

Don't Get Stuck on the Numbers

A mini-guide to profitable pricing for small shop embroiderers.

By Brian Greul

Where pricing is concerned, embroiderers can learn a lot from American Airlines. American figured out that different people would pay different amounts for the same product, a seat on a plane. This is called yield management, which is the practice of getting the most profit out of what you're selling by understanding and reacting to consumer behavior. It's the backdrop for a good pricing model. (See the "Terms You Should Know" sidebar on p.31 for a quick refresher.)

As a small embroiderer, my shop only has so much capacity to sell. If we sell too cheaply, we'll work our fingers raw; if we price products too high, we'll be chasing dust bunnies for fun. Whether you have one, two, six, 12 or 18 heads, the numbers work the same.

Start with the data

When it comes to utilities, it can be difficult to break down your costs per hour. For example, if you work at home, offer more than just embroidery services or share space, you may want to estimate your costs in some areas.

Electricity is a prime example. My shop uses about 13 cents per kilowatt hour. But I offer printing, laser engraving and more. I know my machines don't use kilowatts per hour, but by the time I add air conditioning and more, I probably do. Rather than waste time, I budget \$1 an hour for electric. This more than covers my cost for

Editor's Note: This month, in our new financial column, we review some basic points about pricing to help you determine your costs and develop an effective pricing model.

electricity and won't double my embroidery price.

When you decide to price embroidery-specific supplies, it can be difficult to measure costs. Take, for example, a needle. It costs about \$1.50 for a pack of 10 good needles. So, a needle costs 15 cents. But how long does one needle stitch? Well, are we doing caps? Or flats? And did we do a

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good job on the digitizing? Heck, it's only 15 cents. Let's budget the expense.

Pricing thread is also like this. When I try to figure out what a yard of thread costs, my calculator errors out unless I'm working on something really special. As in the utilities example, it's easier to set an allowance for thread, needles, etc. On the other hand, the cost of backing is something you can calculate. Go a little higher; that way, you're not stuck when a client wants to double up on backing.

Classify your expenses into groups that you can manage. Some are so small that

it's hard to calculate them precisely, and it's not worth it. Just assign a number that's slightly over the cost. Remember, leftover money is profit.

The magic formula

Calculate your monthly costs by using this simple formula: labor plus overhead plus consumables plus usage equals monthly cost.

In this example, the shop has 130 operational hours a month. Here's the formula to arrive at this number:

8.0 hours	=	one day
<1.0> hour	=	less startup, shutdown
<0.5> hour	=	less downtime
<hr/>		
6.5 hours	=	operational workday
x 20 workdays		a month
<hr/>		
130 hours		a month

Note: Operation time is different than just being in your shop. If you run multiple shifts, then you may want to scale the numbers.

The monthly cost divided by 130 hours equals the hourly cost to run your machine. Now, we'll figure out how many stitches can be produced in an hour. This formula shows stitches per hour for both a single-head and six-head machine.

600 stitches per minute (spm)	
x 60 minutes	
<hr/>	
36,000 stitches an hour on a single head	
x 6 heads	
<hr/>	
216,000 stitches per hour on six heads	

The reality is that my labor costs go up as I add more heads, and production per head drops a bit as thread breaks kick in, for example. But the concept is the same. My cost per hour divided by the number of billable units (1,000 stitches) equals my cost per 1,000 stitches.

160 work hours in one month x \$14 hourly wage for one employee
<hr/>
\$2,240
+
216 billable units of 1,000 stitches x \$1.50 cost per square foot of embroidery space for rent and utilities
<hr/>
\$324
+
\$75 a month for utilities
+
\$200 lease payment per month x 6 heads
<hr/>
\$1,200
<hr/>
\$3,839/130 (operational hours a month) = \$29.53 an hour for six heads

Here are some sample numbers:
This is \$4.90 per head per hour:
 $\$3,839/130$ (operational hours a month) = $\$29.53/6$ (heads) = \$4.90. As you can see, labor and equipment are my two big expenses. In this example, I have a 16-foot-by-16-foot room for embroidery, which is tight, but functional. Let's do the math for my cost per 1,000 stitches. If I'm running all six heads, it's 15.6 cents per 1,000 stitches, assuming I run at an average of 600 spm. My machines actually run faster than that, but it's a good number. If I run one head, then my cost jumps to 82 cents per 1,000 stitches.

At this point we aren't quite home free. Think about what you want to make and how many shirts you'll destroy when running jobs. Waste will eat your lunch. I also think you'll have a rough time mak-

ing money if you aren't doubling your cost per 1,000 stitches.

It's been suggested that a promotional products distributor needs to make a 35 percent margin to survive. Margin comes from three places: It's what you make on the embroidery; it's what you make on the garment; and it's what you make on the shipping. Don't forget the shipping. You've got to pay your staff, make a profit and cover losses such as that \$30 shirt that came unhooped when you were sewing. What you don't make in one area you need to make up in another. I like to set my pricing so that the garment margin covers spoilage. This helps me to equalize the risk that varies by garment. My risk is much lower on a polo shirt than it is on a weatherproof jacket.

To price match or not

With the above formula, I hope you'll be able to plug in your own numbers and get

a better idea of what your costs are. And, I want to revisit the airline comparison I made earlier. An empty seat has no value to the airlines. An empty machine has no value to you as an embroiderer.

Understanding where your costs are can help you know when it's a good idea to discount and when it's not. For example: I know my operational cost is about \$30 an hour when I run one head. My machines actually run at 1,200 spm most of the time on flats. So if my "asking" price is \$65 on a jacket back that's 60,000 stitches, and I get a request to "match" my competition at \$50, I know I can do it and still make \$20.

My goal wasn't necessarily to detail exact costs, but to show you how to calculate your costs. ●

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Terms You Should Know

Return on investment is a measure of a company's profitability, equal to a fiscal year's income divided by common stock and preferred stock equity plus long-term debt. ROI measures how effectively the firm uses its capital to generate profit; the higher the ROI, the better.

Revenue is the total amount of money received by a company for goods sold or services provided during a certain time period. It also includes all net sales, exchange of assets; interest and any other increase in the owner's equity and is calculated before any expenses are subtracted. Net income can be calculated by subtracting expenses from revenue.

In terms of reporting revenue in a company's financial statements, different companies consider revenue to be received, or recognized, different ways. For example, revenue could be recognized when a deal is signed, when the money is received, when the services are provided or at other times. There are rules specifying when revenue should be recognized in different situations for companies using different accounting methods, such as cash basis and accrual basis.

Cost is the total money, time and resources associated with a purchase or activity. You further can break it down to labor, materials and usage. For example, labor is what your operator costs. If you're the operator, assign a fair wage. Materials include thread, bobbins, bobbin cases, needles, backing, spray adhesive, etc.

Usage is a term embroiderers may use to describe the cost of running their equipment. Think of your machine as having a lifespan similar to a roll of paper towels; each time you run a job, you use up a small part of its life. It's important to account for usage in the pricing model described in this column.

Overhead is the ongoing administrative expenses of a business that can't be attributed to any specific business activity, but still are necessary for your business to function. Examples include rent, utilities and insurance. It's everything you need to open your doors.

Source: InvestorWords.com