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Below is an excerpt from a great article on Continuous Improvement from Bizmanualz.com. This relates to companies with great market conditions (like oil & gas related businesses are at present) and continuous process improvement. I thought you might find it an interesting read.

Are you Optimizing Profits when a Good Market Increases Sales?

What if your sales increased from \$100,000 to \$110,000 per day and your profit increased from \$10,000 to \$11,000 - did you improve by 10%? **The answer might shock you...**

Because the answer is no. No improvement occurred. In fact, your process deteriorated. Sure, revenue increased, but is this **really** an improvement? Let's take a look at the problem in this table.

Revenue	Before	After	Difference
Sales	\$100,000	\$110,000	\$10,000
Expenses			
Fixed costs	\$20,000	\$20,000	\$0
Extra Expenses		\$2,000	\$2,000
Variable Costs	\$70,000	\$77,000	\$7,000
TOTAL Expenses	\$90,000	\$99,000	\$9,000
Gross Profit	\$10,000	\$11,000	\$1,000

Extra Expenses Prevent Improvement

Here we have the before and the after scenario. You can see that fixed costs are fixed, and do not change with additional revenue. So you should get more than 10% (11.8% to be exact) profit from 10% growth.

And notice that in order to maintain a 10% profit we have to spend \$2,000 in Extra Expenses. These Extra Expenses represent your process inefficiencies. These expenses could be sales discounts, travel, overtime, or something else. The names don't really matter. What does matter is that we are not improving.

Process Evolution Enables Improvement

Improvement results from process evolution, not from an increase in scale. What's the difference? Scale increases when we hire another person, increase expenses, or purchase more assets in order to acquire or service more business. Process evolution occurs when we change the process and as a result can **release hidden capacity and service more business without adding any costs** - and this is a form of efficiency. You can measure efficiency with the formula:

$$\text{Efficiency} = \text{Output} / \text{Costs}$$

But process evolution is about more than just changing costs. It is about changing time, increasing process velocity, and getting more output from the costs you

already have. Cutting costs, by itself, does not evolve a process. In fact, reducing costs, without properly understanding how those costs relate to the process, can actually decrease process evolution (devolution). Let's review an example...

A Cost Reduction Case Study

A company decreases costs by switching suppliers and using cheaper materials for their manufacturing process. Now the purchasing department is happy they are saving money. The bottom line is starting to look better as profits initially increase. And so this improved the process, right? Well...

But then complaints start rolling in from the field. Products are breaking down faster. Technical support costs rise, and customers start reducing their orders. Not only do profits evaporate, but customer goodwill does too. To offset this, your first reaction might be to switch back to the old supplier. This is much easier and it fixes the immediate problem, but it won't recapture the lost sales, customers and damage to the company's reputation.

But, again, you need to focus on the most important issue. There is a limit to the amount of costs one can reduce in any process - zero. You can't reduce costs below zero. On the other hand, there is no limit to the process potential we can achieve. Process evolution concerns the numerator (the output), not the denominator (the costs) in the efficiency equation above.

Change in Process Evolution = New Output / Old Output
(assuming costs are held constant)

By focusing on process evolution instead of costs we can continue to increase our output forever. We just have to make sure that the output increases faster than the costs. Then what we have is true process improvement.