Q-STUDY No. 6

ALLEN: Construction / The Cement Pour

"They wouldn't give me the numbers!"

Allen is a highly successful, world-class construction superintendent. At the time we began working together, he was not able to provide me with the operating costs necessary to determine his contribution on a job site because the company would not make those costs available to the field. (Wha-at?!)

On one particular job, he was in charge of two separate, but identical, concrete foundation pours that would become the base for two free-standing superstructures. He told me that due to his extensive note-taking as well as photographing virtually every stage of the initial pour as it took place, he had been able to generate a 30% savings on the second pour. However—and this is important—he was not able to establish a dollar value for these savings that he could present to anyone in, or out, of the company.

After listening to the details of the project, I was able to point out to Allen that he did have enough information at his disposal to find a "partial" but reasonable QTNT for this segment of the overall project. Note that I said *a partial QTNT*.

The score that follows, based on the information at hand, would have been more accurate had he been able to access all costs associated with the job (i.e., transportation, materials, facilities, inventory, training, etc.). As you will see, in terms of his QTNT score, this works to Allen's benefit. However, he must be prepared to explain to anyone that his score was outrageously high because the necessary accounting information was not available to him.

The Workaround

Both foundations were required to be flawless—perfectly level and without any cracks or voids. Allen and his team executed perfectly on both pours. Since he couldn't find a way to measure the savings between the two, I asked him three questions based on information I knew he would have:

- How many workers had been on-site for each pour?
  He said between 1000 and 1200. I chose to use 1000.
- Taking the average of the highest and the lowest hourly rate, what was the average pay for those 1000 workers?
  He estimated it to be $40 an hour.
- How long did the *first* pour take?
  Allen told me that it had taken 40 hours non-stop.

I told him we now had all the information we would need.

Remember that the calculations that follow are based solely on the approximate cost of his worker's salaries. No other costs are included. Although what follows is certainly not a cost accountant's entry, it IS a methodology that you can learn from and come to understand how you, too, can creatively quantify a reasonable dollar value for your work.

First, we will determine the onsite salary expense:

1000 workers x $40 x 40 hours = $1,600,000

This is the approximate gross salary expense for the first pour.

All we have to do now is multiply the total salary expense for this first pour by 30%--the amount Allen told me he had saved on the identical second pour.

$1,600,000 x .30 = $480,000 = Value of Allen's Contribution

Therefore, $480,000 represents the number of salary dollars, only, saved on this job by Allen over the course of the two identical foundation pours.

You might be wondering, as I did, how Allen came up with a 30% time-saved factor over the first pour. The simple answer is that he and his team accomplished the second pour in 28 hours or 30% fewer hours than it took to execute the initial pour (28 hours being 30% less than 40 hours).

Determining Allen's QTNT

At the time this work was accomplished, Allen's (base) pay was $95,000 per year. Were we to divide $480,000 by $95,000, we would arrive at a QTNT of 5.05, but this would not be accurate because Allen's pay rate in this calculation is *an annual* figure and the work was measured in *hours*.

To arrive at an accurate QTNT for this project, we need to take Allen's $95,000 annual pay and convert it to an hourly rate. To do this, we will divide his annual pay by 2,080—the number of work hours in a year based on a 40-hour workweek. (Note we are not taking overtime/vacation/sick pay, etc. into account here.)

$95,000 ÷ 2080 = $45.67 = Allen's hourly rate

Knowing Allen's hourly rate, we can now calculate his pay for the 40-hour first pour.

40 hours x $45.67 = $1826.80

Taking into account that the second pour only took 28 hours, we need to add those salary dollars to the amount above.

40 hours x .70 = 28

28 hours (40 hours reduced by 30%) x $45.67 = $1278.76
This is Allen's pay for the 28-hour second pour.

$1826.80 + $1278.76 = $3105.56

Allen earned a total of $3105.56 for 68 hours of work.

With this information, we can now calculate Allen's QTNT for both pours.

Total value delivered (Based on salary saved only) = $480,000
Total pay Allen earned during for these two jobs =$3105.56

Allen's QTNT for this project = 154.56

Very impressive!