

TOC STRATEGY— THE 4x4 WAY

By Gerald I. Kendall

“Anyone who believes they can overcome emotion with logic has never been married.” This is one of my favorite lines from Eliyahu M. Goldratt’s book, *Theory of Constraints*. What it points out, so elegantly, is that a good strategy does not sell itself inside an organization. Even the mere mention of the word “strategy” arouses so much emotion, it is almost fun to witness the reactions—but only if you are witnessing it from outside the organization.

Over the course of 33 years of working experience, I have witnessed the same phenomenon over and over again. Organization-wide strategies get developed at least once a year, but are rarely implemented in their entirety. In fact, most CEOs that I work with tell me that it is rare to see even 25% of the ideas people commit to get implemented. As one CEO expressed it, “Every year, we would go off site with the entire senior management team to identify the top 50 issues that we needed to address. The next year, we ended up with those same issues and another 25.” A full TOC analysis of a company, by itself, does not solve this problem.

There is a saying that a smart person learns from his or her own mistakes but a wise person learns from other people’s mistakes. I hope you will choose wisdom and listen carefully. My first experience with applying TOC to company-wide

strategy is a case study in my book, *Securing the Future*. It describes how the diagnosis was a success, but the patient died.

This is a perfect example of doing the TOC analysis and strategy correctly, from a technical point of view. The company was a high technology company with an advanced and technically superior software solution. I was consulting with them. The correct core problems were identified. The solution was carefully thought out, and there was no question that it would overcome the core problems. The plan to implement 18 injections that had been developed was solid. The only problem was that the analysis was mine, not that of the senior management of the company. The CEO did not buy in. Two years later, the company was bankrupt.

Unless the injections are the CEO’s and senior management team’s babies, there is a very slim chance that they will ever be fully and quickly implemented. That requires much more than just discussion from the senior management team. It requires more than excellent facilitation. It even requires much more than having the entire senior management team in agreement with the strategy.

The 4x4 process for developing an enterprise-wide strategy brings together Dr. Goldratt’s lifelong work. It came about after many other approaches failed to get lasting results, even when there were some

spectacular successes with TOC in one or two areas of a company.

Why does the 4x4 process work where other approaches to developing and implementing strategy fail? This must happen because the 4x4 process overcomes some obstacles that other approaches do not. In this article, I will identify some of those obstacles and describe how the process deals with them to achieve the desired intermediate objectives.

These obstacles are not at all obvious to anyone trying to tackle strategy using a traditional approach. I’m presenting these obstacles here to a TOC audience. Do not expect to use this language in order to get buy-in to doing a 4x4 approach from a non-TOC audience. The subject of how to get buy-in to do a 4x4 is a whole article in itself.

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The “Tilt” Obstacle

Members of the strategy team forcefully tilt the strategy towards one side of the core conflict. It is a huge obstacle, because for years, either the CEO or some members of the team have continued to do this without breaking underlying assumptions.



For example, in a recent 4x4, the core conflict was between being diverse and being selective. This distribution company, with many thousands of products in their warehouses, chose to grow their business by trying to become the single source supplier for all of their customer's needs. In their industry, the products change very quickly. Many products have a life of nine months or less. Also, it was not practical for the distributor to inventory every similar product from every manufacturer.

In this environment, you have customers constantly calling and asking for items that are not stocked. Even though the distributor may have a reasonable substitute, there are often circumstances when customers can't or won't accept a substitute. If you don't have the right product in stock today, you have an excellent chance of losing the entire sale and that customer's future business as well.

This side of the conflict drives diversity. Also, given a life cycle of 6-12 months for many of these products, a huge opportunity can be easily missed by failing to add desirable new products quickly.

At the same time, the diversity also drives many undesirable effects. While the sales organization and the senior executive push diversity, it creates a marketing bottleneck in terms of the constant demand for new programs. It creates a huge transaction volume for the purchasing department, both in setting up new vendor relationships and contracts, and in handling the additional purchasing paperwork. The distribution center's job also becomes more challenging as they try to find space for all these new products. And let's not forget Finance that must constantly come up with more money to inventory products that do not have a successful track record.

The "tilt" occurs when one party to this conflict dominates the strategy session, favoring strategies that lean to one side. In the example above, this could be the CEO or Sales VP insisting on diversity, or it could be the CFO or VP Operations demanding selectivity. Either way, the company loses if the core conflict is not broken.

This name that I've given to the obstacle actually represents a collection of obstacles. For example, one of Dr. Goldratt's descriptions is that of "the impatient visionary." I haven't met a CEO yet who isn't impatient. The greater and more coherent their vision, often the more impatient they are and the more they lean to one side of the core conflict.

Another version of this obstacle is where the strategy is also tilted, but towards the status quo. Dr. Goldratt's term for this is the conservative approach or

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compliance, where the proposed solution is nothing more than putting a little bit of polish on an existing compromise.

If the strategy will not produce a breakthrough for the company, why bother going through all the hard work?

Overcoming the “Tilt” obstacle

I have not found a better way to overcome all of the aspects of this obstacle than forcing every single member of the strategy-setting team to “drink from a fire hose” for 4 solid days. This is how one of our clients described the first 4 days of his company’s 4x4. During these first 4 days, our clients proactively listen to Dr. Goldratt’s life’s work in eight presentations (2.5 hours each) of the Goldratt Satellite Program. Each of the presentations is interspersed with at least an hour of local discussion and translation to their environment.

The eight presentations are:

- Operations (applies to any operation of any type of company)
- Finance and Measurements
- Project Management (Focused on engineering, but applies to any projects in any organization)
- Distribution
- Marketing (Bringing the Ducks to want the corn in your field)
- Sales or Shooting the Sitting Ducks (Both for customers and selling ideas internally)
- Managing People
- Strategy

By the end of the first four days, each team member understands the cause and effect relationships that exist across their entire organization, and to a smaller extent, across the supply chain. Only then do they begin to understand why “tilting” does not work. They finally see why focusing on one side of a conflict yields, at best, a temporary solution.

In our example above, the people on the team pushing for diversity realize, after translation of the video presentations, that unbridled diversity has a huge price—excessive inventory, obsolete inventory, and constant demand for more resources without the leverage. At the same time, the people pushing for selectivity discover that it, too, has a huge price. Picking the wrong products with which to be selective can destroy the company. Bypassing a huge opportunity for which the company has the resources and competitive advantage is just as crazy. Having more and more customers phone and telling them that you do not have the product they want in stock kills customer loyalty.

What both sides to the conflict see, through the examples in each of the eight presentations, is a way out—a way to finally overcome the conflict permanently and safely and finally achieve the vision.

The “Overbearing” Obstacle

In one of the first companies for which I did a 4x4, TOC was a “dirty” word. Another TOC consultant had presented to the senior management team earlier that year, and insisted that in any TOC analysis, there must be only *one* core problem. This scared the senior management team to such an extent that they decided, at that time, to not pursue their strategic planning using TOC.

Coincidentally, one of their direct reports attended a public course that my wife, Jackie, and I were teaching in Canada. He liked our style, became convinced that the 4x4 approach was correct, and brought us in to present to their CEO and VPs.

In this presentation, I used an example that I adapted from Dr. Goldratt’s book, *The Haystack Syndrome*, called the P & Q example. The example illustrates beautifully that any effort to improve, which is not focused on the constraint, does not provide the appropriate leverage, and often is a total waste.

What these executives heard, from this example, is that the 4x4 focuses on the constraint of the company, with each functional area involved in either exploiting or subordinating, once the constraint is identified.

No one functional area dominates the strategy. Who cares if there are one, two or three core problems? Why make this an issue?

In other words, the nature of the “overbearing” obstacle is that senior management will not commit to a strategy that they believe was developed around the loudest or the most influential functional area. Each executive has a major problem within their area of responsibility that troubles them deeply. If they believe that the strategy is too oriented to one functional area or executive, they simply will pay lip service to being committed, but will not carry through.

Overcoming the “Overbearing” Obstacle

Every functional area brings their biggest undesirable effect (UDE) to the table. To make sure that they bring something real to the table, I put a qualifier on what UDEs they can consider. The UDE must be the biggest problem they believe is blocking the organization from meeting its goals. They must identify the impact they believe will be achieved by removing the UDE, in terms of Throughput, Investment and Operating Expense.

Obviously, if you collect a set of UDEs from the entire team, and the impact is one tenth of one percent, then people are bringing their pet problems to the table, not the real issues to achieve breakthroughs. In this climate, it is very easy for

one person to become overbearing and kill the entire effort.

Therefore, each team member must bring their biggest UDE. The strategy must address it. The core problem must be agreed upon by the entire team to the extent that each team member must describe the relationship between the core problem's solution and how it will help to overcome their UDE.

Throughout the 4x4, there is a set of interactions between individuals and the group. These interactions, with only a little bit of effort on the facilitator's part, guarantee that no one in this group can or will be overbearing.

This is Deming's philosophy on common and special cause variation at its best. The facilitator does not worry about common cause variation in this strategic planning process, because the process itself handles it. The facilitator can focus on special cause variation (e.g., UDEs that don't really relate to the goal, missing injections).

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“Lack of Discipline” Obstacle

Most “strategies” that I've seen, in the past, are collections of ideas without any rigor at all. Every good strategy should be able to answer the following questions:

- What are the specific, measurable goals that the strategy is designed to achieve?
- What are the major problems (UDE) that must be overcome to achieve the goal(s)?
- What is the impact, in terms of Throughput (or goal units in Not-for-profit organizations), Investment, and

Operating Expense of overcoming that problem?

- Why hasn't the organization been able to overcome the problem in the past (what is the conflict that has prevented it's removal)?
- Why have the collection of problems (conflicts) existed (typically for at least several years)?
- What idea(s) will permanently remove the entire collection of problems?
- What obstacles exist to implementing the entire collection of ideas? What condition must exist to tell us that we've overcome each of these obstacles?
- Who will take responsibility for implementing each idea?
- Who will project manage the overall strategy implementation?
- In what sequence must the ideas be implemented?
- How long will it take to overcome each of the obstacles and implement each idea?
- When will we start and when should we finish?

These are the questions that the 4x4 answers. Each question is attacked methodically. Each question and answer must be documented. In the case of the 4x4, the plan is formulated as both a prerequisite tree and a Critical Chain plan.

Other Obstacles

There are other obstacles. The ones that I've described above are some of the major ones. Each organization usually has some unique obstacles as well. The final plan to run a 4x4 must take these into account. For example, in one company, there had been past attempts to do strategies, with outside help in some cases. One of the problems was that consultants would facilitate the strategic planning, often standing up on their pedestals and beating their favorite drums for their favorite solutions, without fully understanding this specific company. Then they would disappear, and the strategy session became another intel-

lectual exercise that provoked great thinking but no implementation.

The real obstacle was that most of the team members would not take the session seriously. They would think of it as another flavor of the month. For this company, at the CEO's insistence, *we overcame* the obstacle by spending 3 days in advance of the 4x4 interviewing each senior team member, understanding their current situation, language and problems. We also committed, in advance, to ongoing consulting through implementation of the plan.

Summary

There is no shortage of great ideas—just a shortage of great implementations. Simply having every executive involved in developing a strategy falls way short of gaining commitment and buy-in. Each individual member of the strategy team must be intimately involved in inventing a part of the strategy. Each member must be intimately involved in the overall analysis, to such an extent that they realize that the entire strategy, as a whole collection of ideas, must be implemented in its entirety.

As usual, Dr. Goldratt, after many years, invented a brilliant, simple solution to overcome all of the obstacles that have existed to building both a good strategy and the commitment to implement it. The 4x4 process is not just a great idea. I can tell you, from personal experience, that it works just as well with a 20-person company as it does with a multi-billion dollar worldwide enterprise.

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