

“Rules of the Road”: The PIA Ratios

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All printers want their profit margins to improve and the key to generating that improvement is developing an effective profit plan.

To draft a plan which will achieve the desired profits, printers must isolate their plant’s specific operating costs and identify potential trouble spots. The PIA Ratios, the printing industry’s financial benchmarking standard for 80 years, provides the path to their planning process. The PIA Ratios, truly the “rules of the road” for the industry, enable printers to evaluate plant operations and correct or improve operating costs.

It is now more essential than ever, because of the economic environment, to track operational and financial ratios and compare them to the PIA Ratios in order to immediately change obvious deviations, improve future performance, and prevent any deterioration of the balance sheet.

What do the “profit leaders”, (the upper 25% of the participants in the PIA Ratios who earn an average of 12.63% profit as a percentage of value added), know that the others don’t know? They have the technique of continuously measuring their operations and benchmarking to the PIA Ratios. These printers know their current operating costs and what they will be in the future. They know the following:

1. Paper costs as a percentage of sales
2. Other chargeable materials as a percentage of sales
3. Outside services as a percentage of sales
4. Factory payroll as a percentage of value added
5. Factory expenses as a percentage of value added
6. Administrative expenses as a percentage of value added
7. Selling expenses as a percentage of value added
8. Interest expense as a percentage of value added

The PIA Ratios present the profit and loss, balance sheet, and significant facts (profitability ratios, financial ratios and employee profile) for all firms and the profit leaders. The profit leaders are the best printers in the industry. Therefore, in order to achieve profit improvement we must compare ourselves to the profit leaders’ ratios. If they can do it, we can do it. We want to target on the PIA profit leaders’ ratios and not the average of all firms.

There is magic in comparing your performance to the PIA profit leaders’ ratios, because it ignites a spark. What are these printers doing that we are not doing that leads them to make these better profits. Alternatively, you could say, “what are we doing wrong”? We have to examine the transactions behind these final ratios to become profit leaders.

Chart 1 presents an example of how you can use the PIA Ratios. This Company was not achieving profits commensurate with the profit leaders.

	YEAR ENDED		PIA*	PROFIT PLAN	
	SEPTEMBER 30, 2002			YEAR ENDING	
		<u>% SALES</u>	<u>% SALES</u>	SEPTEMBER 30, 2003	<u>% SALES</u>
Sales	<u>\$ 10,000,000</u>	<u>100 %</u>	<u>100 %</u>	<u>\$ 10,000,000</u>	<u>100 %</u>
Less Materials:					
Paper	2,400,000	24	25	2,400,000	24
Chargeable Materials	500,000	5	5	500,000	5
Outside Services	800,000	8	6	600,000	6
	<u>3,700,000</u>	<u>37</u>	<u>36</u>	<u>3,500,000</u>	<u>35</u>
		<u>% VALUE</u>	<u>% VALUE</u>		<u>% VALUE</u>
		<u>ADDED</u>	<u>ADDED</u>		<u>ADDED</u>
Value Added	<u>6,300,000</u>	<u>100%</u>	<u>100%</u>	<u>6,500,000</u>	<u>100%</u>
Other Factory Cost of Product					
Factory Payroll					
Plant Supervision	126,000	2	2	126,000	2
Indirect Labor	567,000	9	5	390,000	6
Direct Labor	2,016,000	32	26	1,816,000	28
Employee Benefits	252,000	4	4	198,000	3
Payroll Taxes	189,000	3	3	149,000	2
	<u>3,150,000</u>	<u>50</u>	<u>40</u>	<u>2,679,000</u>	<u>41</u>
Factory Expenses	<u>1,386,000</u>	<u>22</u>	<u>23</u>	<u>1,386,000</u>	<u>21</u>
	<u>4,536,000</u>	<u>72</u>	<u>63</u>	<u>4,065,000</u>	<u>62</u>
Gross Profit	<u>1,764,000</u>	<u>28</u>	<u>37</u>	<u>2,435,000</u>	<u>38</u>
Administrative and Selling Expenses					
Administrative Expenses	630,000	10	11	630,000	10
Selling Expenses	882,000	14	13	882,000	14
	<u>1,512,000</u>	<u>24</u>	<u>24</u>	<u>1,512,000</u>	<u>24</u>
	252,000	4	13	923,000	14
Interest Expense	<u>189,000</u>	<u>3</u>	<u>2</u>	<u>189,000</u>	<u>3</u>
	63,000	1	11	734,000	11
Other Income	<u>63,000</u>	<u>1</u>	<u>1</u>	<u>63,000</u>	<u>1</u>
Income Before Income Taxes	<u>\$ 126,000</u>	<u>2%</u>	<u>12%</u>	<u>\$ 797,000</u>	<u>12%</u>

*Abstracted from the 2002-2003 PIA Ratios for All Printers classified as Profit Leaders with sales from \$8 to \$15 million.

This company's sales have grown to \$10,000,000 and they have excellent equipment. They have done a great job; but in spite of the good work, they need to make this printing operation more profitable. The company followed the steps below, and is an example of how any printing company can develop a profit plan using the PIA Ratios.

1. Determined their operating structure.
2. Benchmarked these costs to the PIA Ratios.
3. "Right-sized" the cost structure to the industry ratio standards.
4. Put the PIA Ratios to use in developing a profit plan that was predicative of operations.
5. Managed operations in close proximity to the predicative profit plan.

In simplest terms, profit is the excess of revenue over material costs and operating expenses. We have determined that this company deviates from the industry high profit benchmarks in the following areas:

1. Outside services are 2% of sales higher than the industry standards.
2. Factory payroll costs are 10% of value added higher than the industry standards.

Outside services are 2% of sales too high. In absolute terms this is \$200,000. The company has the staff and the equipment to produce these outside services internally. The company should implement policies and procedures to do all work inside that they have the capability to manufacture.

Indirect labor is approximately \$242,000 higher than the industry high profit benchmark. This means that your high profit competitors operate with approximately four to five less indirect employees to produce the same value added. Direct labor is approximately \$326,000 more than the profit leaders' direct labor to produce the same value added. Again, approximately six direct labor employees overstaff this company.

As you can see in Chart 1, this company can have a profit plan to make \$797,000. It has to increase value added \$200,000 by decreasing outside services. Further, it has to decrease indirect and direct labor by right sizing its labor to the industry benchmarks.

This is only an illustration of how the PIA Ratios can be used to diagnose operational problems and aid in the development of plans to achieve higher profits. Any company wishing to start on the road to higher profits should make use of the "rules of the road".

Picture - You already have

H.R. Margolis Company is a public accounting firm with specialties in profit planning, valuation of printing companies, accounting, auditing, tax, and financial management for the graphic arts industry. The Company has prepared the PIA Ratios since 1960. If you have any comments or questions, you can reach Stuart or Harris Margolis at 610-667-4310 or 212-736-1060.