

Big-Picture Thinking

| Kathleen Ray

>> Published Date: 8/27/2012

Coming down off the “Short Course high” leaves many a greenhouse owner pondering how to approach the upcoming spring. Having seen the latest and greatest equipment, it’s time to decide how to improve the system before the busyness of the next season begins. Imagine transplanting 45,000 plants per hour with that new “(insert name here)” machine. What an increase in speed and efficiency that would provide. Think of all the money we could save!

But would a new transplanter, drum seeder or vision grading system really help your organization? Let’s look at the best way to focus efforts on improvement.

The theory of constraints has five focusing steps for ongoing improvement. Using this method will prevent spending money and effort on areas that won’t actually improve the bottom line.

1| IDENTIFY the system’s constraint This might sound like “management-ese,” but the concept is actually not that complicated. What part of your business is holding you back from maximizing your thruput? (Recall that thruput is just a fancy term for revenue minus direct expenses.) Is it really the speed of filling the pots on the transplanting line? Or is it actually sales holding you back?

Think about the “Undesirable Effects” (UDEs) in your business cycle. Is inventory piling up in the dumpster after it doesn’t sell? An example of a sales constraint means you have product sitting in the greenhouse, which has been marketed and would provide value to a customer, but the plants still aren’t going anywhere. Or are you unable to ship out during the peak of spring because you run out of carts or drivers? Are you running two shifts during planting season and still unable to fill the greenhouse with what you need in time for spring? Ask yourself where the bottleneck is in getting product through the greenhouse and to the customer. That is your constraint. I can’t tell you the speed of transplanting is not your constraint—it might be! But the mistake would be to assume that faster transplanting will fix your problems if that’s not actually your system’s constraint. The key is to find the weakest link in your business cycle “chain.”

2| Decide how to EXPLOIT the constraint This is the part you business owners already know how to do. Now that you have focused your energy on one particular aspect of your business cycle, get creative. How much does your “weakest link” need to be improved so it’s no longer holding you back? And how will you get there? Thus, you arrive at your new “spring prep” strategy. Try to consider process flow and procedural changes during this step to help you get there.

3| SUBORDINATE everything else to the above decision Now that you’ve figured out your bottleneck, it’s time to make that the number one priority to fix before the spring hits. The constraint is where you should focus your efforts. If production speed is not your constraint, then don’t spend time or money improving that right now. If this means changing policies or habits, that’s okay! In fact, now is the time to break those before they hold you back from a better spring in 2013.

Try to figure out what measurements or performance indicators are not helping you achieve the goal of maximizing thruput. For example, if you have a sales constraint, is an arbitrarily established “minimum order quantity” holding you back from better serving your customer (and thus hurting your total sales revenue?) On a side note, while a sales constraint might seem like an external constraint, it could actually be caused by internal mistakes long before the plants make it to your availability. Is the availability ending up with the wrong product at the wrong week? Maybe you need a modification in production planning to address the sales constraint.

4| ELEVATE the system’s constraint Now that you’ve decided how to approach the constraint—and made it your number one priority—you can consider ways to increase the constraint’s capacity by spending money on whatever you need to make that happen. The reason that is step four and not step two is because many times the cause of the constraint is not physical but due to internal policies or procedures. Don’t cover up the problem by spending money to hire more people or build another section onto the greenhouse until you’ve truly assessed what’s going wrong and what is causing the bottleneck.

5| If, in a previous step, a constraint has been broken, go back to step 1 What happens when you’ve fixed the initial constraint? It’s time to go back to the drawing board and step 1. Chances are you have a new weakest link in your chain. Maybe you’ve solved your sales constraint and created a logistics bottleneck or a production capacity constraint. Find the next area that needs your attention and continue the process of ongoing improvement. GT

For more information about the Theory of Constraints and the 5 Focusing Steps, read “The Goal” by Eliyahu Goldratt.

Kathleen Ray works in accounting and IT for Van Wingerden International, Inc. in Mills River, North Carolina. She has a Master's Degree in Accounting from Western Carolina University.