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Profit Potential of a Wrap Around or From Absorbing an In-plant Print Shop

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Buying or selling a printing business doesn't happen often in most managers' careers. Consequently, a road map does not always exist to arrive at a fair and equitable price. Print business brokers earn their keep advising either party in such transactions; however, the smaller businesses may choose not to retain these specialists even if they knew where to find one.

Before deciding what to seek for or offer for a small printing enterprise, it may be more helpful to analyze what the profit potential might be if this entity were absorbed into a larger printing organization. This article is intended to benefit both the seller and buyer in terms of providing valuations of several elements of the new consolidation.

For illustration purposes this small printer is assumed to have ten employees operating a single shift with high speed, digital copiers and two-color duplicators in space with no lease obligation. Such a profile might fit an in-plant whose corporate parent is considering outsourcing the service.

Three key areas of valuation are (1) labor, (2) equipment condition / utilization, and (3) economy of scale opportunities.

As each party pursues its own due diligence, certain sensitive information should be shared. Consequently, both parties should offer and be expected to sign nondisclosure agreements. As the elements of valuation are discussed, this facet of handling sensitive information will become more apparent.

Labor Cost Variances

The two key areas requiring detailed analysis of the firm to be acquired are total compensation including overtime policy and expense history. While a comparison of wage hourly rates of the commercial printing industry versus corporate in-plants will often show comparability, the normal longevity of in-plant employees is often attributed to the better fringe benefits offered. The total compensation includes wage plus fringe benefit value.

If the corporate human resource department were to say their fringe benefit ratio is anything less than 40% of total labor, the details of what is included in this number is very important.

First, how is total labor wage cost calculated? Printers will often show hourly wages and overtime as a separate figure. Corporations often include overtime as part of the total wage figures. Overtime expenses for the corporate in-plant may be considerably higher than the commercial printer. It is important to understood and document both the “how much” as well as the “why” (policy. (1) A single shift will incur higher overtime proportionately in meeting tight scheduling demands due to seasonality as well as limited capacity versus the commercial printer’s multi-shift operation. (2) Requests from employees for higher wage increases may be met with easier corporate approvals for overtime particularly if the overtime expense is not included in the chargeback policy for services rendered. (3) Some times the corporate in house client will readily approve overtime expense to get their project quicker, particularly if a full chargeback policy is not in effect. (4) Corporate overtime policy may include double or even triple time for circumstances for which the commercial printer only pays time and half. (5) Actual overtime hours and cost should be collected for all employees. If 20% of the employees are working 80% of the overtime hours, the reason for this discrepancy needs to be understood.

Nationwide surveys of fringe benefits offered by industry SIC category show the printing industry much lower than most others. A mid twenties percent versus a high forties percent is not unusual when comparable fringe benefit definitions are used. The following items should be included as fringe benefits: sick days (carry over and paid upon termination as well as available for use), personal days, paid holidays, vacation days, medical & other insurance, corporate contribution to social security, corporate retirement contribution, and others, such as tuition reimbursement, military or jury pay differential, holiday gift/bonus, paid bereavement leave. The following table illustrates these hypothetical calculations.

Table 1
Total Compensation Variances for Fringe Benefits

	Printer A	In-Plant
Fringe Benefits:		
1) Paid Days Off:		
Sick days	5	9
Personal days	0	2
Holidays	7	9
Vacation	10	15
Subtotal	22	35
As % of 260 (52 wks X 5) =	8.5%	13.5%
2) Out of pocket costs to company (as % of direct labor):		
Group medical	12.0%	18.0%
Social security	7.6%	7.6%
Pension Plan	0.0	6.0%
Other	0.2%	3.1%
Subtotal	19.8%	34.7%
Total	28.3%	48.2%

The transition of in-plant employees to the new organization should be defined. The general manager or customer service person (but not both) would be expected to remain with the corporation in the role of managing the new facilities management or outsourcing contract for at least the first year if not longer. Corporate policy may allow the other employees to transfer to other job openings within the firm. Of the ten employees of this hypothetical unit, two-thirds to three-quarters would be expected to move with the operation to the printer.

Equipment Costs/Utilization

There are three areas of short or long term cost savings with regard to equipment and its utilization: (1) excess existing capacity, (2) unneeded maintenance contracts, and (3) product mix opportunities.

It would not be unusual for the corporation to have digital copiers whose capacity exceeds demand. An in-plant of this hypothetical size might typically produce an average of 800,000 impressions a month from their digital copiers. Two medium speed copiers would be the appropriate volume/capacity matches. However, one high-speed unit is often initially contracted with a second high-speed unit later installed as a back up. This results in excess capacity.

The acquiring printer could have a comparable unit off site, which could adequately serve as back up. Therefore, if there are no lease restrictions, one of the two high-speed units at the corporation's in-plant is surplus. The lease might be bought out, moved to another location within the printer's network (for a reinstall fee), or additional volume from the printer moved to the in-plant location to be absorbed. This third alternative would result in a rebate to the corporation from the printer if the parent corporation were obligated to continue to pay the monthly lease fees on this new volume.

Quite often in-plants have maintenance contracts on all of their equipment. While this is appropriate for a small organization with limited mechanical repair capability, larger printers have more in house mechanical maintenance resources. Therefore, many of these contracts are an unnecessary expense to the consolidated operation. For the digital copiers it may be possible to reduce the response time from 4 to 8 hours due to the available redundancy of other back up units. Or absorbing these incremental units on to the printer's blanket maintenance contract for several other units of the same manufacturer may offer an economy of scale savings.

It is not unusual to find a handful of jobs within the product mix of a small format (duplicator) printer that might be more economically produced on a larger or differently configured press (a perfector, for example). With these types of jobs it is logical that the in-plant would produce them on the smaller equipment because there was no other choice plus capacity and time was available to accomplish the task.

To assess this more cost effective offload possibility, the printer would need to have access to the array of jobs and their specifications over the past year if possible. While a printer of this small size would rarely have job costing records due to not having a management information system available, hypothetical costs can be estimated for any series of production processes. One in-plant had an array of high speed copying units to produce all their requirements. Out of several thousand jobs produced each year there were four whose page count exceeded 500 and run length requirement was greater than 1,000. These four jobs could have been produced on a conventional signature press (sheetfed 40" perfector or full size web) less expensively and quicker. Ironically, producing these four jobs along with their other regular requirements generated over half the organization's overtime expense for the year. Assessing the possible cost savings would best be done by the printer's estimator.

Economy of Scale

The possible consolidation creates a number of economy of scale opportunities already discussed: (1) better utilization of in-house maintenance resources, (2) smoothing workloads over multi-shifts, (3) moving select jobs to more appropriately configured equipment, and/or (4) absorbing new additional volume on to equipment/processes with excess capacity. The remaining economy of scale is the opportunities to purchase additional volume at lower incremental unit costs, such as supplies like paper, ink, and toner.

In a facilities management or outsourcing arrangement of an in-plant facility, the corporation will obviously expect to receive at least as good of service as previously experienced, savings to offset at least the cost of the dedicated contract manager, and market value for the print production equipment. All of this can be achieved, but only if one time and transition costs can be isolated. For example, lease contracts on excess equipment must have their own unique solutions.

If any of the in-plant employees were interviewed and hired by the printer in simple response to a job opening, they would be offered the commercial market wage rate for the particular position with a ninety-day trial employment period. These rates are available from printing industry compensation surveys available from PIA, NAPL, and/or the PIA Regional Affiliates. While many of these in-plant professionals may make the transition and find a new vocational home with the printer, not all would be expected to do so. Plus some would ultimately take a compensation cut due at least to the lower fringe benefits offered. The corporation needs to understand the expected transition process and they may choose to underwrite the excess compensation cost for a period of time as part of longevity, severance package for their former employees.

The potential value of each of these elements is shown in the following Table 2.

Table 2
Profit Opportunity Model for Two-Plant Consolidation

		In-Plant
Expected Annual Revenue:		
10 FTE X $100,000/employee =		$1,000,000
Cost Savings:		
Labor (fringe benefits from Table 1):		
20% X 10FTE X $40,000 ave. compensation =		80,000
Unneeded maintenance contracts:		
.0025 X 800,000 X 12 months =		2,400
Other		5,000
Product mix opportunity:		
6 jobs @ $5,000 =		30,000
	Subtotal cost savings:	117,400

Table 2 (con't)

Economy of Scale:	
Supplies, raw materials:	
5% of 38% X $1,000,000 =	19,000
Excess capacity:	
Potential contribution if sales volume can be generated;	
$.01 X 1,000,000 impressions X 12 months =	120,000
Or excess annual leasing cost must be absorbed of	37,500
Subtotal economies:	56,500
Or with more sales	139,000
Total:	$173,900
Or with more sales	$293,900

This illustration is taken from a hypothetical situation. Due diligence on both parties can substitute actual experience for each margin improvement element.

Facilities management or outsourcing arrangements will always have pricing matrices and services contracts to assure predictable costs over the multi-year life of the agreement. Hypothetical models of such matrices will be shown in the next article. These will serve initially to help weed out the prospective vendors. And then, of course, will serve as the basis for subsequent billing for anticipated printing products and graphics services.

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