

The Power of Incremental Change ... Behavior Contamination

Recently science has been given a black eye because of the way that data was manipulated and tampered with. But that black eye really is a result of human behavior and the way that humans wanted to alter the behavior of other humans. Science, in and of itself was not faulty, only the application of the science.

The scientific method illustrates how small incremental changes can create large results. These incremental changes can be nothing more than a slight adjustment of a formula in a system, of a process or of someone's attitude. These slight adjustments can make huge changes.

The Scientific Method

Remember learning the scientific method in grade school? The chart is the classic interpretation. Typically you start with observation, develop a theory based on that observation, make a prediction or the hypothesis, build an experiment to test your hypothesis and observe the results.

Too often in business and "life" the we is to go back and adjust the theory after just one test. But scientists don't just run one experiment and we businesspeople should follow their example. When experimenting scientists will lock down all variables except for one, the variable being tested. Scientists run multiple tests, each time changing the single variable to be tested. If the tested variable has 10 different steps the scientists will run the test at least 10 times.

Note the modifying clause above; "*at least*". You see, most scientists understand that the only time that you can lock variables down to where they cannot change is to create a situation that is perfect, and most scientists understand that perfection only happens in the imagination. In the real world there is no such thing as perfection. Many a scientific test is ruined because of unknown contamination in one of the controlled variables. *That is why really good scientists will run an experiment testing a single variable multiple times without changing anything.* For example, in testing and experiment where variable has 10 different settings a really good scientist will run a total of 100 runs of the experiment testing each variable setting 10 times to assure that any slight changes in any of the other controlled variables are captured and eliminated.

Following the idea of good experimental practice, scientists will rerun a test multiple times to assure a consistent result. The key here is a consistent result. The last thing that a competent scientist wants is to have his scientific conclusion destroyed because of sloppy practice. For a theory or hypothesis to be validated the experiments proving that hypothesis must be replicated. If other scientists cannot reproduce the same results the theory is considered to just be a theory, perhaps a junk theory.

The Connection to Business Practice

How many times in your business have you tried a new idea or process and at the end of the effort received an undesired outcome? What did you do? Did you change the theory or did you examine your execution? What kind of failure analysis did you perform? Was your attempt true to the design of your theory?

My guess is that the execution of the process did not follow the plan. Many times in business and ideas tested only once and it results in disappointment. Almost automatically there is an urge to go back and adjust the plan. Truly good managers closely examine the execution of the plan to understand and make sure that the execution followed the plan. Truly good managers will run the process multiple times and closely examine the results. Exceptional managers will look at the execution and determine where the uncontrolled variables occurred.

Exceptional managers understand that most business processes depend on the practices of human beings. Human beings are somewhat uncontrolled variables in any business process. Ask three different people to of perform the same business function and you will see three different methods employed.

The true art of clean business process is management's ability to control the variables of human behavior. So how well do you as a manager control the behavior of your organization?

How many of your innovative ideas have resulted in disappointment? What is your reaction: Fix the Plan or Fix the Execution? How would it feel to have a innovation coach backing up your work? Call us and find out.

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