



## AIA Best Practices: Strategic planning: Know thyself—a case study

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### Summary

Not all projects are profitable. Certain project or client types might not be profitable for your firm. Or the converse could be true: Certain project or client types—or projects of certain sizes or in certain geographic areas—may be incredibly profitable. But do you know which ones are? No matter what project-based accounting software you use, this information is already available.

### A case study

Consider this firm with \$10.5 million in net revenue. This could be the net revenue of a small or mid-size firm for two or three years, or it could be one year of net revenue for a larger firm. Regardless, on this net revenue the firm realized 12.5 % profit and a net multiplier of almost 3.0. (Remember the old rule of thumb of three? "If I can bill my people out at three times what I pay them, we should make money." It still works—and 3.0 is still the most common target multiplier in the industry.)

Right there, the firm might say, "Hey, this looks great! We hit our net multiplier target and have an above average operating profit rate! Why look any further?"

Why? Because there is some interesting—and strategically important—information in the details behind the numbers. Wait until you see the information this study uncovers.

### Calculating net revenue and net multipliers by project and client type

From the numerous projects that made up this firm's net revenue base, it identified seven project types that it designs and six client types for whom it works. All projects were sorted by these project and client types, and total net revenue and a net multiplier were calculated for each subgroup or market segment.

Exhibit 1 shows the net revenue generated and net multiplier realized from each project or client subgroup. The net multipliers are color coded to indicate whether they are below average, about average, or above average. Subtotals and percentages of total net revenue also are included for each project and client type.

By Project Type, the firm had a balanced basis of work, with each type accounting for about 10 % to 25 % of the firm's net revenue. But look at the variances among the net multipliers—from about 2.2 for Project Type B

to more than 4.0 for Project Type F. More on the importance of this later, but suffice it to say that there is a major difference in how much operating profit each of these project types contributed to the firm.

**Exhibit 1**

Project Type	A	B	C	D	E	F	G	Total Net Revenue	% of Total Net Revenue
Client Type								Billing Multiplier	
I	\$158,607 <b>1.87</b>				\$922,577 2.73	\$322,856 <b>3.67</b>		\$1,404,040 <b>2.75</b>	13%
II	\$231,007 <b>2.53</b>	\$263,709 <b>1.97</b>		\$208,227 <b>2.13</b>				\$702,943 <b>2.18</b>	7%
III			\$2,336,783 <b>3.69</b>			\$1,015,150 <b>4.85</b>		\$3,351,933 <b>3.98</b>	32%
IV		\$1,026,998 <b>2.08</b>		\$1,223,477 <b>3.51</b>	\$212,680 2.77	\$140,531 <b>3.94</b>		\$2,603,686 <b>2.73</b>	25%
V	\$592,893 2.86	\$557,188 <b>2.54</b>	\$210,893 <b>2.00</b>			\$254,151 2.70	\$578,983 2.63	\$2,194,108 <b>2.59</b>	21%
VI								\$244,555 <b>3.59</b>	\$244,555 <b>3.59</b>
<b>Total Net Revenue</b>	<b>\$982,507</b>	<b>\$1,847,895</b>	<b>\$2,547,676</b>	<b>\$1,431,704</b>	<b>\$1,135,257</b>	<b>\$1,732,688</b>	<b>\$823,538</b>	<b>\$10,501,265</b>	
<b>Billing Multiplier</b>	<b>2.56</b>	<b>2.18</b>	<b>3.45</b>	<b>3.21</b>	<b>2.74</b>	<b>4.06</b>	<b>2.86</b>	<b>2.96</b>	
<b>% of Total Net Revenue</b>	<b>9%</b>	<b>18%</b>	<b>24%</b>	<b>14%</b>	<b>11%</b>	<b>16%</b>	<b>8%</b>	<b>100%</b>	

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## EXHIBIT 1

By Client Type, about 80 % of the firm's net revenue came from just three of these client types: III, IV, and V. Again, there is a net multiplier spread from about 2.2 for Client Type II to 4.0 for Client Type III. The firm earned a net multiplier of almost 4.0 on Client Type III, from which it also realized 32 % of its net revenue.

### Calculating operating profit by subgroup

Let's go a step further and look at operating profit by subgroup. Remember that both net multiplier and overhead rate have direct labor as their denominator. This firm had an overhead rate of 160 %. Therefore, by however much the net multiplier exceeds—or doesn't exceed—its break-even multiplier of 2.60 ( $1 + 160\%$ ) determines how much operating profit—or loss—the firm realized from each subgroup. Exhibit 2 has the same layout as Exhibit 1 except with operating profit instead of net revenue, and the difference between its net multiplier and the break-even multiplier of 2.60 instead of the net multiplier.

In Exhibit 2, let's look at Client Type III again. Projects from this one Client Type, from which the firm generated 32 % of its business, generated more than 90 % of the firm's Operating Profits. *This is strategic information!* Guess who I am inviting first to the next client party. Guess who I am going to develop an entire

marketing plan around. Guess whose industry our people are going to learn inside and out. Guess whose associations I am going to join and become active in!

Now, let's go back to Project Type again. As Exhibit 1 showed, Net Revenue is spread fairly evenly among the project types. Look at Exhibit 2 by Operating Profit, however, and you will see that project types C and F each generated 49 % of the firm's Operating Profit while D generated 21 %.

Wait a minute:  $49 + 49 + 21 = 119$ . How is that possible? In Project Type B, the firm lost 28 % of its Operating Profit – more than \$350,000. This firm had Operating Profit of almost \$1.3 million, but it might have made more than \$1.6 million just by breaking even on Type B projects. Similarly, Client Type II's projects lost 9 % of the firm's Operating Profit—almost \$140,000. Again, analyzing the financial information of your projects can offer strategic information.

**Exhibit 2**

Project Type / Client Type	A	B	C	D	E	F	G	Total Oper Profit / Bng Mult – Breakeven	% of Total Operating Profit
I	(\$61,916) (0.73)				\$43,932 0.13	\$94,130 1.07		\$76,146 0.15	6%
II	(\$6,391) (0.07)	(\$84,333) (0.63)		(\$45,947) (0.47)				(\$136,672) (0.42)	(11%)
III			\$690,269 1.09			\$470,946 2.25		\$1,161,215 1.38	91%
IV		(\$256,750) (0.52)		\$317,198 0.91	\$13,053 0.17	\$47,795 1.34		\$121,296 0.13	9%
V	\$53,899 0.26	(\$13,162) (0.06)	(\$63,268) (0.60)			\$9,413 0.10	\$6,604 0.03	(\$6,513) (0.01)	(1%)
VI							\$67,440 0.99	\$67,440 0.99	5%
<b>Total Operating Profit / Bng Mult – Breakeven</b>	<b>(\$14,409) (0.04)</b>	<b>(\$354,246) (0.42)</b>	<b>\$627,002 0.85</b>	<b>\$271,251 0.61</b>	<b>\$66,985 0.14</b>	<b>\$622,288 1.46</b>	<b>\$74,045 0.26</b>	<b>\$1,282,917 0.36</b>	
<b>% of Total Oper Profit</b>	<b>(1%)</b>	<b>(28%)</b>	<b>49%</b>	<b>21%</b>	<b>4%</b>	<b>49%</b>	<b>6%</b>	<b>100%</b>	

*Overhead Rate = 160%*

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## EXHIBIT 2

### You already have the financial data

Unfortunately, this also is where I must pause in my analysis. As a 'bean counter', I cannot tell you why certain Project or Client Type's losses occurred, nor can I tell you why other Project or Client Types made so much money. But I can ask questions to lead you down the correct path: Was it fees? Was it project execution? Was it the project manager or team on the projects? Was it client or project requirements? This analysis has to come from the firm's managers and professional staff.

Your 'bean counters' can give you all the information needed to conduct this same type of strategic financial review. No matter what accounting software you use, any project-based system keeps financial information at this level. The question is, are you using it?

### **Understanding the numbers**

**Net Revenue** is Total Revenue minus all Direct Expenses. Direct Expenses include consultants, printing, testing, travel, and other expenses directly related to a project – everything but labor. Net Revenue is what remains to cover *your* firm's salaries and *your* overhead expenses, with the remainder *your* profits.

**Net (or Billing) Multiplier** is Net Revenue divided by Direct Labor. In other words, for every dollar you pay someone to work on a project, how many dollars do you get? A Net Multiplier can be calculated for every project.

**Overhead Rate** is all Overhead (Indirect) Expenses, including Indirect Labor, divided by Direct Labor. An Overhead Rate is the number of dollars of Overhead Expenses per dollar of Direct Labor. A firm's overall Net Multiplier must be greater than one plus its Overhead Rate in order to make a profit.

## Strategic analysis and decisions

The strategic part of the analysis comes from a postmortem review of each underlying project in a surprise (a good or bad result) subgroup. Each subgroup had several projects underlying its results; it is usually not just one project.

The firm's managers and professional staff should be able to figure out the reasons for each and every surprise. They know what the firm is good at—or not good at. They know where fees are difficult to negotiate. They know! But they may not realize they know until they ask these questions:

- What are we financially successful at and why?
- Whom are we financially successful with and why?
- Does our financial success stem from our design, our production, our client relations?
- Can we expand on this? How? What other client types have similar project needs?
- If we are not financially successful, why not? Can we correct it, at least to the break-even point? If so, how? Must we provide this Project Type (service)? Do we really need the business of those clients?
- What is our reputation based on?
- What are we creatively good at? Are we financially successful at this, too, and why or why not?

Choosing which markets to practice in is a major part of strategic planning. That decision is up to you. It's your firm. You already have information in your accounting system that you can use to learn and understand how and where you are doing poorly or well. My advice is to make sure you use it in your decision making. The first step in strategic planning is "Know Thyself."

## About the contributor

After years as an A/E CFO, Mike Webber started A/E Finance to support firms with or without a CFO of their own. Using underutilized information already in each firms accounting system, Mike conducts financial analyses, and develops and implements management systems that track individual project and overall firm performance. Mike shares his expertise on several AIA committees.

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