood uses next generation communications is carvings. Using first generation techniques, creating and using carving programs is

difficult at best. Each user must create the required carving program which must be the correct size for the application. In Thermwood's approach, carving programs exist in a library where you download and rent them on a per play basis.

Not only can you rent the carving program but you can scale it any way you need. The control can resize the program before it creates the machine code to make it. You can even imbed carvings in parts made using eCabinet Systems and the control will carve the parts in the nest, automatically.

All the things we have talked about so far already exist, but the next generation control holds even more promise for the future. The approach we have discussed so far relies on someone designing a product and then the system making it. What if you have a part you simply want to reproduce?

Today there are techniques where you can laser scan the part and create a program but what if you could just send the scan data to the machine control and it would make the

part? What if the scanner were just part of the machine, sort of like a document scanner except for three-d parts? The part could be scanned and re-sized. These exciting possibilities are being worked on right now but it is a sure bet they will be part of the next generation, not the last generation.

First generation CNC controls have served us well for the last 30 years and today they are reliable and inexpensive. But as usually happens with technology, a new generation is starting to replace the tried and true, offering more flexibility, more capability, simpler operation and ultimately lower cost because software and functions you normally pay a premium for are now a standard part of the control. In this new arena, Thermwood's Gen 2 SuperControl is a world leader, combining the ability to run all first generation programs with more fully implemented next generation features than any other control today. ■

THE NEW CABINETSHOP 41

A low cost fixed table CNC router for the smaller shop.

Over the years we've had a lot of requests for a CNC router in the $60K range. Our CabinetShop 40 starts around $72K but has a moving table, which means more floor space and somewhat slower performance than a fixed table machine. Most cabinet shops today opt for the CabinetShop 45 (5'x10' table size) which starts in the $80K range and this still is a good choice for many shops. It offers great performance in a fixed table/moving gantry design, but the price is just a bit high for some smaller shops. What we need is a fixed table machine with similar performance to the CabinetShop 45 but at a lower price. Now we have it!

The CabinetShop 41 is a fixed table, (4'x8' table size) moving gantry machine that has great performance like its larger brother but a base price of $59,950. Achieving this balance between performance and price was no small matter.

Our machine design engineers use a powerful CAD system to design machine structures that provide them with detail stress analysis and performance projections for new designs. We turned our engineering staff loose with the directive to design a machine that could have a base price in the $60K range, yet still provide high performance. We weren't sure it was even possible but it never hurts to try. What they came up with is pretty amazing.

They achieved their goal by engineering a simple but effective design that could, in its base form, do all the things a cabinet shop will normally want. They created a standard product but had to limit options to those things that can be simply bolted on. This eliminates alternate ways to build or

assemble the machine which reduces internal costs. As an example, there are 14 variations for the bar style tool changer on the CabinetShop 45, there is one on the CabinetShop 41. The CabinetShop 45 can take up to two days to get through engineering after an order is received resulting in the release of over 25 subassemblies. The CabinetShop 41 can be processed in twenty minutes with the release of only three subassemblies to the factory.

The CabinetShop 41 comes standard with a bar style tool changer with 6 tool positions. Three of these positions are standard and three are oversized holders to accommodate tooling needed for five piece doors.

Several different high-flow vacuum pumps can be added to provide hold-down for nested sheet stock. It is best to work with our dealers to determine the best pump for your particular application.

Despite the lower price, the CabinetShop 41 shares all the high-tech manufacturing features with our most expensive machines. As we already said, the structure and performance has been refined using one of the most sophisticated CAD systems available.

In addition, all welded steel structures are stress relieved, again using highly sophisticated techniques. A large electromagnet is attached to the structure. Then, the structure is vibrated at varying frequencies while a computer system using a series of sensors analyzes the reaction of the structure to the vibrations. Variations in the frequency and amplitude of the vibration are used to relieve stresses caused by the welds. When the process is complete, the system provides a series of charts that show the struc-

tural improvement from the process. Increases in strength and stiffness of 35-40% are common.

Once the machine is complete and running, it is laser aligned and compensated. The most sophisticated three-dimensional laser interferometers are used to level and square the individual axes and then to create a compensation table for the machine. This means that the laser measures the exact position of the machine throughout the working envelope and compares this to where the control thinks the machine is. It then creates a compensation table that corrects for any inaccuracy, regardless of its source. The control uses these compensation tables to actually make the machine more accurate than the parts it is made from. This is the same process used for our most demanding aerospace and defense applications when building some of our most expensive machines.

The CabinetShop 41 uses the same next generation Gen2 SuperControl that is used on all Thermwood CNC routers. It offers better motion and accuracy, easier programming and program execution and advanced communications both from the control to the operator and the operator to Thermwood technical service. It is able to perform all the advanced functions that have made Thermwood a leader in the cabinet industry including single file job download, nesting at the machine, dovetail drawers, MDF doors, five-piece doors, puzzle joint face frames, profile modeling and carving.

The CabinetShop 41 opens CNC machining to almost anyone in the cabinet or custom furniture business. In the last issue of our magazine, we had an article titled "Can I justify a

CNC Router ?" To see the impact of the CabinetShop 41 on these numbers, use the figures presented but subtract $20,000 from the machine cost. It now appears that even the smallest shops can afford a CNC router. ■

The CabinetShop 41 offers a rugged, highly capable 4'x8' machine at a surprisingly low cost. It also provides the same high speed performance as Thermwood's larger machines.

Thermwood's Gen2 SuperControl

MORE NEXT GENERATION CONTROL FEATURES

A major advance in CNC control technology, called "next generation control" is emerging, based on modern technology and communications. Thermwood's new Gen2 SuperControl has more next generation features than any other CNC router control today. Next generation controls can do everything that first generation controls can do. It's the other things it does that make it so valuable.

Better Motion and Accuracy

Faster processors allow for advanced motion algorithms which result in better smoother motions. Next Generation controls also allow for three dimensional position compensation. Some first generation controls allow for pitch error compensation on each axis but ignore errors caused by axis interaction. Next Generation controls, including Thermwood's Gen2 SuperControl, provide three dimensional compensation, automatically compensating for all error, regardless of its source.

Easier to Program and Run

First generation controls require you to design the part and then perform additional steps to convert the design to a CNC program that the control can run. Next Generation controls, like the Gen2 SuperControl, accept the design directly without having to convert it to CNC code. This has significant impact on both programming and on running the program. For example, a typical kitchen may require 100 of more CNC programs with a first generation control, one for each nested sheet and an additional program for each part that has a flip operation. The operator must sort and deal with these each job, taking time which dramatically reduces productivity. The Gen2 SuperControl requires but a single file containing all parts in the job. It nests the parts, creates the programs and guides the operator through each step. Design files from multiple CAD and design programs can be sent to the control and processed together in the same nest. If a profile edge is required and a proper tool doesn't exist, the control creates a modeling program using standard tools to machine the profile. If you need simple rectangles, you can send a CP-OUT file intended for a panel saw or an Excel file or, you can simply tell it what sizes you need and it makes them for you. Next generation controls are much more flexible and forgiving. As an added benefit, you can send the same Next generation control file to any machine equipped with a next generation control, regardless of its size or configuration, and you will get the same parts. First generation CNC programs can seldom be exchanged between machines.

Advanced Communications

Next generation controls are more integrated with the machine than first generation controls. For example, the control keeps track of routine maintenance and lubrication, alerting the operator when it is needed. It keeps track of tool use and alerts the operator when a tool life has expired. Should an error occur, the control displays a diagram of the machine and points to areas to check. It plays video instructions on the monitor showing how to perform maintenance or repair tasks. An electronic manual in the control is fully searchable. You can bring up CAD drawings of every assembly on the machine, move, rotate and explode it to see how it is assembled. Place the cursor on any part to get the correct part number. And if you need even more help, you can access Thermwood technical service right through the control. An audio/video/data link connects you directly to an experienced technician who can do virtually anything with the control that could be done if he were actually in your shop. You can purchase spare parts, supplies or almost anything else you need right through the control. Next generation controls communicate well and the Gen2 SuperControl can do everything we just talked about right now, today.

Thermwood has been shipping Gen2 SuperControls on every CNC router it makes for over a year now and we continue to work on new and better features for the future. If you are looking for a CNC router, don't settle for last generation's technology...select a Gen2 SuperControl, the CNC control with the most next generation features.

THERMWOOD
First in CNC Routers
www.thermwood.com

TRADE SHOW TIPS

From time to time, custom cabinet shops may have an opportunity to display at a local or regional builder's show, a home show or any of a hundred gatherings of potential customers.

These types of trade shows can be a great tool to meet new customers, but they must be approached properly if you want them to really be profitable. We at Thermwood have been attending trade shows for over thirty years now and currently display at a show someplace in the world about every month, so we decided to share with eCabinet Systems Members some of the things we have learned over the years.

First, you must decide why you are attending the show and write a statement of purpose. If your goal is to meet new customers, then write "Meet new customers." Note, this is NOT "sell new customers". Actually closing orders at a show makes it a totally different show than meeting customers you plan to sell later. Either purpose is valid, but you must choose. Perhaps you want to meet new building contractors. Again, your presentation will be quite different if that is your purpose. Regardless, the single most important step for a successful show is defining a purpose.

The defined purpose of the show will determine what you will show and how you will show it. Your purpose statement will isolate a certain segment of attendees that you are targeting. Your display must attract the attention of that group for your show to be successful.

This brings us to the single most common error made at trade shows. If you want to see this yourself, the next time you attend a trade show, walk at a medium pace down an aisle and look at the displays on each side as you walk. When you reach the end, try to remember what any of the companies you just saw actually did.

For most displays at a trade show, you can't tell what they make or sell by looking at the booth. We attended a plastic trade show some time back and were simulating the trimming of a three dimensional plastic part on a five axis CNC router. We had several people come by and assume this was a coordinate measuring machine.

If you are trying to sell custom cabinets you might display several samples of your work in several designs and finishes, maybe with a cut-away to show the craftsmanship. This simple approach will really confuse most folks. Some will think you build cabinets. Others will think you sell cabinets. Some will think you sell cabinets made by others. Some will think you design cabinets. Some will think you finish cabinets. Others will think you sell something that's inside the cut-away cabinet. Your display will not be effective unless you tell them what you do. Something as simple as a sign that says: "We build custom cabinets for you" will completely change the effectiveness of your display.

The only way people will know what you do is to tell them, and it is best to do it in as few words as possible. This brings us to the next requirement. You have a target audience and you've told them what you do. Now you need to

tell them why they should do business with you. In marketing this is called the "promise".

To be effective this promise must be clear, easy to understand and important to your customer. If you are appealing to builders who want a reliable source for cabinets, you will communicate that you are "reliable". If you are targeting high-end customers who want elaborate jobs, you may focus on your design and craftsmanship. Regardless, to be really effective, you must communicate a promise. By the way, make sure you can keep the "promise".

The next area we will address is how to get people to notice you. Remember, a trade show is above all else a "show". If you think of a stage show, it has lights, sound and movement and the three elements together carefully control where your attention is focused. You must use these same factors to gain attention to your display.

As most people walk into a typical trade show there is sensory overload. Sights, sounds, colors and movement combine into a general state of confusion. As people are subjected to sensory overload, the first thing they turn off is reading. As a general rule, people will not read signs at a show unless they are very simple with very few words. Don't try to use signs to tell your story, it won't work. Do, however, use simple signs to communicate what you do and the "promise".

Because of the high level of sensory input, most people walk through trade shows in a trance, tuning out

most of what they see until they encounter something they are comfortable with. If they are looking for a particular product or service, they will wander through the show until they encounter something that is obviously what they are looking for. Make sure your display is obvious to those who are looking for your product.

Light your display well. A well lit booth will get a lot more attention. The general level of lighting at a trade show is inadequate and a well lit booth will separate your display from the general chaos. Just adding extra lights will make your display stand out and people will naturally focus on it.

Then, get your customers involved. This is the movement part. Give them

things to touch, feel and hold. If you are focusing on your drawer boxes or construction, give them samples they can touch and feel. Let them open and close drawers or operate automatic TV lifts. Make your display a comfortable place where they can get involved with your product. By the way, bring extra display pieces because some of them may "walk away".

Finally, cement the connection. There is nothing worse than to have a potential customer attend the show, decide they would like to buy your product and when they are back home not be able to find you. Give them a card, selling sheet or anything that has your contact information and make sure that what you give them ties back to your display. When they get home they will have

a pile of cards and literature. They will remember your booth and your promise. Make sure the literature you gave them ties back to what they remember.

Attending a trade show almost always results in some benefit. If you follow these guidelines, our experience has shown that the results can be multiplied, sometimes several fold. ■

THERMWOOD'S
NEW OFFICE / SHOW ROOM
OPENS

One year from beginning construction, we're almost done. We have moved into our new office/showroom building and would like to take you on a photo tour of our new facility. We still have some final details to complete, but it is pretty well complete.

As you approach the building you walk under a large canopy. The steel tube canopy structure was built by the people here at Thermwood. The metallic black color, on the canopy, as well as the exposed beams inside the building, are all the same black metallic auto paint that is on Ken's pickup truck.

Through the main doors, the main lobby is thirty foot high featuring a thirty foot high black granite wall behind the reception desk. The reception desk is a twelve foot version of the Steve Hodges designed Italian credenza, which is available through Thermwood's Furniture Network program. It was designed using eCabinet Systems, built and finished here at Thermwood and has a black granite top cut from the same material as the wall.

An American flag hangs above the Thermwood sign and flags from each of the nations where we formally market our products are hung from the ceiling.

The unique abstract paintings throughout the building were done specifically for the building by Thermwood's founder, Ken Susnjara, using dual component metallic auto urethanes on canvas. It is interesting to note that the frames for these paintings are made from puzzle joint face frames designed in eCabinet Systems.

The main floor has four state-of-the-art training rooms, three of which open to a hands-on machine training room. Each of these rooms can be used for training either software or machine operation. Offices across from the training rooms house the training and customer demonstration support people.

The IT and communications equipment have been moved into a specially prepared IT Center in the new facility. There are two meeting rooms on the lower level as well as two dining rooms separated by a catering kitchen. The dining rooms can substitute as additional meeting rooms by serving lunches in the individual meeting and training rooms using portable heated server carts. The kitchen design allows for efficient handling of all this equipment and the design offers a lot of flexibility.

The showroom (demonstration room) is set up as a permanent trade show. With 30 foot ceilings and extensive utility, communication and electrical service, the facility will provide customers with a much better experience when visiting.

The new office building is located in front of the existing building creating a courtyard between the two facilities. This courtyard is landscaped to provide a great sitting and break area for both employees and customers in good weather.

The upper level can be accessed via an elevator. We thought this was the first elevator in town but found the library had one that goes to the basement. It IS the first elevator in town that goes UP!

The upper level houses executive officers, marketing, sales and the main conference room. As with the lower level it sports high ceilings and wide halls. It also has glass walls along the hall providing outside views to almost everyone,

THERMWOOD

Our new home.

THERMWOOD

including interior offices. A balcony offers an overhead view of the showroom.

We are very pleased with the final result and look forward to each of you visiting us. We would like to thank Jasper Lumber who both designed and built the facility and all those that worked so diligently on the project. They did a great job, did it quickly and in an open and cooperative manner that made the entire project actually enjoyable. ■

1. Another view of the lobby.
2. The front lobby in the morning.

1

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3. Comfortable conference rooms welcome visitors.
4. A landscaped courtyard connects the buildings.
5. Modern class rooms enhance training.
6. The new show room demo center has a trade show theme.

6

THE FURNITURE OF THERMWOOD - PART 1

Editor's Note: One unique feature of our new office and showroom building is that we designed and built all the furniture in the building except for seating. These were all built and finished in our furniture training shops. We thought you might like a closer view of these pieces. We have also included the material cost, machining and build times that we experienced and an estimated retail price determined by finding the closest products to ours on the web. All these designs will be available as a design sharing library. We will cover half the pieces in this issue and the remainder next time.

Main Reception Desk

This desk was made using design elements from Steve Hodges Italian Credenza. It is twelve feet long and four feet high in the front and made from walnut. It has a lot of carvings and modeled moldings. It is finished in the highly distressed Attic Antique Walnut finish we offer. The back side was custom designed to hold all the equipment our receptionist needs to do the various jobs she handles. The top is cut from the same black granite that is used on the lobby floor and wall. This is the only piece of traditional furniture used in the building, the rest are contemporary design.

Material Cost – wood – $1,430
Granite top - $350 (this was a special deal and will normally cost much more)
Hardware - $84
Finishing Material $640
Total Material Cost $2,504
Machine Time – 1 week, approx 40 hrs. (includes all carvings and modeled moldings)
Assembly and finishing time – 120 man hours
Retail Value – This is difficult to say. We could not find anything similar on the web and expect that having this custom made using traditional methods would cost in excess of $30,000.

▸▸ The reception desk is the only piece of traditional furniture in the otherwise contemporary setting.
▸▸ The back side of the reception desk is pure function".

86" Executive Desks

The executive desks are a contemporary design built in walnut with a Golden Walnut finish. The top is made of two sheets of plywood with an edge molding that was CNC modeled. The top sheet is walnut veneered and the bottom sheet is a lower cost material. The center floating box is a typical blind dado cabinet design with mitered corners and two vertical columns support the center box and top. The support columns as well as the inset desk pad are covered in a black leatherette upholstery material. We built and finished these desks in batches of 4. Larger batches would likely result in lower labor costs and smaller batches in higher labor costs.

The real trick to making this piece, as well as all the other pieces that require a flat smooth top, is the processing of the desk top. You cannot buy veneer covered plywood that is flat enough without precision finish sanding. A wide finish sander is very expensive and is beyond the budget of the small shop. To address this we borrowed techniques from the auto finish industry. We used a pneumatic reciprocating strip sander with 220 grit paper to level the unfinished veneer. Then, during the final top coat

▸▸ "The 86" Executive Desk is ideal informal meetings.

process, we sanded between each coat using an 18 inch auto block sander and 320 grit paper.

This is a relatively quick process and resulted in flat, smooth tops. Note that all pieces were finished using pre-cat except for the dining tables which were finished using conversion varnish.

The desk design includes a series of open work shelves where the typical piles of work can be stored in open view but off the desk top. The desk design also works well as a conference table with the cantilevered desk front.

▸▸ The working side of the Executive Desk is highly functional.

Material Cost – wood – $554
Leather Wrap – $37
Hardware $72
Finishing Material $320
Total Material Cost $983
Machine Time – 2.5 hrs (This includes modeling the edge molding)
Assembly and finishing time – approx 40 man hrs (in batches of 4)
Retail Value – Typical desks of this size and basic construction are offered for sale at $4,500 to $5,500.

Manager's Desks

The manager's desk is designed to install against a wall in a corner. It features a curved opening for the user and can be equipped with an undercounter keyboard tray. A matching curved meeting table can be installed on the outside offering a comfortable circular work opening. There is also a separate overhead storage cabinet that mounts directly to the wall (not shown in the photo).

As with the executive desk, the top of the managers' desks float above two center boxes on black leatherette covered vertical pilasters. The top is made of two 4'x8' sheets of plywood. The top is walnut covered ply and the lower sheet is black melamine covered plywood. This eliminates the need for finishing the underside and yet offers an equalized structure. A simple curved walnut molding is used around the front edges of the top and all walnut surfaces are finished in the Golden Walnut finish. The center boxes are black melamine covered plywood with black edge banding and the drawer fronts are

▸▸ Manager's desks are both functional and attractive.

walnut veneer plywood, also edge banded. Note that the drawers are grouped so that the grain structure flows smoothly through adjacent drawer fronts. It is interesting to note that a single 4'x8' sheet of walnut veneer plywood makes both the top and the grouped drawer fronts.

Material Cost – wood – $1,210
Leather Wrap – $37
Hardware $72
Finishing Material $72
Total Material Cost $1,566
Machine Time – 2 hrs
Assembly and finishing time – 27 man hrs in a batch of 16
Retail Value – There is nothing exactly like this available, but a quality desk system in this size typically sell for $3,000 to $4,500.

▶▶ The 8' conference table looks expensive despite how simple it is to make.

8' Conference Table

This conference table is made from two 4'x8' sheets of plywood. The upper sheet is walnut veneer and there is a support structure between the sheets that blind dados into the top and bottom sheet. In eCabinet Systems, the table top is actually a cabinet turned on its side. The top is one cabinet end and the bottom another with shelves and partitions making up the interior support structure. A modeled walnut ogee edge trim completes the look. The table top is supported by two leatherette covered pilasters. Again, we finished it in the golden walnut finish to give it a modern, natural contemporary look. This is a fairly easy and inexpensive table to make compared to the high cost such tables normally sell for. As we mentioned in the executive desk description, the real trick to these tables is how we level and finish the top.

Material Cost – wood – $272
Leather Wrap – $28
Hardware $1
Finishing Material $72
Total Material Cost $373
Machine Time – approx 1 hr including modeling the edge trim
Assembly and finishing time – 36 hrs in batch of one (much of this is finishing time during which several pieces could be finished)
Retail Value – Tables of this kind can easily sell for $5,000 to $6,000 which is quite a high price compared to how easy and inexpensive it is to make.

10' Wall Unit

This large and impressive unit is rather simple to make. The base structure is made from two cabinets, one on the top and one on the bottom. The cabinet boxes themselves are made of black melamine covered MDF and the door and drawer fronts are walnut veneered plywood. The front ogee bumper trim is a leatherette covered trim piece that was modeled from solid stock. The doors and drawer fronts were grouped so that the wood grain flowed smoothly through all the adjacent doors giving a much richer appearance.

Material Cost – wood – 1,533
Leather Wrap – $28
Hardware $333
Finishing Material $72
Total Material Cost $1,533
Machine Time – 1 hr.
Assembly and finishing time – 15 hrs.
Retail Value – This is another difficult one to estimate but a likely retail price for use in an office would be between $3,000 and $4,000.

▶▶ The wall units offer an attractive contemporary backdrop for the executive desks.

UTAH VALLEY STATE COLLEGE LEADS THE WAY IN
TECHNOLOGY DRIVEN WOOD DESIGN

Old world craftsmanship meets high tech on the rich grain of mahogany.

By Leslie Woodford

It's a dream come true for students at Utah Valley State College (UVSC) in Orem, Utah.

In the fall of 2006, UVSC installed a Thermwood CNC router as the newest addition to the Cabinetry and Architectural Woodwork program's array of woodworking machines.

The faculty acquired the machine in order to give students a technological edge in the woodworking field. Kelly Baird teaches drafting and computer applications where students learn basic G&M codes to create programs to run the CNC router. They start with simple commands: making arcs, ellipses, and other basic shapes. Baird is pleased with what students are learning; he says, "Learning G&M programming teaches higher level thinking skills and gets students thinking more creatively."

Recently, student Corey Woodford took creative thinking to a new level in the UVSC woodshop. Woodford had worked for thirteen years as a machinist before he enrolled in the UVCS cabinetry program in 2006. He had machined everything from sheet metal to parts for tomahawk missiles to plastic filter plates. Because of his machining experience, he was intrigued by the idea of using a CNC router to craft projects out of wood. To him, the Thermwood was like a Porsche 911 Turbo that had always been driven in second gear. Woodford wanted to take it from 0-60 in 3.7 seconds, and that is what he did.

A web search of the Thermwood site http://www.thermwood.com introduced him to the eCabinet Systems community. eCabinet Systems is a software program designed for cabinet and furniture shops. The software is free to members and is user friendly; it allows small shops to create custom cabinets and furniture designs, then with a few keystrokes the program writes all of the G&M codes which can then be run on a Thermwood CNC router.

Thus, small shops can create big projects without the overhead of training and employing individuals specialized in G&M coding. The software tracks the purchase of material needed and creates nested designs for cutting the wood, thus reducing expenses in clerical work as well as using materials economically.

Additionally, eCabinet Systems is a community of users that unites shops into a cooperative. Members can share their designs with one another, rent designs from master craftsmen, and share production services.

On the web, Woodford also discovered the Thermwood Furniture Network. Here, for a small fee, Thermwood owners can rent programs that run designs of master craftsmen on the eCabinet Systems software, and woodworkers can build custom furniture that would normally be out of reach to a small shop. Woodford was drawn in by

Cory with the finished table.

Instructors at Utah Valley State College.

Legs being machined using the rotary playback

Cory with UVSC's Thermwood router.axis.

the elaborate wood carving and Renaissance styling of master craftsman Arno Schadt, and he selected the accent table from his collection. Says Woodford, "I chose this project because of its intricacy and to see if the machine could do it."

Jody Wilmes, eCabinet Systems manager taught Woodford how to create an account with Thermwood to rent the design program through the internet (cost: $60) and provided technical support as the school got the router internet-ready for the use of the elaborate leaf design program.

Assembled table ready for finishing.

The project has connected him to other eCabinet community members. Once Woodford obtained the software, he realized that UVSC's router would not be able to cut the legs. He needed a Thermwood with a rotary table, which can turn the legs in order to create designs in a fourth dimension. Again he queried the internet and discovered Thermwood Production Sharing—a portion of the eCabinet Systems cooperative that allows members to offer machining services to other members.

Voila! He connected with Interwest Wood Design in Grangeville, Idaho. They have a Thermwood with the needed rotary table, and Woodford contracted with shop owner Kirk Newsome to make table legs. He was pleased with professional and timely work done at Interwest Wood.

It has been a learning experience for Woodford as well as the professors at UVSC. Says Gary Best, one of the instructors at UVSC, "We are excited that the school has this new technology. Having CNC installed allows the students an opportunity to learn on a

machine that very few schools have."

Pictures of Woodford's project and sample parts from it will remain with the school to show future students the types of projects they can create with the router. Woodford has been excited about his project, "Using my past machining experience, this equipment has allowed me to create elaborate custom furniture. I have learned a lot as I've had to turn to the internet and to Jody (Wilmes) in order to get everything running the way it should."

UVSC started as a war production vocational school in 1941. It has grown over the years, evolving from vocational school to a community college then to a state college. In February 2007, the Utah legislature signed legislation whereby UVSC will become Utah Valley University in July of 2008. UVSC is one of only a few schools in the western United States that offer degrees in cabinetry. But that distinction is threatened by lagging enrollment. Woodford and his fellow students hope that a recent campaign to boost student enrollment will be successful so that future students will benefit from the state-of-the-art technology programs available at UVSC.

UVSC offers AAS and BS degrees in Cabinetry and Architectural Woodwork and in Technology Management respectively. The AAS degree consists of two years of study of cabinetry and woodwork, including computer aided woodwork. The BS degree builds on the AAS degree in Cabinetry adding business and management courses to give the student a broad-base education. Many graduates go into project management or managerial positions in their field of specialty. In addition to the cabinetry specialty, UVSC offers seventeen other specialties, including Drafting Technology, Fire Science, Automotive Technology, Art and Visual Communications, and Electronic and Computer Technology.

Woodford has taken the new Porsche for a spin—boy, is it fast!—thus he has opened the door for future students to get the most out of UVSC's Thermwood router. After watching Woodford's project unfold, Professor Eldon Greenhalgh comments, "Corey's project has been a learning experience for all of us. With his project, future students will be able to see the elaborate designs that they can create. It will give them extra skill when they go out in the field." ■

KERRY'S CORNER

DON'T SELL YOURSELF SHORT
A beginners guide to shameless self promotion.

BY KERRY FULLINGTON

Although I didn't realize it at the time, Marketing has been an important part of my business strategy from the start. Ideally when I began building cabinets I would have written a plan, researched my customer base and then moved on, secure in the knowledge I had a demand for my product and a list of definite logical steps leading me to my goal of success. I skipped all of that and jumped in because I like creating things out of wood. It was then I realized a multitude of shops build cabinets, and there is really not a great deal of difference in them. They are nothing more than a collection of decorated boxes stacked together in various fashions and the true challenge was making the customer want my box instead of my competitors. For me, this meant creating an image and I began this long walk down the road of self promotion. I found that I had to sell myself as well my product.

Early on, eCabinet Systems became an important part of this campaign. I discovered the photo realistic images created using eCabinet Systems Software were as important as all of the practical things it did for me like cut list, bill of materials and sheet optimization. By paying attention to detail and going the "extra mile", creating web based presentations and proposals with these drawings I was able to generate sales. This, I think, was my first introduction to Marketing. I was selling something more than cabinets.

Marketing can be the great equalizer between you and your competitor. A small shop promoting itself properly can easily compete with much larger shops. You must sell your high points. If you are the larger shop with automation that is what you sell. You tell the potential customer that you can get the job done faster and with accuracy not attainable using conventional machinery found in smaller shops. The small shop can stress the importance of old world craftsmanship and one on one personal service not common in larger companies. eCabinet Systems expresses this quite well in the language they used for different business profiles included in the Proposal Writer. For the small shop, they write; "The Goodbuilder Cabinet Company has been building quality kitchens for 15 years. We are a local company comprised of caring craftsman serving the local community. We can assure you of attention to detail that is simply impossible with pre-built factory cabinets. Our products are built for your application, not made to fit with dead space and filler strips."

And for the large shop; "As a custom cabinet shop, we are one of the largest and most successful. Our success means we are large enough to employ some of the most sophisticated computer cabinet design and kitchen layout systems available. We purchase and communicate electronically, taking advantage of all of the productivity and efficiency of the New Economy while retaining the quality and craftsmanship of the old economy. You, our customer, benefit from this combination."

These profiles along with several others for small, medium and large companies are available in the Proposal Writer section of the eCabinet Systems Software. I think they are good examples of marketing. Promote who you are as well as what you sell.

While researching this article (I actually had no idea what marketing was) I came across this quote. "If the circus is coming to town and you paint a sign saying "Circus coming to the Fairground Saturday," that's advertising. If you put the sign on the back of an elephant and walk it into town, that's promotion. If the elephant walks through the mayor's flower bed, that's publicity. And if you get the mayor to laugh about it, that's public relations. If the town's citizens go to the circus, you show them the many entertainment booths, explain how much fun they'll have spending money at the booths, answer their questions and ultimately, they spend a lot at the circus, that's marketing." -Unknown

I think Unknown hit the nail on the head, it's not the circus it's the sales.

Marketer is one of the most important hats that you wear every day. It is with this aggressive promotion of your business and yourselves that you create sales. With all of the demands on your time, Marketing is one place you should never "Sell Yourself Short". ■

DEFINING YOUR MARKET
& POSITIONING YOUR PRODUCT

I f you build and sell cabinets or furniture, you have already defined and positioned your product although, for most cabinet shops, this was not thought out or planned but simply happened or evolved. In many cases, applying a little marketing can increase business and profits, sometimes with surprisingly small changes and little additional effort.

Marketing is simply developing an understanding of who you sell to and what you sell to them. Sometimes a small adjustment to who you sell and what you sell can rather markedly increase business. Let's start by developing an understanding of who you want to sell to.

The foundation of traditional marketing is understanding the marketplace. Before you can develop a marketing plan, you must understand the market area in which you operate. Large companies spend huge sums to develop this understanding. In the past, small companies could not afford to do this but the Internet has changed that. Today, even a very small shop can develop useful market information.

There are three numbers we would like to define, Total Available Market, Served Market and Market Share. Let's look at each of these.

First, Total Available Market. This is the total potential sales for the product class in the entire market area you could possibly address. In the cabinet business, this would mean all the cabinets and cabinet like products sold in as large and area as you could ship to before shipping cost became prohibitive. For almost any cabinet shop, this is probably a pretty big number. So how do we find this number?

To start, you must look at your customers. For cabinets, this generally means cabinets for new homes and cabinets for remodeling. Finding the housing starts and remodeling numbers for your area would be a good start.

A good starting place is the National Association of Home Builders web site (www.nahb.org). Here you will find a lot of statistical data as well as other resources to help develop your marketing plan. You might even consider joining a local group associated with the NAHB.

From this data you can determine the housing starts in your Total Available Market area. Multiply this by an estimate of the cost of an average kitchen and you have a rough idea of the size of the available market for new construction. Now we need to address remodeling.

A good source for this is a program run by Harvard called Joint Center for Housing Studies (http://www.jchs.harvard.edu). Here you can find a lot of information about remodeling on a national scale. To translate this to your local area, you might take the ratio of housing starts you determined for your area as compared to housing starts nationally and then apply this same ratio to remodeling. The goal of all this is to generate a rough understanding of the overall size of the market available to you. You can likely find a lot more sites that will give you even more valuable information.

Next, we need to determine the Served Market. The products you make will not work for the entire market. Some people want things you don't build. Others want lower prices than you offer. In short, only a portion of the Total Available Market would actually ever buy your product. We want to find just how large a portion of the total market you have any chance of selling to. This is the Served Market.

Here you are going to have to use your knowledge and experience, but we can give you some tools. The basic tool we will use is the market pyramid.

Pretty much any market can be defined by a market pyramid. The area inside this pyramid represents the total market. The height of the pyramid is defined by two things, price and features. This assumes that as the features, (mate-

rial, finish, quality) improve, the price also increases. The higher you are on the pyramid, the better the product and the higher the price.

The horizontal distance on the pyramid represents the market size at any level of price/features. At the bottom, where prices are low, the market is large (pyramid is wide). As you move up the pyramid, price/features increase and the number of people willing to pay the associated higher price diminishes. At the top, prices are very high and the market very small.

Now, let's use the market pyramid to determine your Served Market. Each company's Served Market is defined by two horizontal lines. The top line is defined by the features or quality level you offer. Everyone above this line wants things you don't offer. Everyone below this line will be satisfied with your product.

The bottom line that defines your market is determined by price. Everyone above this line is willing to pay your price. Everyone below this line is not willing to pay your price and will not buy your product regardless of what features you offer. Therefore, everyone between the two lines will be satisfied with your product and is willing to pay your price. That's your Served Market.

You are going to have to do some guessing to set these two lines in your market. The top of the pyramid is defined by the highest priced products offered in your area. The bottom is defined by the lowest cost products from the lowest possible cost source, regardless of how poor the product. Using these two numbers, you need to set the bottom of your market share by drawing a horizontal line across where your prices fit.

Next, estimate the features and quality level at the very top and at the very bottom and estimate where your product fits. Draw another horizontal line defining the top of your Served Market. The area between the two lines is your market. With a little math you can determine the ratio of this area to the area of the total pyramid. Multiply this ratio by the Total Available Market and you have your Served Market.

This is probably a bigger number than what you actually sell. The ratio of what you sell to the Served Market is your Marker Share. Your Market Share is determined by how well you market and sell against competitors who operate in the same area of the market pyramid that you do.

Now that we have some basic information, let's see how this might help us get more business. The first thing you realize is that you can increase the size of your market by moving the top line up or moving the bottom line down. Moving the top line up means increasing features or quality. As long as you can do this without increasing your price, you market increases. If your price does go up, make sure the amount you are losing at the bottom is not greater than

the amount you gain at the top or you are losing Served Market and the improved product actually has less potential for making you money.

Another way to increase the size of your market is to move the bottom line down. This means you need to reduce your cost/price without simultaneously reducing features or quality. As you can see, market size grows fastest by reducing cost and price because you are moving down into the fatter part of the pyramid.

This approach can make the analysis of the addition of new designs or buying a CNC router easier to understand. This analysis along with a basic understanding of your particular market can make these decisions much easier.

Another good use of the market pyramid is to define the Served Market for each of your competitors. Develop the top and bottom lines for their Served Markets and overlay these on your market pyramid. It is unlikely that they will exactly overlay you. Generally they will overlap at the top or the bottom and their Served Market size will not be the same as yours. This analysis can help you determine the best way to compete. If they overlap at the top, their product is better but your prices are better. You must stress quality in the selling process and let the price close the deal. If they overlap at the bottom, your product has more features but their price is better. Here you must try to convince the customer that your quality is the minimum acceptable and anything less is not adequate regardless of the price. This is a more difficult sale but if you know how to approach it at the beginning, your chances of success are much better.

As a final note, the bottom line and the top line are not really lines. They are fuzzy gray areas. You don't go from being willing to buy at one price but not willing to buy at a dollar more. You go from being enthusiastic about the price to less excited to not willing to pay. The most difficult sales are the ones in these gray areas and when your gray area overlaps your competitor's gray area it's a real horse race.

These are simple basic marketing tools, but they really help focus and organize your thinking and if a little effort in these marketing areas result in two or three or four additional jobs each year, the time is probably the most profitable you could possibly spend. ■

eCab World

Marketing 101
By Dan Epps

Marketing is advertising and advertising is expensive. I already get a lot of business just from word-of-mouth, so why waste money on expensive advertising anyway?

If you agree with these statements you are not alone. Perhaps the biggest single misconception people have is that marketing is advertising. While advertising certainly plays a role, marketing is far more than just advertising. To put it simply, marketing is your public business image. Everything about your business from advertising, business cards and stationery to your location, facilities and even your customers are part of the marketing picture.

What? My shop, its location and my customers are part of my marketing? Absolutely! Who do you want to be selling to and who are you actually selling to? Are you aiming for the high-end customer but your sales seem to be more toward the other end of the spectrum? When you have a prospect that lives in a million dollar home, are you showing them reference work where the whole home could be purchased for less that they are willing to spend on a kitchen alone? And your shop, does it have a nice showroom in a nice business district or is it in the low-rent district and covered with sawdust?

In the customer's perception, both of these things speak volumes about you and your work. Think about it like this: You hear of a great restaurant with a fantastic chef and decide to try it out. When you drive there it is on a side of town that you prefer not to be in at night. You go inside and the other diners aren't the type of people you would normally hang out with and make you feel quite uneasy. Do you eat and recommend the restaurant to your friends? Probably not.

Just as with the restaurant with the fantastic chef, your craftsmanship may be the best in the area but that alone will not attract high-end customers if you are in the wrong location and your other customers are from the wrong neighborhoods so to speak.

You must become part of your target market. You have to be "one of them" to get their business. Let's take for example, fellow eCabinet Systems member Peter Walsh's website (www.peterwalshbookcases.com). Peter does business in Palm Springs California, an exclusive community that is home to many millionaires from the entertainment industry. All it takes is one look at Peter's opening page to see that he is just as exclusive as his clientele. The photo, logo, colors, text style and verbiage all come together to create the desired effect. This page makes you want to see what is inside!

Marketing involves still more. Everything you do can be considered part of the marketing process. Take fellow eCabinet Systems member Kerry Fullington's 3D presentations for example. Most of us can create a decent looking room layout to illustrate what the finished project will look like, but few possess Kerry's presentation skills. Just take a look at Kerry's latest post in the Customer Images area of the eCabinet Systems forum. Here Kerry uses small touches such as the plant, coffee maker and items on the shelves to give the room a realistic, lived-in quality.

When creating materials for your advertising campaigns be extremely critical of your capabilities. If you can create professional quality photos of your work, by all means do your own photography, otherwise hire a professional photographer. The same holds true for your advertising copy—if you can write professional quality copy do it yourself, otherwise hire a professional. Unless you are extremely talented at graphic advertising layout, hire a professional to do your layout. Printing absolutely must be professionally done! Do not print your advertising materials yourself (no matter how good your color laser printer is) or take it to the local big box office supply store. Use a reliable printing company, high quality paper and a four color printing process. Remember, the quality of your advertising materials reflect the quality of your workmanship to potential customers.

Don't try to save a few dollars by creating your own advertising materials. Every dollar you try to save here could easily cost you ten dollars (or more) in lost sales. Your customers buy from you because they are not professional cabinetmakers. Why should you try to create advertising materials instead of hiring a professional?

Do your research then create (and maintain) a marketing plan. Create a business image that matches your target market then maintain that image in everything you do. Consistency is just as important in your business image as it is in the quality of your products. The table at the end of this article lists several online resources for business demographics as well as creating business and marketing plans.

Please contact me at depps@ecabworld.com for comments or questions about this article.

Many thanks to Peter Walsh (pwalsh@dc.rr.com) and Kerry Fullington (kerry@kerryfullington.com) for graciously allowing me to use their images in this article. ■

This Year......
Only 4-6 fortunate customers will get to own a genuine
Peter Walsh Custom-Built Library
This is because we build them by hand, and we do it ....
one at a time.
Will we be building one for you?
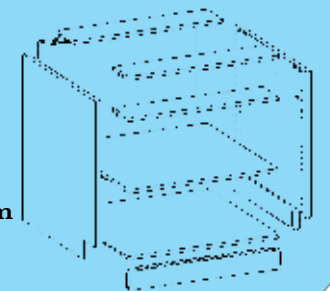
Online Research Resources

Resource	URL	Free/Pay
U.S. Census Bureau	www.census.gov	Free
U.S. Census Bureau (searchable index):	factfinder.census.gov	Free
Entrepreneur.com	www.entrepreneur.com/marketing	Free
Marketresearch.com	www.marketresearch.com	Pay
Dun & Bradstreet	www.zapdata.com	Pay
Hoover's	www.hoovers.com	Pay
SCORE	www.score.org	Free
CCH Business Owner's Toolkit	www.toolkit.cch.com	Free
MarketingPlans.com	www.marketingplans.com	Free/Pay

ECABINET SYSTEMS SEMINARS & TRAINING SCHEDULE

July 2007
16-17-18 July 2007 at Hampton Inn Tropicana, Las Vegas, NV
23-27 July 2007 at Thermwood Corporation

August 2007
12-17 August 2007 at Thermwood Corporation
20-24 August 2007 at Thermwood Corporation

September 2007
11-12-13 Sep 2007 at Radisson Hotel Akron-Fairlawn, Akron, OH
17-21 September 2007 at Thermwood Corporation

October 2007
2-3-4 October 2007 at Holiday Inn, Burnsville (Minneapolis), MN
8-12 October at Thermwood Corporation
22-26 October at Thermwood Corporation

November 2007
5-6-7 November 2007 at Devos Place, Grand Rapids, MI
12-16 November 2007 at Thermwood Corporation
26-30 November at Thermwood Corporation

December 2007
3-4-5 December 2007 at Orange County Convention Center, Orlando, FL
3-7 December 2007 at Thermwood Corporation

All courses conducted at Thermwood are 5 days and all seminars are 3 days.

To enroll in a Seminar or Training Class sign up online through the Member's Store. You can access the Member's Store through the eCabinet Systems software or at www.ecabinetsystems.com.

Please visit the Member's Store for the latest information on course schedules, cost and availability. Additional seminars will be scheduled for 2007.
Dates are subject to change or cancellation.

Software Application Training

Thermwood offers training in the following applications with the focus of the training tailored to coordinate the application with the operation of a Thermwood router:

Master Cam Router Entry, Router and Router Pro
Art Cam Insignia and Art Cam Pro
Panelmetrix

Product Training

While training is included with the purchase of a Thermwood CNC router and accessories, we also provide training for newly hired personnel and ongoing training for upgraded/updated equipment. The emphasis of training for the CNC router is to initiate the user in the operation of the router, to familiarize the user with the machine language and programming methods, and to provide the user with a basic understanding of the options available through the control of their Thermwood CNC Control.

While the standard class for Operator/Programmer training is for five (5) days, other types of training, such as maintenance and tramming can be arranged on an as needed basis.

Thermwood will soon be offering professional furniture manufacturing training to support the manufacture and finishing of its professional furniture designs. Topics include machine carving, techniques for sanding difficult parts, high-tech adhesives and assembly techniques, and mixing and application of sophisticated furniture finishes. Methods and techniques can be applied to both high-end custom cabinetry and furniture.

For further info you may call us at 1-800-221-3865 or via email training@thermwood.com ■

WHAT'S NEW?

Thermwood Announces the CabinetShop 41

Thermwood has announced a new CNC router system specifically designed for smaller cabinet shops. The CabinetShop 41 has a 4'x8' table, 10 HP automatic tool change spindle and can be equipped with a variety of vacuum hold down packages. It's base price is $59,950. It can machine nested cabinet boxes, dovetail drawer boxes, MDF doors, five-piece raised panel doors (with the added door package), puzzle joint face frames, and it can model profiles and run carvings from Thermwood's carving library. There is a full article in this magazine on this exciting new product.

First Training Classes Held in New Facility

Thermwood has conducted the first training classes in its new office/showroom building. The facility has four state-of-the-art training classes, three of which open to the hands-on machine area. The fourth classroom is intended primarily for software training. A full week of machine training is included for two people with each machine purchase. Thermwood also offers eCabinet Systems software training as well as full training for a variety of additional software products the Company sells.

Software Update Released Version 5.1 Build 3

We released an update to the eCabinet Systems software since the last Member Magazine with the following features and corrections:

Changes/Additions for v5.1 Build 3

- Improved file saving for "Out of Memory" error. (IMPROVED)
- Added ability for users to change thickness % for puzzle joints. (ADDED)
- Saving a cabinet with the equal sign in the file name causes trouble when reloading the cabinet. (Manually changing the file name will allow the cabinet to load) This character is now blocked. (FIXED)
- Part editor hole placed in the corner of a blind dado (and has the exact same depth as the dado) can cause an error message "Error creating route bodies" and then it will lose part editor cuts on that part. (FIXED)
- Changing material thickness when writing CNC would not update the thickness % for puzzle joints. (FIXED)
- Particular part in a job (nexus main top) will not nest in true shape. (FIXED)
- Certain scenario causes a deck to lose blind dado on the back edge when the deck has a front inset. (FIXED)
- Stretcher editor will not position stretchers correctly if the parent part has front construction. (FIXED)
- KD/RTA fittings place incorrectly on a corner cabinet with a back inset. (FIXED)
- Center section of cabinet moldings on cornered front corner cabinets will not allow texture matching. (FIXED)
- Certain stretcher locks prohibit cabinet dimension changes when they should not. (FIXED)
- Cutting down the width of a countertop or c-top back splash with the part editor will cause it to reposition when returning to custom layout. (FIXED)
- Certain scenario causes blind dado tenon insets to apply incorrectly for front construction (cabinet to face frame construction). (FIXED)
- Countertop Editor: Metric values for certain fields get multiplied by 25.4. (FIXED)
- Drawer boxes are not getting fit and depth clearances applied to blind and full dados. (FIXED)
- Resolved an issue where hardware hole pattern associations would get lost from the custom layout/batch. (FIXED)
- Deleting Assemblies/Cabinets in room causes other Assemblies/Cabinets to be deleted as well. (FIXED)
- Not able to select closed geometry for cutting in contour mode while in metric. (FIXED)

WHAT OUR
MEMBERS
ARE DOING ||||||||

Jeff Norris – Jeffrey Redmond Company, Columbus, Ohio

Jeff has a set of beautiful work benches to show us. Let's have him tell us about the project in his own words. "For many years I had used an old door as my work bench top. Every woodworker dreams of building the ultimate work bench and I was not excluded from this. About two years ago I decided that I might as well go ahead and build something for myself, considering that I spend very little time at home, my home is pretty much the shop I decided to build the dream work bench. After staring at the workbench book for countless hours over the years I had a good idea of the bench I wanted to build. I have been using eCabinet Systems since version one so I decided to do a computer model of my bench."

"I'll bet that most wood guys have a special stash of wood that they have been saving for special projects and I am one. Over the years I have accumulated a pretty good stack of

Here is the number one complete workbench.

wood. I had a fair amount of really nice eight quarter ash that I had scavenged from the basement of an old building that was going to be demolished. A friend had come by the shop one day with a truck load of oak stair treads from an old house, and informed me of a pile of rather large base boards left on site. Under normal circumstance I decline these contributions as it usually proves more trouble working around nail holes and random lengths. But this time there was so much material that I decided to warehouse the material in hopes of using it for cabinets and fixtures around the shop."

"After doing my design in eCabinet Systems and examin-

Here is Jeff's workbench design in eCabinet Systems.

The in-process workbench project with Jeff's Thermwood CNC router in the background.

ing my stock of working material I concluded that I had enough material to build two benches. Most cabinet shops tend to have their "main guy" and I am no exception. In an effort to reward my right hand man I decided to build two benches one for me and one for Gary. Of course Gary would get the task of doing his share of the work but on my dime."

"Using my eCabinet design we set to work gluing up many boards for the tops working carefully around nail holes. I should mention when working with reclaimed lumber it is imperative to have a metal detector. A nail in the planer will require all of your knives to be re-sharpened. But a nail in the wide belt sander can cause a fire. Another significant challenge is trying to use the material and not have exposed nail holes. We managed to hide all of the nail holes. For the legs we chose the old stair treads."

"For the tops one would be ash and the other red oak based on the quantity of materials we had. One bench has oak panels and drawer fronts and the other used some quarter sawn sycamore that I got a super deal on from some old Amish guy a number of years back."

"This project took nearly two years to complete working around paying jobs. The glued up tops leaned against the wall of the shop for some time until we put them on our Thermwood and machined them flat and square. I was able to machine the pockets for the vises and the holes for the bench dogs as well. The frames of the benches are all mortise and tenon construction and we were able to do both the mortise and tenon joints on our Thermwood. The interiors of the benches were built to be essentially large cabinets that we inserted into the bench frames and they, of course, were machined on our Thermwood. Having a CNC machine made light work of many of the components of the bench and without it I probably would have never had the time to chisel the mortises by hand."

"Having eCabinet Systems to do the design was another

The second complete workbench – quite a project.

significant factor in being able to devote the time to making such a nice bench. I find that computer modeling is super powerful especially for a guy who can't sketch very well. After having many of the parts of the benches lying around for almost two years in various states I decided to finish them up the last week of 2005. Most of us are not too busy between Christmas and new years and this proved to be a good decision. Our benches are nine feet long and over three feet wide and I guess that they weigh in at nearly five hundred pounds. I can't describe the joy of hand working on a bench that is solid as a rock."

What a great project! It looks like it was worth the wait.

Joe Dusel, Woodistry, Vista, California

Joe has an interesting product to show us. It is amazing where opportunities can be found. Let's let Joe tell us about it.

"Besides our custom work we make a few products in small batches and sell them on our website www.Aikomei.com

Here is a wireframe eCabinet Systems image of the "getabako"
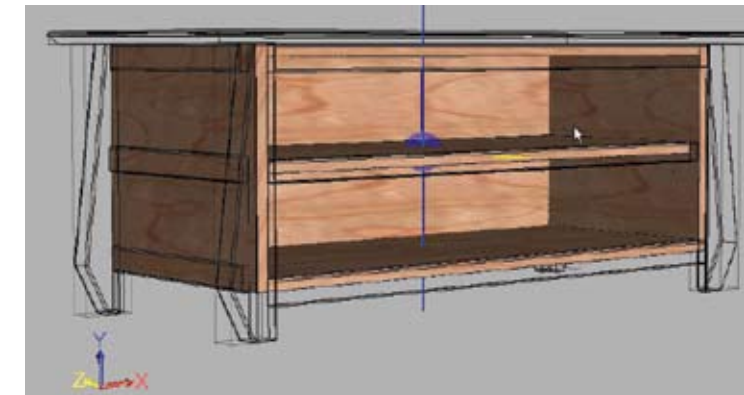
A rendered view of the shoe bench shows an attractive design.

The finished article.

<http://www.aikomei.com/>. One of our products we call a "shoe bench" or, in Japanese, "getabako". The Japanese custom is to remove their shoes when entering a home and this custom is becoming popular for us Americans who want to keep our floors free of tracked in dirt. This shoe bench was designed as an RTA box using Hafele Rafix32 hardware which is available through eCabinet Systems. All of the trim, legs and top were added as Display Boards to make this a piece of furniture. The leg shapes were made using the Part Editor. The carcass for the shoe bench in the picture was made on a Thermwood CNC

Al's finished workshop cabinet.

An eCabinet Systems rendering of Al's cabinet

which made drilling the RTA holes simple and, of course, the boxes went together perfectly. We designed these units to be RTA to reduce our shipping costs."

"Currently we make these getabako in Jarrah and Maple trim with the tops made of either natural or amber bamboo plywood."

What a great looking product.

Al Navas, Sandal Woods, St. Joseph, Missouri

Here is a project that introduced Al to cabinetmaking. Let's let him tell the story.

"My wife had been using an old, beat-up cabinet we purchased at a garage sale for $2. Eventually my wife needed more room to store her turning and carving supplies, and asked if I could help her in some way, to come up with a better storage alternative."

"I jumped at the opportunity, even though I had never built a cabinet; in our budding business I had been making blanket chests, jewelry boxes and such, basically one-of-a-kind items that we hope will eventually become heirlooms. But I promised my wife I would make it "a good one". The outcome is what you see on the photos: a well-built, sturdy cabinet that should last quite a while."

"Now I am totally consumed by cabinetmaking. I am currently designing a large entertainment center. I love it! And the best thing about it is that eCabinet Systems has become the center of the design efforts in our shop, and I read the Thermwood and eCabinet Systems forums regularly!!!"
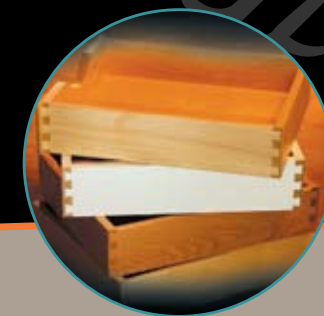
Nice first cabinet and that is some really nice work your wife does. Good luck with the entertainment center. ■

Offering a way to get more direction in life.

The Valendoors DLV 5-piece door system is an affordable way to rival the look of real wood doors. Unlike 1-piece door components, our DLV doors feature true wood grain direction. With our 5 day shipping, why wait? Enhance your product line with the door to higher sales.

valen | industry-leading capability