

Open Press Time? Contribution Pricing Can Increase Utilization Levels...and Net Profit

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Industry analysts continue to discuss problems that concern every printer: a slow economy; industry overcapacity; and the increasing use of email, web publishing and print-on-demand in place of traditional runs. Plant consolidations, mergers, technological improvements, niche marketing, and other strategies are being pursued to counter the problems faced by our industry. Despite these efforts, industry-wide studies indicate lower than desired pre-tax profits in 2000. Many companies cannot maintain already low profit margins.

One obvious reason for the lower bottom line is that many larger and medium printing plants had operating rates ranging between 60% and 75% of capacity in 2000. One way to address the ever-shrinking net profit margin is to attempt to fill up as much "open" time as possible. But with excess capacity and fierce competition in most commercial markets, printers find it difficult to obtain additional work at a price that they believe makes it worth doing.

"**Contribution theory**" provides a different way of analyzing at what selling price additional work is worthwhile to your company. Simply put, the theory states that a manufacturer should fill open time with any suitable job that will pay all variable job related costs and "contribute" dollars towards fixed overhead. Obviously, the more the job contributes to overhead, the better.

Contribution theory challenges the belief that "making money" on each job is necessary to earn or increase profit. In fact, *there are two ways to increase net profits*:

1. produce more product at a profit; or
2. avoid spending money made on profitable sales to pay fixed overhead not covered during idle production periods.

Printers need to begin to concentrate on the second profit-making technique, because we all know that open time is coming, and that the losses in fixed costs suffered during that time can not only lower the profit margin, but often takes the company into the red.

In the commercial market, filling the gap created by lags between production and capacity can be extremely difficult. There is a legitimate sales reluctance to constantly alter pricing based on the projected operating rate at the time of planned production, because once a customer is quoted a low price, whatever the reason, it is difficult to sell him in the future at any other level. Nor is it easy to sell a job that must go on press Thursday--because that's when you have the production hole.

There are two primary methods to obtain contribution work without dropping prices to your customers: 1) joint ventures and strategic alliances; 2) government printing.

A strategic alliance or joint venture with another company under which you provide product or services that your partner does not offer, or that you can provide at a lower (contribution level) price can fill up idle time. Some of these arrangements can also

take the form of workload sharing. Any concern about customer theft by either party can be addressed by a written agreement not to provide services to the others customers during the term of the alliance or venture and for a period of time after the relationship ends.

U.S. Government Printing Office (GPO) and state contracts--hundreds of which are up for bid each day--offer another way to plug a hole in the production cycle, whether it exists all of the time, occurs on a cyclical basis, or appears without notice when a job cancels or is delayed. GPO and state contract awards are generally made to the lowest qualified bidder. There is no problem with varying your price for the same product, on different contracts, based upon your company's needs at the time. Your government bids do not affect commercial pricing.

Two "bid services" offer printers pre-sorted federal printing bid opportunities: <http://www.internationalbid.com/> and <http://www.bidsplus.com/>. International Bid also offers pre-sorted state printing bid opportunities on its web site.

Doing the Numbers. In the Models below, *Sales* represents the total gross revenues; *Materials* represents the cost of both materials and outside services required for the job; *Variable Costs* include direct cost items attributable to the work in question (such as materials, subcontracting, etc.); *Fixed Costs* include all direct and indirect expenses that are incurred whether the job was produced or not (such as rent, equipment payments, utilities, labor costs, all overhead, all G&A, etc.); and *Contribution* is the total of Fixed Costs and Profit.

Model 1 presents a simplified analysis of contribution levels for five production periods. During the fifth production period, there were no sales due to open production. This company was operating at a 6.4% net profit at the end of Period 4, but after period 5, ended with an overall loss of -1.2%.

Model 1

Production Period	1	2	3	4	5	Total
Sales	\$1,000	\$850	\$800	\$750	OPEN	\$3,400
Materials/Outside	\$ 400	\$340	\$320	\$300		\$1,360
Variable Costs	\$ 230	\$196	\$184	\$172		\$ 782
Contribution	\$ 370	\$314	\$296	\$278		\$1,258
Fixed Costs	\$ 260	\$260	\$260	\$260	\$260	\$1,300
Profit \$	\$ 110	\$ 54	\$ 36	\$ 18	<260>	<\$42>
Profit %	11%	6.3%	4.5%	2.4%		<1.2%>

In Model 2, Periods 1, 2, 3 and 4 mirror those in Model 1. However, during Period 5, the company knowingly produced work at a loss. That loss was, however, substantially less than the loss suffered in the same period in Model 1 when no work was produced. Change the models so that Period 4 is identical to Period 5 in each (to reflect 40% open time), and you really see the value of contribution theory.

Model 2

Production Period	1	2	3	4	5	Total
Sales	\$1,000	\$850	\$800	\$750	\$600	\$4,000
Materials/Outside	\$ 400	\$340	\$320	\$300	\$240	\$1,600
Variable Costs	\$ 230	\$196	\$184	\$172	\$138	\$ 920
Contribution	\$ 370	\$314	\$296	\$278	\$222	\$1,480
Fixed Costs	\$ 260	\$260	\$260	\$260	\$260	\$1,300
Profit \$	\$ 110	\$54	\$36	\$18	<\$38>	\$ 180
Profit %	11%	6.3%	4.5%	2.4%	<6.3%>	4.5%

As can be seen from the Models, it takes very little open production time to totally devastate the profit picture. Worse yet, the new sales that must be generated to make up for the loss of fixed expenses are phenomenal. In Model 1, it would take all the profit from 5 normal production periods just to pay the fixed costs lost in Period 5. While the models are simple for purposes of illustration, the theory operates the same in reality--try it with your P&L Statements.

Printers simply cannot afford to have equipment and employees idle--even if some work must be acquired at no profit (or at a slight loss as in Model 2) to fill the gap. The best way to obtain the volume needed in order to avoid "unabsorbed" fixed costs during open time is to carefully calculate the plant's production capacity, and chart that capacity against past actual production and projected future production on both a short term and a long-term basis. The results of that analysis will indicate the projected volume of work that needs to be obtained--with little or no profit--in order to "make money".

A word of caution: Setting truly effective contribution pricing levels requires that you know your costs. Simply discounting "list" prices does not allow a determination of the contribution level achieved by a particular type of work or customer. If your company has not calculated cost-based budgeted hourly rates in a while, you should do an update when developing a contribution pricing plan. We use an auto-calculating spreadsheet based on a widely accepted methodology.

The bottom line. There is little your company can do about industry overcapacity and a slow economy. However, you can employ contribution theory pricing on alliances, joint ventures, and GPO and state contracts to avoid the loss of fixed costs during idle periods, making the bottom line look a lot better.

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