#### Theory of Constraints Practitioners Alliance www.tocpractice.com





The power of the Transition Tree Dr. Ted Hutchin

21 February 2019, Thursday, 17:00 (5 pm) UK time

# The power of the Transition Tree

A very powerful tool for creating and transferring both knowledge and know-how

A webinar written and presented by Dr Ted Hutchin

#### Where did my interest in the Trt begin?

- During the Jonah Programme the second TP example at Ashridge in 1991, I attended with many of the TOC community in the UK at the time and stayed with my friend David Marks who lived close by.
- When the Trt was presented we both struggled with it and so, on the way back to David's home, we decided to think about the course we were running the following week for IBM teaching them about manufacturing.
- As David went through the four days of the course, working our way through the structure we had used for some time, I quickly realised that he was talking a Trt even if neither of used that structure!!!
- So maybe it had some merit after all!!!

### So why am I doing this webinar?

- That first exposure to the Trt was many years ago.
- I want to share my own experiences of using the Trt over the past thirty years.
- And, when I met Oded and Jelena back in 2018,
   Oded observed that I was one of a very small
   group of people still using the Trt and yet surely as
   a powerful tool contained within the TP it should
   be more widely used after all it has so many
   applications.

# BUT! If the Trt is a solution, what is the problem?

- Great question! Thanks Candy!!!!
- Some obvious questions
  - I don't know how to.......
  - I think I know but not at all sure of the sequence
  - I don't know how to communicate the knowledge I wish to impart
  - I don't know how to develop the know-how of such communications

Ted Hutchin

- And there are also obstacles!
  - This takes far too long to do
  - There is no need
  - I have a better way
  - Trt adds no value to what I am doing

#### The first time we used Trt for real

- Anyway, back to 1992 and the first JP that David and I did together.
- 12 pages of Trt including times for breaks etc
  - Anecdote about Tony Doughty and Mick McLoughlin
- Shared with Dick Franks and Dave Bergland in the US, three JP running at the same time.
- Massive transfer of both knowledge and knowhow.

# The importance of reflection after using the Trt

- Afterwards time was given to reflections about what we had done.
- The importance of fully understanding both the objective and the starting condition of the Trt.
- The importance of having some knowledge of those who are coming on the programme – precourse work etc.
- This highlighted the need for more Trts that must be completed prior to people arriving and sitting in the class on the first day.

#### The second real test

- In 1993 I began my doctoral research at Cranfield University.
- The Trt was fundamental to this whole process, firstly laying out the overall structure of the research, secondly the analysis of the data and finally the writing up of the thesis ready for submission.

# The research project ctd

- So, once I knew what the research process
  was going to address I started to consider the
  Trt for data capture, the Trt for data analysis,
  the Trt for writing up the thesis and then.....
- Writing up the whole thing as a book which came out in 2001 entitled "Unconstrained Organisations".

# Using the Trt to write

Understanding that there is an inherent structure to any writing but especially for a thesis

#### Using the Trt to write

- Eli used Trts to write and one day in New Haven he gave me the Trt he used to write his books.
- I was fascinated, not so much about the structure he used to write but the fact that I could use this tool to ensure that my thesis followed a robust argument.

### Writing the Thesis Trt

- Eli was running an Odyssey programme in New Haven so I took my daughter to the USA to attend, and a whole load of flip chart paper and post-its.
- Then I started using the structure of the Trt to build up, chapter by chapter, the logical structure of the thesis.
- I had already completed an outline using the Prt so there was already something to build on.
- Over the next three days I worked on the Trt, completed it and took it back to the UK to type up.

## Completing the job

- One of the great advantages of using the Trt to write was that I no longer had to write in the actual sequence of a thesis as I had done with my Masters.
- I could now write out of sequence and work on those parts which I could easily make progress with and come back to the more difficult when I had had more time to think about what I wanted to say for each action item on the left hand side of the Trt whilst still complying with the central and right hand column.

# Another example from around this time

- Oded, David and myself went to Bratislava in Slovakia to try to introduce the TOC/TP to that country.
- The night before the meeting we discussed how we might do it.
- I then woke up during the night, thanks to a pigeon, and wrote a Trt which I then shared the following morning – once shared we actually followed the tree with success (check out the Hebrew for pigeon!)

# A final thought about using the Trt to write

- Once you begin to see the logic that good writing requires you soon find there are a number of things you have difficulty doing which you had never experienced before!
  - Reading newspapers most of what you read is simply illogical once you understand the importance of a robust process with which to write.
  - Watching many TV programmes purporting to be drama many contain illogical leaps that prevent watching the programme any further.
  - Be careful knowing the logical structure that is the Trt can seriously damage the papers you read, the books you read (particularly fiction) and the TV dramas that you watch.

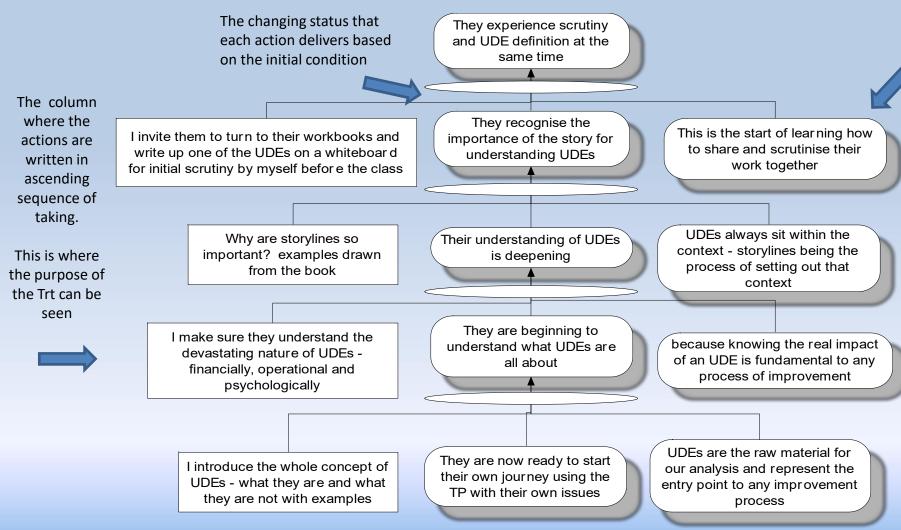
## Introducing the structure I use

There is real inherent simplicity in this way of constructing the Trt

## The primary structure of the Trt

- This is the only structure you need to know.
- I know there are other structures being offered but they are seen as just too difficult to use and lack the inherent simplicity of Eli's original structure.

#### An example from my teaching the TP



The column where the reason for taking the action on the same line are written

This is where the meaning of the Trt can be seen

# So if we examine my example

- As I take each action I can check if the next statement on the central column has been achieved, if it has then I know that the action was completed correctly and the outcome I wanted achieved.
- If not then I clearly need to change the action which I can do. What I cannot change are the other two columns – ever.

#### **Transition Tree Webinar explanation** So let's look at 1. state the intended goal of the Trt - the changed state you hope to achieve if you complete all the actions correctly the structure As we take the last action so, assuming this last change statement has on the tree we should now been achieved through the sequence of actions on theft hand column we should now Why 7 have high confidence that the expected outcome is expect to see the achievement of the goal about to be achieved statement above Be careful not to jump up the Equally, the reasons for taking Note here that the statements in the central column central column from the current the action do not change with are not up for change as they represent our the movement through the Trt layer to the next. Complete each Action 4 knowledge about the causality connection between so they too are not for the starting point and the end point - so no changes changing either - they remain layer before moving up the Trt as here are allowed as a point of discipline for the you may fall into the trap of too whole process big a leap in terms of change which then makes determining Once more check to see if the next the respective action statement changed state has been achieved and Action 3 Why 3 either continue to the next action or repeat difficult. the corrections necessary as before This is the second action but it cannot begin until So if I have completed the action This second action is the expected change has indeed been achieved, if statement below, what changes will totally dependent on the Next layer it has not then the previous action is not vet have taken place on this column achievement of the first complete - so either complete it, or modify it, or the central spine of the Trt change it for another action that does lead to the expected changed state 4. then This is where you explain the What is the first action 2. This is the starting point for reasons behind the chosen construction but this depends partly Starting layer you are going to take? starting position and remember How do you intend to on the goal statement but primarily David Ruelle sensitive start? where you are at the beginning dependence on initial condition 20 22/02/2019 2. and we take this action 1. If we have this 3. because Ted Hutchin

#### Some reflections on Trt

- The simple method of construction with the repeating set of three boxes from the bottom of the page to the top is the only way to create this level of knowledge.
- The starting position of the central column must satisfy recognise the key principle of David Ruelle within the context of chaos theory – sensitive dependence on initial condition – ignore this at your peril.

#### So, how does it work?

- Three columns in the tree
  - Central column is where we determine the changes we are seeking to achieve through the completion of the relevant task.
  - The action statements are all in the left hand column these are the actions I am about to take, or write, which takes the student, or the reader, from the starting position to the end point.
  - The reason why I am taking this particular action goes into the right hand column – this is where I have to make the logical connect between the action I am taking, the starting point and the expected outcome of that action are made clear.

### What happens if?

- Some times people tell me that they struggle with Trts that split into two branches.
- But no Trt has two branches!
- If you discover that there is a split point then, take
  the Tree up to the split point and consider that
  one Trt which then feeds the two branches, each
  of which is a separate tree, or produce two trees
  that take the common as the starting point for
  each added to which is the respective branch.

#### So what conclusions can I come to?

- When I first met Eli in 1987 little did I know the impact he, and those he gathered around him, would have on my life.
- From working all around the globe, meeting so many fascinating people, in so many interesting companies; such a rich experience that I can scarcely take it in.
- But I also learned that using the TOC/TP and teaching the TOC/TP were not the same; and that some people who thought they could teach TP found it rather more difficult than they imagined it would be.

### My primary uses

- Throughout my career I have used TOC/TP/Trt most of the time:
  - Teaching plans for both TOC and lecturing at both Cranfield and Nottingham universities
  - All my training using the DBR simulators and games developed for CCPM
  - Writing books
  - Writing blogs
  - Writing essays
  - Writing this webinar

#### Some more uses!

- Sales calls are good for using Trts:
  - Kevin Fox wrote a piece back in 1992 and the Trt was so clear, indeed so good that I used it, internalized it even to the extent that one or two within the UK team at the time were angry that I could not share it.
  - Robert Bolton even came from Australia to help the UK team as he came with me on a number of sales calls.
  - SPIN selling is a simple Trt and again I simply integrated it with my existing Trt – became ever more powerful.

### Some thoughts about actions

- Can actions ever be too big?
  - Yes, often it is better to use small steps which allow for smaller changed states.
- Can you ever skip actions?
  - Rarely but in sales Trts perhaps more often especially if the person you are selling to jumps straight to the BUY point!
- Can actions have nested loops?
  - Yes, any action may of itself contain a number of smaller steps which it is better to verbalise than leave just as one, bigger, action statement.
- Can actions have more than one version?
  - Yes, this is what we did with the JP all those years ago and with the MSW teaching programme but it is essential to capture all the versions as this builds up the body of knowledge for the execution of the Trt itself.

#### Some more uses ctd

- Project plans are good for using Trt, that way the various action items can be properly identified and the logical connections made and all within the Prt that are the summary tasks — I always use PERT for the construction of project plans — again PERT itself is a form of Trt.
- Now I can produce all manner of templates within the field I am working:
  - Civil Engineering, Railway Engineering, High Tech, New Product Development and so on.

#### Yet more uses!!

- Capturing what Eli was saying at conferences easy to capture his Trt – but also there were times when he would stray, deal with something else, and then come straight back to where he had left the Trt!!
- Attending a recent TOC conference with Oded, capturing what was being said by the various speakers and noting their lack of Trt in the presentation and how disjointed that sounded!
- Then there are scripts, storyboards and so on, all Trt!

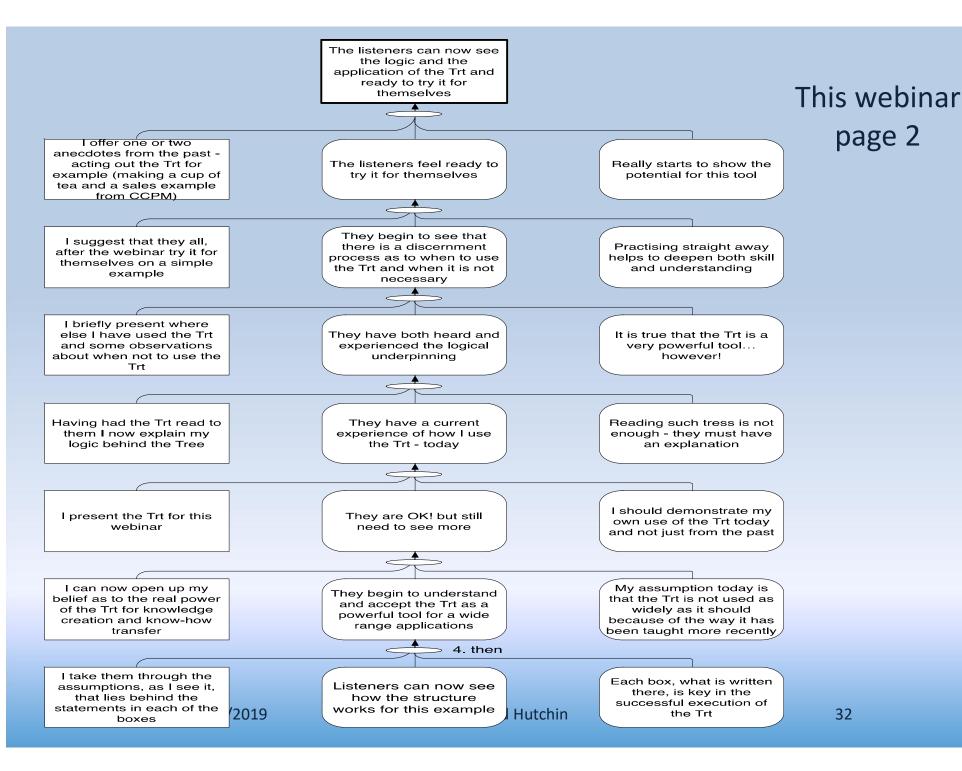
#### So....

- If you already know how to do something then JUST DO IT!
- Trts are used when you don't know the best way, or indeed any way, to achieve an objective, ambitious or otherwise.
  - If you believe that the Trt does not work for you please don't teach it or even think you can replace it – you can't.
- Of course the Trt is disciplined but then so is neuro-surgery. SO go to someone who has put in the hours of practice, hours of exploration, hours of reflection, hours of being the student and who has learned the discipline of the Trt and you will not be disappointed.
- This is a combination of both the Socratic and Talmudic approaches to understanding.
- And now I am still using what Eli taught me all those years ago but now following in his father's footsteps in studying scripture, studying the way of contemplation and then teaching others.
- The legacy never ends!

Ted can now retire! Ted reflects on the This just might be his webinar and hopes that Ted is once more chilled legacy, as it was given to those who listened will and looking forward to his him by Eli, Oded and so actually start to use this next adventure! many more most powerful of TP tools (part of his personal Frt) Ted, having no more All those who sent in a Answering questions questions, makes a new question have received an requires a treat such as cup of tea and finds some answer Dark Chocolate Dark Chocolate to eat Oded now sends out the responses to all those Oded receives all my This is the communication concerned or does so responses to the pathway through the TOC questions he has sent me Practitioners web site I answer each question in I am ready to sit with each This is what I have turn and send them back question received and committed to do to Oded respond Ted is now relaxed, After any such webinar Questions arrive that chilling out and awaiting there are questions that require a response questions through the should be properly addressed web! Having answered questions at the end, they can now leave the Ted is both thirsty and I now go and have a cup webinar knowing I will respond hungry due to the of tea and a biscuit to questions they may have exertions of the webinar later > 4 then The listeners can now see I end the webinar by the logic and the They will have questions inviting questions now or application of the Trt and related to the webinar and by sending them in for me ready to try it for these must be answered to respond to themselves 1. If we have this 2. and we take this action 3. because

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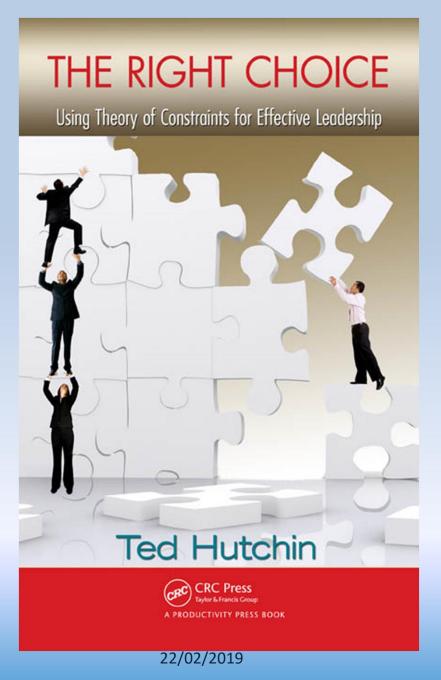
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Listeners can now see how the structure works for this example This webinar Understanding how the I can now take them The listeners are now structure works is through the structure of fundamental to successful ready to consider the the Trt as used for the use (where the real power process in more depth research (writing plus) lies) I continue with the second This was my attempt to The listeners are now major example of my use really test this process witnessing the expansion of the Trt - my doctoral (Trt) and check whether it of application for the Trt research was robust or not I take them through one of The listeners can now see It is easy to restrict the the examples where I how the Trt was applications of a tool that started to realise the has so many possible scrutinised at that time almost limitless regularly applications application of the Trt I discuss the reflections It is important to that took place at the time Listeners now know the continually scrutinise and about what I/we learned the impact the Trt had on then reflect on the TP about using the Trt for me/us tools we are using teaching Listeners now know why I This was where I really I begin by talking about the first use of the Trt - the first am so keen to talk about started to understand the Jonah Programme I taught power of the Trt the Trt The listeners now know I begin by explaining why The listeners need to who I am and why I am I have offered to do this know why I am doing this able to talk about this webinar on the Trt now subject 4. then Brief introduction to me People are signed up and Not everyone knows who and my TOC/TP listening to the webinar I am and my TOC history background lutchin

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#### THE RIGHT CHOICE: Using Theory of Constraints for Effective Leadership

by Dr Ted Hutchin

Effective leadership is probably the most pressing requirement in all manner of organisations today; managers can maintain the status quo but leaders challenge assumptions and create new opportunities. This is a book for anyone seeking to develop their leadership skills and who wants to establish a team - a 'flight crew' - that is capable of leading throughout the whole of the organisation.

The book is based on over ten years of work in leading and implementing change. It also draws on many hours of coaching organisation leaders in order to help them create a better balance within their own life and thus become more effective in leading. This book introduces a powerful technique for helping leaders not only to make better choices, but also to develop leaders for the future.

Case studies are central to the book; they show what people have actually done, what they have struggled with, and the importance of understanding causal relationships. The development of strong relationships within a team or organisation is a crucial part of good leadership. The book shows how conflicts can be resolved and relationships restored through the use of the tools described, in particular the "cloud" technique from the Theory of Constraints Thinking Processes.

The use of the 'coaching cycle' and the 'coaching quadrant' provide a strong platform/model for any leader wishing to formulate the right strategy for taking the organisation or team forward. This is all about bringing people with you, painting the compelling picture that engages with people and allows them to choose to engage rather than be forced to do so.