

Pricing Woodturning

Introduction

Many amateur turners have the dream of transforming their hobby into a full-time occupation. Others, who spend a lot of money on their hobby, may need to find a way of financing their obsession. Yet again, there are some hobbyists who, after inundating their friends and relations with turned gifts, find themselves with shelves laden with bowls and the like. Although they start out with no commercial aspirations they may find selling to the public a useful option. All these turners may will benefit from an understanding of the factors to be considered when setting their prices.

A business plan

A pricing policy, when integrated with a marketing plan, plays an important part in business planning. Some sellers may think that such planning is of no concern to them, but they are wrong. In practice planning is unavoidable. Anyone who decides to sell something must have some idea about where to sell it and how much to sell it for. However vague those ideas are they constitute a plan. The more those ideas are refined the more successful the seller is likely to be. There is also the fact, that in the UK at least, some banks will not provide business loans without the submission of a business plan.

The limits to prices

For all sellers there is a band of prices within which they can operate. The lowest price at which they can sell (if they wish to stay in business) is determined by the costs of production. In brief these are the cost of materials, overheads, and wages. The highest price at which they can sell is that price which would, theoretically, result in the maximum level of turnover. This is often referred to as “the price the market will bear”. This sounds a simple and very obvious concept but in reality it embraces a number of issues connected with marketing. Also, in practice, it may be difficult to determine.

There will be some products for which the price the market will bear will be lower than the costs of production. In this case there is no opportunity for a viable business. Many would-be entrepreneurs find this out too late. This is why a pricing policy should be integrated with a marketing plan. If the sums do not match-up, ie if projected costs exceed projected revenue it may be possible to adjust the product (and the associated costs), modify the marketing strategy, or do both of these things. These adjustments may also be applied to a viable product to make it still more profitable.

Cost-plus pricing

In the real world (as opposed to that in which economists live) prices are often determined on what is known as a ‘cost-plus’ basis. By this method the price levels are set so that revenue will cover the cost of materials, overheads, wages/salaries, plus a notional amount to provide an adequate return on capital, ie profit. The notion of making a profit, as distinct from earning an income, need not concern the self-employed turner. Setting up a workshop will entail some capital expenditure; in theory this is money that might be invested more profitably elsewhere. However, by normal business standards the capital employed by a wood turner is not significant. So we can forget about profit.

In the following I will outline the way in which the concept of cost-plus pricing can be applied to a wood turning business.

Financial costs

For the one-man band turning is a form of piecework so, basically, a turner is selling time. But as well as the cost of the turner's time the price of the piece must include an element that will cover other costs incurred in its production. These costs take two forms. On the one hand, there are costs that are unique to that piece and can be identified as such. Such costs may include those of wood and bought in items such as pepper mill mechanisms, pen and pencil parts, knife blades, box lids. On the other hand, there are costs, such as that of electricity, that are difficult to allocate to individual items. These are usually treated as overheads and are averaged out over the output.

Productive and non-productive time

When looking at the time which goes into making and *selling* a product it will be seen that some aspects are similar to those in the financial area. Notice the emphasis on selling. When a turner is self-employed every minute of time taken to get a product into the hands of a customer has to be accounted for. It is convenient to divide a turner's time into two elements: 'productive' time and 'non-productive' time. Productive time is that which can readily be allocated to a particular piece. In essence this is the time taken to turn it plus the time required to complete it, such as the fitting and assembly of parts, decoration, and finishing operations. The rest is non-productive time.

Although the term 'non-productive' time has negative connotations it is an essential element of business activity. If my own experience is anything to go by, the time overhead can be as long as the time spent on the lathe. But, however long it is, it is necessary to build it into cost calculations.

Financial overheads

The precise composition of financial overheads will depend on the nature of the business. Nevertheless, some of the most common elements can be outlined, as follows:

- Rent
- Business rates (or similar taxes)
- Electricity and other fuel
- Telephone
- Interest on loans
- Depreciation and maintenance of plant and vehicles
- Insurance: personal, third-party and product liability
- Accountant's fees
- Subscriptions to professional bodies
- Fees for courses and seminars
- Cost of technical literature, books, plans, etc.
- Work wear, including personal safety equipment
- Selling costs
 - Marketing
 - Advertising
 - Exhibition fees
 - Travelling and accommodation
- Health care/insurance
- Pension plan

In addition to these the cost of some consumables, such as tools, abrasives and finishing materials, are difficult to allocate to individual pieces, and are best averaged out over the range of products.

Non-productive time overheads

To some extent the non-productive time overheads mirror the financial overheads. For example, attendance at a seminar may not only incur a fee but it will take up a significant amount of time. Like financial overheads time overheads will differ according to the nature of the business. These are some of the time consuming activities that are likely to be relevant to a professional turner:

- Procuring materials
- Preparing materials
- Business planning
- Developing skills and knowledge
- Developing new products
- Customer relations
- General administration
- Preparation of accounts
- Marketing
- Advertising
- Setting up and manning exhibitions
- Travelling
- Packing goods
- Housekeeping (keeping the shop tidy)
- Inter-personal interaction (chatting to passers-by!)
- Personal maintenance (dentist, doctor, optician, etc.)
- Personal needs (tea and lunch breaks, toilet, etc.)

The hourly rate

Now it is necessary to translate these factors into a pricing policy that will provide a decent wage. (Do not forget that this is the minimum price, it may be possible to charge more, depending on what the market will bear.) The most convenient way of doing this for a craftsman is to base prices on an hourly rate. Many professionals in the service sector use this method. I suggest a woodturner should formulate his hourly rate on the basis of productive time, as defined earlier, as this time is relatively easy to measure. The non-productive time is built into the equation in the way shown below. So the price will be calculated as the time taken, multiplied by the hourly rate, plus the cost of the materials unique to that piece.

The most convenient way of showing how the hourly rate is determined is by means of a hypothetical example:

First we need to know the required level of turnover:

Projected annual salary	£15,000
Financial overheads	<u>£ 3,000</u>
Total: required turnover	£18,000

Then, we need to work out how many hours are available after allowing for time off:

Number of working weeks in year	= 48
Hours worked per week	= 40

$$\text{Total hours per year} = 48 \times 40 = 1920$$

From the total hours per year we need to deduct the time overhead (ie, the non-productive time). Let us assume that this is 25% of the total. This will leave 1440 hours of productive time. Next, we have to divide the required turnover by the number of productive hours:

$$£18,000 \text{ divided by } 1440 \text{ hours} = £12.50 \text{ per hour}$$

We can now see how this might be applied to an actual piece: a nutcracker bowl. (This is a bowl with a mechanism for cracking nuts fixed in the centre.) I have taken the prices of the parts from the current Craft Supplies (UK) catalogue. The bowl is made from an ash blank 12 ins. x 1 1/2 ins. and takes an hour to turn and finish. It will take some time to fit the nutcracker to the bowl. So, this time, say 6 minutes, should be included. The price is calculated as follows:

The hourly rate multiplied by the time spent making it:

$$\text{Time taken} \times \text{hourly rate} = 1.1 \times 12.50 = £13.50$$

Plus

$$\text{Cost of the bowl blank} = £ 6.40$$

$$\text{Cost of ship's wheel nutcracker} = \underline{£12.95}$$

$$\text{Selling price} = £32.85$$

Some alternative methods of costing

Some experienced professional bowl turners have been known to use a simple formula, based on the dimensions of the bowl, as a means of setting prices. This may be as simple as the following:

$$\text{Price} = \text{Diameter of bowl} \times \text{Height of bowl} \times C \times \text{The hourly rate} + \text{The price of the wood}$$

This does not mean that their method is different in any essentials from that which I have outlined above. It is simply that they know from experience that the size of the bowl is a good indicator of the time required to make it. The value C is a constant which is used to convert the volume of the bowl into a time in minutes. Another way of putting this is that $H \times D \times C$ is a proxy for the time required to turn the bowl. It is possible, too, that if they were asked, they would deny having calculated the hourly rate in the way I have described. It may just be a figure that they know works for them. Nevertheless, I would suggest that however their figure has been arrived at it must cover the type of costs identified in this article.

Cost-plus pricing for part-time turners

Semi-professional, or part-time turners, should calculate their hourly rates in the way described above using values that would be appropriate if they were working on a full-time basis. This would entail thinking about the number of hours they would work and what level of earnings they would require. Calculating the financial overheads should not be difficult because these are much the same for a part-time turner as they would be for the full-timer. As, presumably, the part-timer will be working from home it's unlikely that there will be any rent or rates to pay. Some costs, such as electricity and telephone, will be probably be shared with the house. A separate meter, or similar device, could be installed in the electricity power line for the workshop if it is thought worth the trouble. Measuring the non-productive time associated with items made for sale is likely to be difficult. An attempt should be made to monitor this time because it may be a lot more than anticipated. In all probability, at the end of the day, an estimate will be all that is possible.

As well as semi-professional, or part-time, turners those just embarking on a professional career may also find it difficult to put a value on all the factors that I have enumerated. In this case estimates will have to be made. To large extent, even when these estimates are inaccurate, it is the process that is important. Thinking about these factors creates awareness of all that is entailed when setting up a business. In time, if good records are kept and proceedings are monitored, the figures can be made more precise. Remember, too, that at the end of the first year quite a lot of this information will be needed to keep the tax-man happy.

Multiple activities

Many professional (and semi-professional) turners have more than one string to their bow. In addition to turning they may be involved in activities such as teaching, writing and selling tools or materials. When the turner is involved in more than one activity it may be necessary to cost/price them separately considering each as a part-time activity as outlined above. However, these additional activities could well entail higher expenditure, such as the purchase of a computer (for a writer), stocks of tools, or the printing of promotional materials. This would lead to an increase in overheads and, hence, to the hourly rate. Therefore they would be undertaken only if they were expected to lead to improved earning opportunities.

Conclusion

At the beginning of this article I implied that a pricing policy should be integrated with a marketing plan. It will undoubtedly have been noticed that most of the above discussion has been confined to cost-plus pricing and that I have made little mention of how the 'price the market will bear' might be determined.. However, marketing is a major discipline in its own right, and deserves more attention than I am able to give it at this time. In any case I suspect that many turners venturing into selling for the first time will find it difficult to achieve a decent hourly rate. In other words they will already be charging the price the market will bear. This is particularly the case if the turner is looking for sustained sales rather than the occasional disposal of a 'one-off' masterpiece. Yes, from time to time, because a piece is made from a stunning piece of wood or has some unique design features, it will be possible to sell it at well above the price suggested by the cost-plus method . I doubt, however, that there are any rules that will help to establish what that price should be.

It is significant that one of the best production turners in the world, Richard Raffan, prices his work by a method that is basically the same as the cost-plus method I have outlined. (See the Introduction to 'Turned-Bowl Design'.) Because he is Richard Raffan he is able to set a his prices at a rather higher level than the average turner, but the principle is the same. And what is good enough for him is probably good enough for others.

Finally, there is something I have not yet mentioned: skill. If it is assumed that the workmanship in all items offered for sale is of the same meticulous standard (is that too much to hope?) there are two elements in skill. For a professional speed is very important. Raffan, for example, can set a higher hourly rate than most because he is very quick. As a consequence he earns more. The other element is design - some makers are better at this than others and can add a premium to their prices as a result.