

Strain Thy Brain
by
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Although I am a strong advocate of employing the latest in technological innovations to improve business efficiencies and profitability, a disturbing revelation caused me to reach for my pencil and paper and add numbers the old-fashioned way. At first, I was beginning to think that I had forgotten how to add. But what really bothered me was that I realized I had allowed part of my brain to think less critically and perhaps I had placed too much reliance on a machine.

Call it regression analysis but I decided to add backwards a couple years ago while working with an area student. I was on a mission of mercy helping out someone very bright with her math homework. She was in her second month working with fractions and she was beginning to experience problems. When I sat down to review her work, I became uneasy when I found that she had arrived at all the answers to her homework problems on a calculator. My mouth hit the floor when she didn't know what a common denominator was. How a kid learns to add fractions without understanding the fundamentals involved is beyond me.

I made her put the calculator away and I began to go over the few mathematical principles that I remembered. It was frustrating. I had to actually employ my brain to do work. Finally in a moment of frustration, she picked up her calculator and said, "who cares if I get the right answer." My little friend didn't have the foggiest clue how to add fractions without that calculator. Perhaps like her, I had yielded much of my thinking over to a machine. She had the ability to do so much more. It was then that I decided arithmetic was more than just getting a right answer. It was an attitude.

The following week I tried an experiment while we had auditors at work. I took a long series of numbers I needed to reconcile and added them by hand. When a young CPA came in to examine my reconciliation, he asked me where my tape was for the calculation. I told him that I did it by hand and I was quite sure it was accurate. Amazed, the CPA went away with my paper convinced that I was up to something. He took about 20 minutes fidgeting with my schedule, came back and pronounced it "ok".

A few days later he asked me for a series of reconciled schedules. I gave him a dozen computer-generated spread sheets. All of them were correct except one. The wrong one contained the right number on the bottom but was missing a very large number in the middle. In other words, the total did not equal the sum of the digits. The young CPA never questioned the accuracy of the data because he assumed the computer formula at the bottom was correct. It was not.

I wasn't surprised that the young CPA would take the word of a computer over me. Most of us are prone to believe the validity of anything that comes off a computer. As a fellow

member of the CPA profession, I do know there is a certain faith placed in the accuracy of schedules being presented by a respected client. In addition, the schedule in question was very minor. However, the mistake still should have been caught.

In some ways, programmable calculators and personal computers have become sloth personified. Machines have caused many of us to shut off our brains and flick the internal switch to cruise control. Computers are wonderful machines but for people like me who forget, I know it is good to occasionally exercise the computer in my head.

While today's best computers may reduce my beloved chess to a solved problem, nothing more than tic-tac-toe, the critical thinking involved in mathematics is part of finding solutions to many problems, particularly in the workplace. So if you want to stay sharp, use a paper and a pencil. And if you are like me, make sure your pencil comes with a big eraser.



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