

"The Choice" - the latest book from Dr Eli Goldratt

Pre-Release Book Review by Dr Ted Hutchin, July 2008

When an advance copy of the latest book from Eli arrived on my desk I approached it with both anticipation and trepidation. The former due to the expectation that I would learn a great deal from reading the book, understand what Eli was trying to say and to then apply it to my own life, the latter because he might reveal my own lack of clarity in thinking and that is always a painful process to go through!

The book follows his usual style of being a narrative which covers a range of issues and experiences that he has had, and all in the framework of a conversation with his daughter Efrat. The first lesson for Efrat focuses on the importance of understanding what is meant by the term "freedom of choice" and linked to that the term "degrees of freedom". This is a term familiar to those with a scientific, or systems, background but not necessarily for all. We start with one of Eli's usual stories about the ability to tap into an opportunity when most see none. What is it about Eli's ability to see clearly what others do not?

Of course, in the story he covers some of the core issues that have affected the world-wide sales of TOC for many years, primarily the inability to really see the scale of opportunity that sits before us. This is linked to our inability to really capture the attention of our own prospects by enabling them to see the real opportunity they might have, and how we can help. In the story Eli argues that retail is probably the perfect target market for TOC, plus any one major retailer leads to many suppliers, and this gives him the platform to open up a discussion with Efrat about freedom of choice and the notion of degrees of freedom.

"The more complicated the situation seems to be, the simpler the solution must be"

So under questioning Efrat manages to drag out of Eli the statement "The more complicated the situation seems to be, the simpler the solution must be". In explanation Eli makes the point that in most companies today there is the assumption that they are complex, that the markets they serve are complex and that therefore the only way forward is to use a complex solution. People, argues Eli, are "looking for sophisticated explanations for complicated solutions". Of course what is being suggested is that with the right analytical approach, what appears to be a complex situation, with many complicated connections, is often not the case - but just how many people actually believe this statement?

So Efrat needs to understand what this means and therefore Eli gives her an example in the form of a case study, based around the clothing industry. The story is not new, but that is not the point. The point is that there is an underlying logic here that most people miss entirely. (As an aside, capturing the logic contained in the case study (Chapter 4), is rather a good exercise to carry out to test your own capability in using TOC).

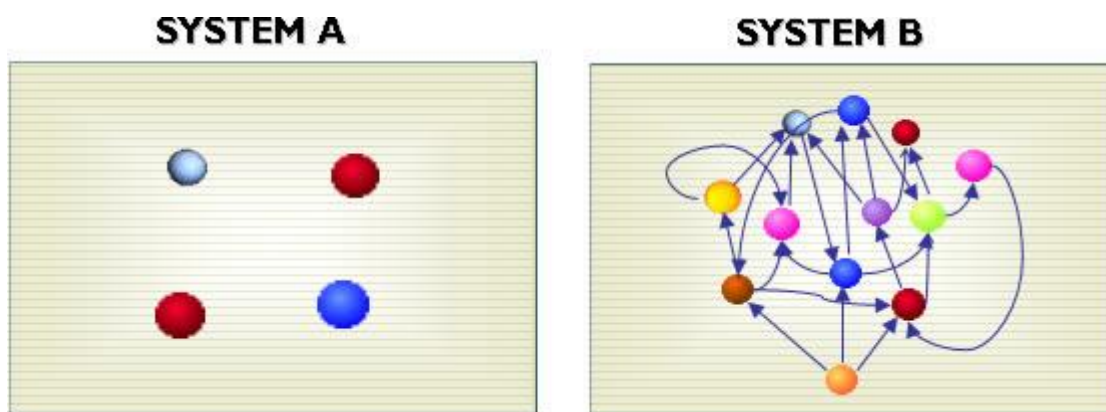
This leads us to the point where Efrat now has to think about why, when given all the relevant facts, she still did not see what Eli had seen, and he makes no claims about being inherently smarter! But the direction that Eli takes is now different to that expected – it is more about having a meaningful life.

The basic thrust of the argument is that people spend a great deal of time trying to develop and implement complex solutions that they know will not work, when a better

way exists: using the effect-cause-effect relationships that exist in all organisations. It is these Effect-Cause-Effect relationships that determine every aspect of our lives and they are what Eli defines as “common sense”.

So it is now important to understand what Eli calls “inherent simplicity”, namely the application of a thinking process that allows us to delve into the causal relationships within problems to determine those few (and there may be only one) key areas upon which to focus. It is the discovery of common causes that leads to the understanding of inherent simplicity.

It is this radical approach that allows Eli to see what others cannot – his total subordination to the tools of his trade. He is a physicist by profession. He knows these tools work, he has used them all his life, they are second nature to him, if not to others. He uses the diagram shown below to make the point.



Which system is more complex?

Now I have used this diagram many times and it is interesting how many times people tell me that B is more complex than A. But Eli explains that if the definition of complexity is the number of things we have to describe then maybe B is the right answer. But, Eli continues, if we look at it from a systems perspective then you must ask a different question, concerning ‘degrees of freedom’. So the focus turns to the minimum number of points you have to touch in order to have an impact on the whole system.

Now the answer is definitely that A is more complex, because there is only one point in B that has to be touched in order to affect the whole system. Whereas for A, the number is four, meaning that it is a far more complex environment to control; and what if there are more than four? So if we change the definition of complexity we will have a very different answer. Thus the first step in understanding, and thence using, inherent simplicity is uncovered – the use of Effect-Cause-Effect logic to determine the root cause of the organisation, and focus our efforts there. But Eli urges caution, we are not done yet.

We can now understand the importance of a logical analysis, but what about the many contradictions and conflicts that abound in any system where people are involved! This takes us to the next step in the discussion between father and daughter. Many times when we do such analyses we come across conflicts and apparent contradictions. Of course within the Theory of Constraints there is a tool for dealing with conflicts – the ‘evaporating cloud’. Here we search for the underlying assumptions that hold the conflict in place and then remove the cause of the conflict by dissolving the assumptions - thereby eliminating the conflict altogether.

So now there are two stages in the process of using inherent simplicity, the first is to arrive at “the conclusion that meaningful opportunities are open when one sees how

to remove a blockage; how to overcome an undesirable situation that I'm convinced I cannot change" and then to realise that the second obstacle is "that people's perception is that conflicts are a given and that the best we can do is to seek a compromise".

"What I mean by Inherent Simplicity is that reality, any part of reality, is governed by very few elements, and that any existing conflict can be eliminated"

It is at this point the Efrat manages to elicit from Eli the statement: "What I mean by Inherent Simplicity is that reality, any part of reality, is governed by very few elements, and that any existing conflict can be eliminated" and then he goes on to say: "If we take that as a given, as absolutely correct in every situation, we'll find ourselves thinking clearly". But knowing this does not mean everyone can do it, or indeed Efrat for that matter, so the story continues.....

The key for Eli is to recognise that if we are dealing with a range of undesirable effects then at the root must be a chronic conflict – that is a conflict that does not have an acceptable compromise. This is linked to the fact that for many people such a conflict is so difficult that they give up and do not address the core issue. As Efrat describes it in talking to her father: "Your belief in Inherent Simplicity caused you to take for granted that these problems can be solved because they are the result of a root conflict and that the conflict can be removed. That's why you didn't have a tendency to camouflage these problems".

As Efrat moves forward in her journey of discovery, Eli takes her through the importance of harmony, of understanding and seeing the issues from the perspective of the other side and of examining the blame culture that dominates many relationships, both internally within organisations and between organisations. The key here is to recognise that for every relationship there is a change that will cause the parties to achieve what they need from the relationship and thus achieve a level of harmony previously thought unachievable. This is all about changing the mind set such that win-win relationships can be developed and encouraged to grow. The definition of win-win that Eli uses is interesting and novel: the win for my side is less than that for the other side!

Eli explains the dangers of tautology, making sure that in our analysis we are not resorting to circular logic, that we are indeed delving into the real causal relationships which are often intangible – which is where the potential for tautology comes in. The understanding of convergence and predicted effect are discussed, their strength being that they can deal properly with tautology. The predicted effect may show that the suggested, intangible cause is not correct – and this is of course excellent as we can now start to consider what the real cause is.

The book continues the story, using the clothing/retail industry case study as the vehicle to explain Dr Goldratt's approach in greater depth. If you want to know more you will have to read the book, but I hope I have created a hunger to learn more.

Publication date for "*The Choice*" is October 2008.