

Q-STUDY No. 12

ALLEN: Construction / Bridge Building

“Saving minutes & thousands of dollars.”

You met Allen in Q-Study No. 6 and learned about two foundations that were poured under his supervision. Well, he’s back and the reason I share this next accomplishment of his with you is because I want you to recognize how tiny, incremental amounts of time (or materials or inventory or whatever you work with) may appear insignificant but when added up can cost—or save—your company a lot of money. I think there is a good chance that this study will help you look a little closer at what you do. Every little bit really does count. Maybe you should be counting that stuff that you work with and begin reaping the benefit.

In Allen’s previous study, *The Cement Pour*, the two massive slabs of concrete his team poured were 6’ tall x 20’ wide x 120’ long. This pour created two huge structures that were now physically in the way! To get to their daily work locations, some 1200 workers spent 5 to 10 minutes every day making the trek *one-way just to get to work*. Once again, to provide conservative results, we will base the following calculations on 1000 workers the same as we did in Allen’s “Cement Pour” example.

Already having the necessary materials and skilled labor on-site, Allen, without seeking management approval (...sometimes it’s easier to beg forgiveness than to ask for permission), decided to design and erect a temporary bridge that spanned those gigantic cement slabs—at virtually no cost to the company.

Imagine the savings that could be realized by getting his workers working more quickly—even if by only 5 minutes a day.

Using nothing more than the power of observation, Allen saw that his crews were making several one-way trips daily on the clock: One outbound in the morning, two out and back for the mid-morning break, two out and back for lunch, and two for the mid-afternoon break for a total of seven trips. (We won’t include the return trip at the end of the day because, presumably, they were off the clock.)

We already know Allen’s pay-rate from the previous example (\$40 hr.), and he has said that it took each worker 5 to 10 minutes to get to their job, so, of course, we will use the conservative, shorter time factor. Let’s do the math.

$$\mathbf{5 \text{ minutes} \times 1000 \text{ workers} \times 7 \text{ trips} = 35,000 \text{ minutes}}$$

$$\mathbf{35,000 \text{ minutes} \div 60 \text{ minutes} = 583 \text{ lost production hours per day}}$$

(The company was getting nothing in return for those paid 583 hours per day.)

We know the average pay for these workers was \$40 per hour.

$$\mathbf{583 \text{ hours} \times \$40 = \$23,320 \text{ per day}}$$

This is the cost to the company of 1000 workers taking the long way to their job site DAILY before the bridge was erected.

Allen told me that this part of the overall project took a total of five months from start to finish. I do not know how long the bridge was in place so, for our purposes, let's agree that the bridge was in place for 90 working days.

**\$23,320 x 90 days = \$2,098,800 saved in wages (in 5-minute increments!)
over 90 days**

To determine Allen's QTNT for this single project, use his previously calculated hourly pay.

90 days x 8 hours per day x \$45.67 per hour = \$32,882.40 = Allen's pay for this period of time

**Total saved by installing crossover bridge = \$2,098,800
Allen's pay for this time period = \$32,882.40**

**Allen's QTNT for taking the initiative to build this bridge = 63.83
or**

**He returned a value to his organization of 63 times his hourly pay
totalled over 90 workdays.**

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