Never Say I know
By Dr. Eliyahu Goldratt

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* The article was slightly modified to enable easy comprehension for readers who are not familiar with the Theory of Constraints.

When coming to evaluate the applicability of our generic solution to a specific case, there is a rule that I am trying to stick to – check and crosscheck if our assumptions about the key data on which our suggested solution is based are valid for the specific case. Recently, I had to face a case where it was apparent that I had deviated from that rule. Of course, the consequences were embarrassing, but that is not the reason I’m now forcing myself to sit down and write this document (I’m not a masochist). The main reason is that the renewed analysis showed me (again) the extent to which there is no end to deeper understanding; we have embarked on a journey that does not have an end, just exciting and rewarding stepping stones.

Maybe I was “hit” by this case because the company is producing sporting apparel. If there is a sector that I fooled myself that I knew inside and out, it is manufacturing-based companies. Nevertheless, the renewed analysis yielded not one, but three additions to the body of knowledge. The importance of these additions can be evaluated by the fact that in the following few weeks I used them effectively for two other consumer-goods manufacturers.

Here are the details. Eighty-five percent of the company’s income comes from being a contractor to the big brand companies. Usually, a contractor will have one or two dominant clients. A dominant client has the power to squeeze a low price from its contractors. Low prices translate into low gross margins – purchased materials being a high percent of income. But this company has over ten brand companies as clients, none of them dominating its sales. Therefore I wasn’t overly surprised when I was told that their material cost is only half of their income.

The other 15% of sales come from their own collection, their own brand, which they sell through their own ten shops and a few more franchised shops, all located in their small country. A textbook case. In the first meeting I verified that their production lead-time is two months (very common in the apparel industry) and yes, they produce for the entire season in one batch and ship it before the beginning of the season to the brand companies.

This company is located in Europe. So, relative to their competitors in the Far East they do have a big advantage that they are not using today: transportation time to the
central warehouses of all their clients is only a few days. This proximity to the markets is wasted since their long production lead-time puts them at two months distance from their clients. But there is no real set-up in production of sports apparel (and they are an A-type plant) so it should be easy to cut the lead time to less than a week. About twenty-five years ago I published the relevant knowledge and since then it has been implemented in hundreds of such plants.

To turn their advantage into a real competitive edge one just has to realize the eagerness of the brand companies to reduce their inventories. What the brands love, almost to the extent that they like to further reduce the price they pay to the contractor, is that the contractor will hold the inventory for them. The contractor’s proximity coupled with drastically shorter production lead-times will enable providing such service for just a modest increase in cost.

Offering such service, the contractor will be able to get as many orders as he is able to handle. And he will be able to handle much more than today since a side effect of reducing the production lead-time is the exposure of significant excess capacity, enough to support almost doubling sales without increasing manpower.

To support more than double the current sales, the contractor will need to increase capacity. That is not a problem; there is no shortage of sewers and the machines are just sewing machines. With material cost as low as just half the selling price, an increase in sales would bring significant contribution to bottom line profit. Profitability (profit over sales) would have a dramatic increase.

Next case please.

During the preliminary extensive checks with management it turned out that a key data element was wrong – material cost is not 50% of sales, rather it is 75% (even when the big brand companies are not a dominant client, they have the power to squeeze low prices from a contractor that is too eager to grow fast). Gross margins that are so small change the entire picture; to bring the company to excellent profits it is not enough just to increase sales, but they must significantly increase margins as well. In short, kiss good-bye a vision based on just holding the inventories for the brand companies.

Two different questions should be answered. To avoid running again into such an embarrassment we need to know: how come such a basic piece of data was wrong? And, to ensure that we do have a vision for contractors that supply to brands we should also try and answer a more interesting question: is there a feasible way to increase margins?

As for the first question it didn’t take long to reveal the source of the mistake. The 50% was derived from their financial statements. Therefore, it represents an average over their two channels of sales. Even though the other channel – direct sales through their
own shops – is relatively small (just 15%) it had a major impact on the average percentage of material. Simply, for the channel of direct sales, the material represents much, much less than 50% of the selling price (margins in the direct sales channel are composed of the huge markup of their own brand plus the substantial markup of their own shops).

We now understand the source of the mistake. But it doesn’t help us to answer the much more interesting question: what can we do to increase margins? Moving to ask for a premium price for rapid response is the first thing that jumps to mind, especially when one considers the current production lead-time of two months and the ease of cutting the production lead-time to be, at most, one week. Well, in their environment there is a limitation that makes it difficult. Dying the fabric is a batch process. Therefore, their suppliers will be reluctant to dye small quantities. Moreover, the suppliers are not willing to guarantee the same color in subsequent batches. Knowing the amazing benefits that moving from producing to forecast to producing for consumption brings the brand companies, I first concentrated on finding a way to solve the problem of the need for large batches of dyed fabric.

Suppose that all garments would have been produced from just one dyed fabric, what would happen if the company would buy the material in large quantities, but produce – convert the materials to garments – in small quantities as dictated by actual consumption? True, like today, the investment in material would be much earlier than consumption, but the real gain would be achieved. There would be almost no shortages and surpluses of garments.

Since all garments are not produced from just one dyed fabric, the extent to which such a mode of operation will be effective in reducing shortages and surpluses depends on the extent to which the same fabric is used for different garments.

We all know that to some extent the same dyed fabric is used for different garments since all sizes of the same model use exactly the same dyed fabric. Unfortunately, this cannot help much. In fashion the forecast is particularly lousy because the lifetime of the products in the market is too short. Consumption data that has been collected in one season cannot be used for forecasting the next season’s consumption because the products are different. But that is not the case for forecasting the relative consumption of the different sizes; the ratio between consumption of a large size and a small size tends to stay the same for years.

So, it all depends on the extent to which the same dyed fabric is used for different models. For that I checked the number of different models they produce per year (35,000) and compared it to the number of different dyed fabrics they use per year (4,700). The ratio is one to seven. Is it enough?
We know that, in general, about 30% of the SKUs suffer from shortages – they are depleted before the massive end-of-the-season clearance sale starts – the high runners. Another 30% suffer from surpluses – they are sold mainly in the end-of-the-season sales (and in the outlets) – the slow movers. That means that in a group of seven models there is a high chance (over 90%) that at least one model will be a high runner, while at least one other model will be a slow mover. So even though we start with a given (forecasted) amount of dyed fabric, still, in most cases, the diversion that we can do (from the actual slow movers to the actual high runners) will help. How much will it help?

To answer this question we have to realize the non-linear nature of the damage shortages cause. Suppose that a particular item has been depleted after one month and the season lasts four months. How much are the lost sales relative to the amount that was sold? One doesn’t have to be a trained mathematician to answer this question; the lost sales are three times bigger than the actual sales. What about an item that is completely sold out after three months? The lost sales are just one third of the actual sales (less, if one takes into account that in the last month of the season prices are lower). This means that even though we work with restricted availability of the colored fabric we can get most of the effect, in terms of percent increase in sales, since most lost sales can be prevented. The same goes for reducing the bad effect of surpluses, especially when we consider that the longer it takes until the slow mover is sold, the lower the price at which it is sold.

How can we take advantage of it? How can we turn it into a mafia offer to the brand companies? Currently the brand companies order the amount needed for the whole season and demand delivery before the beginning of the season. Once they get the goods they immediately push about 40% into retail to fill up the pipelines with the new collection. Let’s not try to change these big companies. Let’s give them an offer that does not require any real change from their side and that the advantages of our offer will be apparent to them.

What do you think about the following offer? Continuing to follow the current practice the contractor will get the orders per item (based on forecast) enough time before the beginning of the season. Based on the orders the contractor buys the entire quantity of dyed fabric, as it currently does. But, the contractor will cut, sew and ship half the forecasted quantity of each item (the quantity needed to fill the pipelines in retail and leave some spare at the brand warehouses). Now the contractor waits for the orders to come to the brand company from the retailers. The first orders are apparently orders for high runners. The contractor is informed of each order that the brand gets, and as long as it still has that dyed fabric, it will replenish within a time period that is very short relative to the period of the season; two weeks should be enough for a system that is used to minimum two months. Six weeks before the end of the season, the brand should instruct the contractor what should be done with any residual fabric. Should it be...
turned into garments or should it be held for the next year (at the brand’s expense)? I think that if such an offer is presented well (with a full explanation of the benefits the brand will unavoidably gain) the chances are very high that each and every brand will gladly accept.

As a matter of fact, knowing that all brands are currently struggling to find ways to increase their inventory turns, I think that they will be interested in such an offer to the extent that the contractor can use it effectively to increase its margins. Here I’m going into the speculative mode; the following should be checked with the brands and modified according to their response.*

*Within one year of writing this article, such an offer was presented to several brands. They all accepted it with open arms.

Brands that operate on three seasons a year (the standard in sports apparel) have about six inventory turns. For them, increasing to nine inventory turns is a major achievement. I doubt that anyone in those companies thinks that twelve inventory turns is realistic for the company. Therefore, requesting a bonus based on actual inventory turns might fly.

The contractor should present his offer along the lines of:
Right now, in sporting apparel you have six inventory turns. With our offer, which is based on the mammoth efforts that we have made to improve our reaction time from over two months to less than two weeks (including transportation) we think you can achieve higher inventory turns. Let’s take the conservative assumption that fluctuations (and a lot of luck) might bring your inventory turns on our goods to eight. So, let’s acknowledge our contribution to your improved results only if your inventory turns go up to the delightful number of nine. But then, compensate us for our unique contribution. For example, for each inventory turn starting at nine, give us a bonus equal to just 5% of our price.

Since the mark-up of the brands is usually around 400% of the price they pay to their contractors and since increasing their inventory turns is of such importance to them, such an offer has a real chance of being accepted (at least by three or four of the twelve clients the company has). Of course to conclude such a deal we’ll have to climb the ladder, from the purchasing agent to a relatively high-level manager, so don’t expect a quick deal.

What impact will it have on the contractor’s margins? My founded expectation is that such an offer will actually bring the inventory turns of a brand (without any action from the brand to change the way it does business with the retailer) from six to fifteen* turns. The offer has the potential to double the contractor’s margins while dramatically increasing its sales.

*At first glance fifteen inventory turns seems optimistic but, actually, it is very conservative. Just consider that right after the beginning of a season a brand currently
holds 60% (40% are shipped almost immediately to retail) of the goods (this number is going down slowly during the season) while using our way the brand will hold just 10% of the goods. So we can expect the inventory turns will increase five fold and that is without taking into account that sales will go up due to fewer shortages of the high runners – fifteen inventory turns is very conservative.

I have some slight hesitations; simply we haven’t yet tried getting bonuses for improved inventory turns, or anything similar. So I kept on thinking about additional ways (to be done in parallel) to increase the company’s margins while dramatically increasing their sales.

How can they get higher margins? I couldn’t think of an additional way to get a higher price from the company’s clients – the brand companies. So what about bypassing them and selling directly to retail?

Usually, this avenue is not feasible for a contractor since it actually demands building a new type of company. It is one thing to have the ability to cut and sew fabric into garments according to given designs; it is a totally different ability to design new collections of garments and to do it three times a year in pace with the changing fashion. But in this particular case our company already has this ability. It does have its own collections and in its country these collections compete well with the big brands’ collections. As a matter of fact, in their country they are number three in selling their own sports apparel, ahead of much more known and much bigger brands. So, it seems that if we want to increase the company’s margin, we just have to concentrate more on sales directly to the shops. And since they have almost saturated their small country – they have their shops in every major location – they will have to approach shops outside of their country. Considering the markup of brands, this will not just increase the company’s margins, it will explode them.

Isn’t it obvious? Well, from harsh experience, I’ve learned to be very careful at answering this question. On the one hand, I do recognize that all good solutions have one thing in common, they are obvious but only in hindsight. Always, once I finally verbalize a good solution to a major problem, I’m disappointed with myself for wasting so much time until I reached the obvious.

But, on the other hand, I also learned not to just admire, but actually to respect, peoples’ experience and intuition. If the solution is correct, if the solution is really so obvious, how come people haven’t used this solution a long time ago? It must be that something, an erroneous assumption that they took for granted as an indisputable fact of life, caused them to dismiss this solution – blocked them from even trying to implement it. So until I clearly recognize and verify such a blocking assumption I don’t know if my new solution is obvious, or just stupid.
Why hadn’t this company tried to sell directly to shops outside their own country? It must be because it has the name recognition, the brand name, mainly within the borders of their country (in other words, outside its country it is a non-brand company). And the managers of the company had learned that to build a brand name takes time, a lot of time, and money, a lot of money. The bigger the country, the bigger the sums of money required. It is obvious that to build a brand name, in a sizable country, is beyond their current financial (and managerial) abilities.

But why is having a brand name so important? Why are they convinced that as long as the company didn’t yet establish a real brand name, in the territory in which a shop is located, it will not be economical to try and persuade the shops to carry their collections?

It is, probably, because shops know that merchandise that carries a known name will sell and they are reluctant to take the risk of buying non-brand merchandise, merchandise that might not sell well enough. The shops’ reluctance is logical because the constraint of most shops is display space (and cash). Carrying merchandise that might not sell well is actually wasting the constraint (the opposite of “exploit”) and therefore reduces the overall sales of the shop.

We can proceed from here in two ways. One is systematic, logical and meticulous. The other is bold, daring and not less logical. (Actually there are many more ways to proceed, but since they are not logical I’ll ignore them.)

Do you know Robert Frost’s poem “The Road Not Taken”?
Two roads diverged in a yellow wood, And sorry I could not travel both And be one traveler, long I stood And looked down one as far as I could To where it bent in the undergrowth.

First, let’s look down the meticulous road as far as we can (it is meticulous and also boring, so please don’t fall asleep before we start to travel the other, much more exciting, road).

Shops might be reluctant to carry non-brand products, but it is a fact that many shops do carry a lot of non-brand products. So, it must be that the managers of our company know that it is possible to sell to shops outside their country, but they don’t really try to do it because they are convinced that it might lead to losses rather than profits. Let’s carefully examine this conviction because the alternative is simply to give up on the idea of selling directly to the shops.

First, let’s get rid of the more banal way. If the shops are reluctant to buy non-brand merchandise because it is too risky, the company should reduce the shops’ risk by offering the goods on consignment. This is a lousy suggestion. Offering the goods on
consignment is very risky for the supplier, since there is a high chance that most of the merchandise will be shipped back at the end of the season. And it is bad for the shop because, consignment or not, blocking a shelf with merchandise that doesn’t move well is reducing the sales of the shop.

The shops that do carry non-brand merchandise are aware of the risk of holding too much slow-moving merchandise. They reduce the risk through lowering the price of those goods to the end consumer; they increase the chance of sales of the non-brand products by fixing the end price of non-brand products to be substantially lower than the brands’ prices. But, at the same time, the shops are also making sure that their margins will be adequate, which means they will pay much lower prices to the non-brand providers. How low can our company go, and still make nice profits?

Let’s assume that the shops will sell the company’s garments for a price that is half the price of the brand garment. That means that if the shop maintains the same markup regardless of whether or not the garment is a brand garment, the shops will pay our company half the price the shops pay for an equivalent brand garment. Half the price the brands get is still much more than what the brands are currently paying to the contractor. That means that it behooves the company to sell directly to retail since, in doing so, the company will make gross margins which are several times bigger than the current gross margins it has selling to the brands.

Let’s not be hasty to jump to such a conclusion. Remember, the managers of a company do have a lot of experience and intuition. Therefore, we can assume that they are oblivious to the obvious only in cases where we clearly pinpointed an erroneous assumption that blocked them from seeing the obvious. In our case, did we identify such a blocking erroneous assumption? No!

So it must be that something is wrong; that I’ve ignored something essential in doing the above calculation. The expected margins are based on the assumption that the likely sales price to the shops will not be less than half the price the shops pay for an equivalent brand garment. Is this crucial assumption solid?

As we said, when the company tries to sell in other countries it is a non-brand company; it does not have any real competitive edge. Are there other non-brand companies that sell in those countries? Many. Many non-brands, none having a competitive edge, are the ideal conditions for the buyers of the shops to try to squeeze down the purchase price. And they are experts in squeezing. Under the reality of a price war, can we safely assume that the selling price to the shops will be as high as half the brand price? Let’s ask it in a different way. Are the existing non-brand companies making a fortune? Not at all. Some make a living, some struggle, some are going out of business, but rarely do we hear about non-brand companies in apparel making a fortune unless they succeeded to
build something specific that gives them a competitive edge in a niche market. A price of half the brands’ price seems a little too optimistic.

What is behind the “bent in the undergrowth”? The tendency is to still do some checks. To check the price the shops are paying for non-brand garments, to check what will be the cost of putting in a sales force to sell to shops, etc. It will take time, efforts and some investment but there is a chance that as a result of extensive checks, the conclusion will be that it is a viable road. Maybe.

Now let’s follow the other road, the bold, daring road.
As we said, the main reason that shops are reluctant to buy from a non-brand company is that the risk that the merchandise will not sell well enough is much higher than for brand merchandise. We can be totally relaxed if we find a way to reduce that risk to a level that is even below the risk that shops take when they buy brand garments. Daring?

You bet, but the real question is: Is it possible?
To answer this question we have to first assess the risk the shops are taking when they carry a brand garment.

Is there any risk for the shop when it buys a brand garment? We know that there is a major risk. We do know that even when the shop buys brand garments there are a lot of relatively slow movers. Some (about 30%) are so slow that a shop has to carry them for a few months and even then it is able to sell them (at a loss) only at the end-of-the-season clearance sales.

Allowing the shops to buy based on actual consumption rather than forecast, plus offering the return of slow movers for a full refund (and the mechanism of “return this, take that instead”) the company reduces the shops’ risk to a bare minimum, while improving substantially the exploitation of the shops’ shelf space. Let’s do some calculations to realize the financial impact of such a unique service on the shop’s profitability.

Let’s conservatively estimate the total increase in sales (due to less shortages, and much higher percentage of high runners) to be just 50%. For the shop this is an increase in sales that is not associated with any increase in overhead or employee costs. What is the resulting impact on the shop’s profitability? Even though most shops mark up the price by 100%, the vast majority of the shops do not make more than 5% net profit on sales. For such shops, a 50% increase in sales means that their profit on our company’s products will increase by at least a factor of five, versus comparable goods purchased from a conventional manufacturer.

It stands to reason that when the sale to the shop is done in the proper way – explaining the logic that clearly show the benefits to the shops rather than talking mainly about the
garments themselves – most shops, which are not dedicated to specific brands, will accept the company’s offer. A shop will probably start with a test collection, but within weeks that test will expand, creating a happy and loyal outlet.

What about our company’s investment? With such a mafia offer, the company should choose to concentrate its sales efforts on a densely populated area that can be served by one regional warehouse. The amount of sales (potential sales are larger than several times what our company’s capacity can supply) and profits will easily dwarf the relatively small investment in inventory.

All in all it looks like this approach is an obvious winner. But we are not the first ones to look for a solution for selling non-brand products directly to shops. Many, who are not less bright or less meticulous than us, have tried to solve it. How come that we have succeeded where they all failed?

They tried to find the way to reduce the gap between the risks the shop is taking buying from a non-brand as compared with the risks of buying from a brand. We have approached it differently. We increased the challenge to the level of impossibility – instead of trying to reduce the gap, we dared to think about reversing the gap.

Two roads diverged in a wood, and I
I took the one less traveled by,
And that has made all the difference.
Dr. Eliyahu Goldratt (1947-2011)

Internationally recognized leader in the development of new business management philosophies and systems, Dr. Goldratt’s work is carried out by consultants and educators around the world, and utilized by many of the world’s largest corporations, including IBM, Procter & Gamble, AT&T, NV Philips, ABB and Boeing. Unconventional, stimulating, and “a slayer of sacred cows,” Dr. Goldratt exhorted his audience to examine and reassess their business practices with a fresh, new vision.

THE GOAL, his best-selling business textbook written in novel form, illustrates Dr. Goldratt’s Theory of Constraints (TOC), an overall framework for helping businesses determine: what to change — not everything is broken, what to change to — what are the simple, practical solutions, and how to cause the change — overcoming the inherent resistance to change. Dr. Goldratt wrote numerous books on related topics, including IT’S NOT LUCK and CRITICAL CHAIN. His book, THE CHOICE, rapidly became the #1 bestseller in Japan. Dr. Goldratt was a frequent contributor to scientific journals, magazines and business publications.

Dr. Goldratt was the Founder and Chairman of Goldratt Consulting, which continues to take the Theory of Constraints practices to new heights with VIABLE VISION, a platform to improve business productivity and profitability. Viable Vision provides the strategy and specific tactics that deliver unprecedented performance and bottom-line results in all aspects of a company’s operation.

Goldratt Consulting helps companies to immediately accelerate cash flow and profits, and with the same actions begin to strengthen the company for exponential growth.

Our clients enjoy substantial increased liquidity within weeks and ongoing growth in profitability. Our approach is based on Theory of Constraints (TOC) - the time tested, logical, common sense solutions introduced by Dr. Eli Goldratt 25 years ago in his book, The Goal, which is still a best-seller today.

TOC has been implemented in nearly every function in companies from $25 million family operations to top Fortune 500, in product and project manufacturers, and companies with simple and complex distribution networks. TOC is taught in hundreds of colleges and universities, and much has been published on the subject.

Dr. Eli Goldratt founded Goldratt Consulting as part of The Goldratt Group. The company is headquartered in Israel and represented in every continent. Our leadership roster contains the most highly renowned TOC experts in the world.

Goldratt Consulting is not a typical consultancy.

• We only work with companies that commit to reaching a level of performance they had previously considered unattainable.
• We only implement solutions that bring such performance without compromising long term for short term or one stakeholder group for another (shareholders, management, employees, customers).
• Instead of hourly or daily rates, our fees are based on the mutually agreed financial value that is generated through our efforts.
• The vast majority of payments are set to the client reaching specific financial performance milestones, which begin when the “previously considered unattainable” performance is surpassed.

If you would like to learn how Goldratt Consulting can help your business reach new heights of performance, contact us to schedule a free initial evaluation with a Goldratt Executive. www.goldrattconsulting.com