

## In This Issue

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# Developing a Global Perspective?

The recent months have shown that those companies who can truly focus on global issues rather than the usual fascination with local issues are succeeding far better than might have been expected. Of course by global I mean the global measurements of any for-profit organisation rather than the local measurements such as efficiencies and cost allocations.

But there is a new dimension to the use of the word global. Recent clients have demonstrated the urgent need for many companies today to have a genuine global partnership understanding with their supply chain, both backward and forward. For some time now the focus of the TOC community has been to recognise and understand the true nature of inter-company relationships where the global of any one company is simply the local of the entire supply chain.

This is not new of course, and anyone familiar with the Insight programme or any of Dr Goldratt's recent pronouncements will be only too aware of the need to challenge the way we do business in the context of the global supply chain. My own book "Constraint Management in Manufacturing" argued for the same understanding of the global supply chain.

Only this last month the regular newsletter from Prof Dan Jones of the Lean Enterprise Academy highlighted the same concerns. He writes: *"In retailing, the advent of home shopping revealed that at that time supply chains could only fulfil exact customer orders about 60% of the time. While suppliers comfort themselves in thinking their service levels are close to 98% this turns out to be for orders they accepted, not what the retailers asked for! From the retailers perspective the suppliers' ability to supply what the retailer wanted is often closer to 70%. This hidden gap can only be closed by rapid replenishment supply chains where suppliers make, ship and sell in line with demand within days and not months. A similar performance gap exists in every industry, if we look closely enough."*

I am indeed grateful that Dan has now recognised what we in the TOC community have known for some time, and once more the importance of linking both Lean and TOC is made ever more clear.

## A Recent Case Study

Of course knowing that there is a problem is only a starting point, and although many people now recognise the problem they often fall into the trap of developing solutions before any real analysis of the core problem has been completed. We recently undertook an evaluation of the provision of oil and lubrication to a workshop that was involved in the MRO (Maintain and Repair) environment.



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Data was collected from a number of key managers and stakeholders in the supply and management of fuels and oils within the workshop. In each case they were asked to describe their key roles and responsibilities and to highlight those issues that gave them real problems each and every day. This led to the creation of the list of Undesirable Effects (UDEs) below which then formed the basis for the initial analysis:

- There are often stock outs
- Often material goes past the "use by" date
- Often material is supplied after the "use by" date
- The central stores location is slow to respond to urgent demand
- There is constant expediting
- Often stock arrives late
- The flow is not smooth from supply to point of use (fractured flow with many different people/resources involved)

This is not a new list as we could have gained such a list from many other environments where the supply to the Point of Consumption (POC) is critical.

The basic flow was as follows: As demand is placed upon the system each stage aggregates the demand into a larger amount, usually for cost implications. Thus a single Point of Consumption (POC) will load the central replenishment system within the individual workshop, which then moves the aggregate demand back through the system all the way to the OEM.

We started to examine the situation through the use of the cloud technique, a core analytical tool of the TOC Thinking Processes.

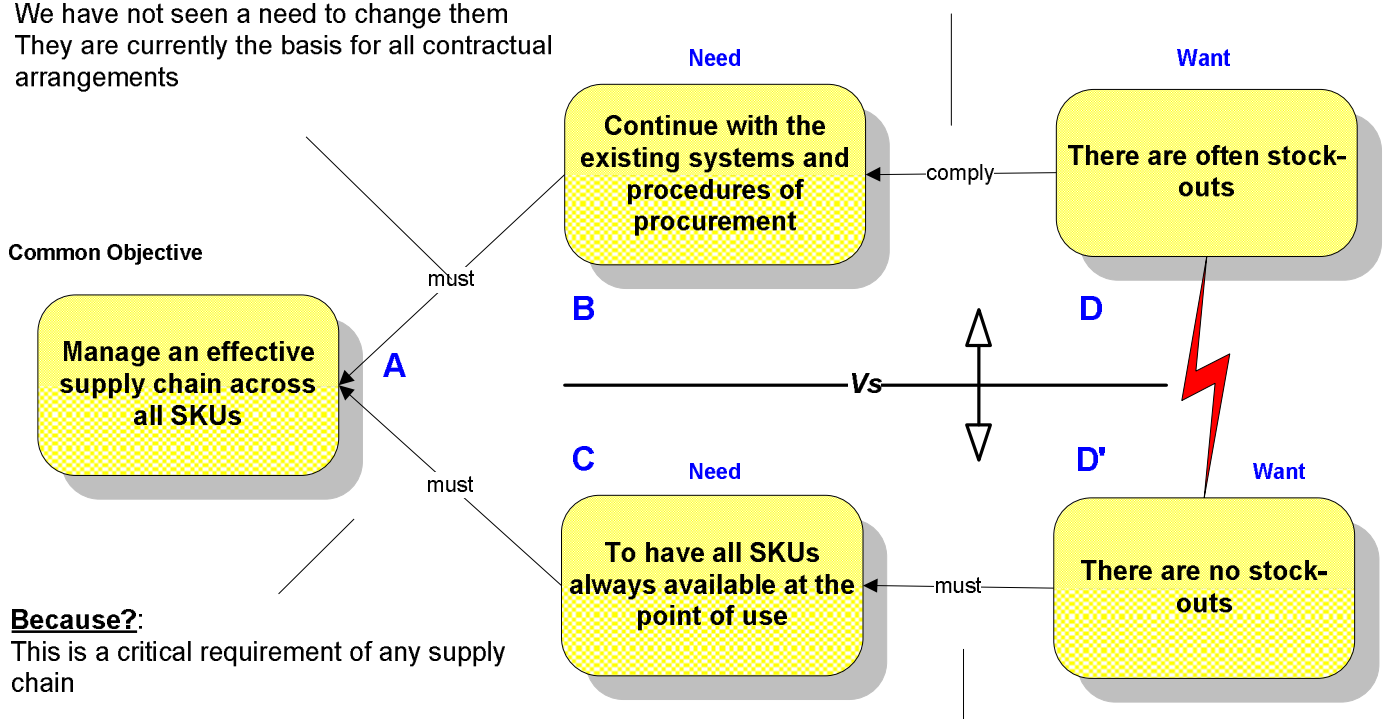
### UDE 1

**Because?:**

These are the current rules that have to be followed  
 We have not seen a need to change them  
 They are currently the basis for all contractual arrangements

**Because?:**

There is a mismatch between the level of service provided and that needed  
 The provision of SKUs is managed through the use of min-max calculations  
 Cost of provision is a core measure



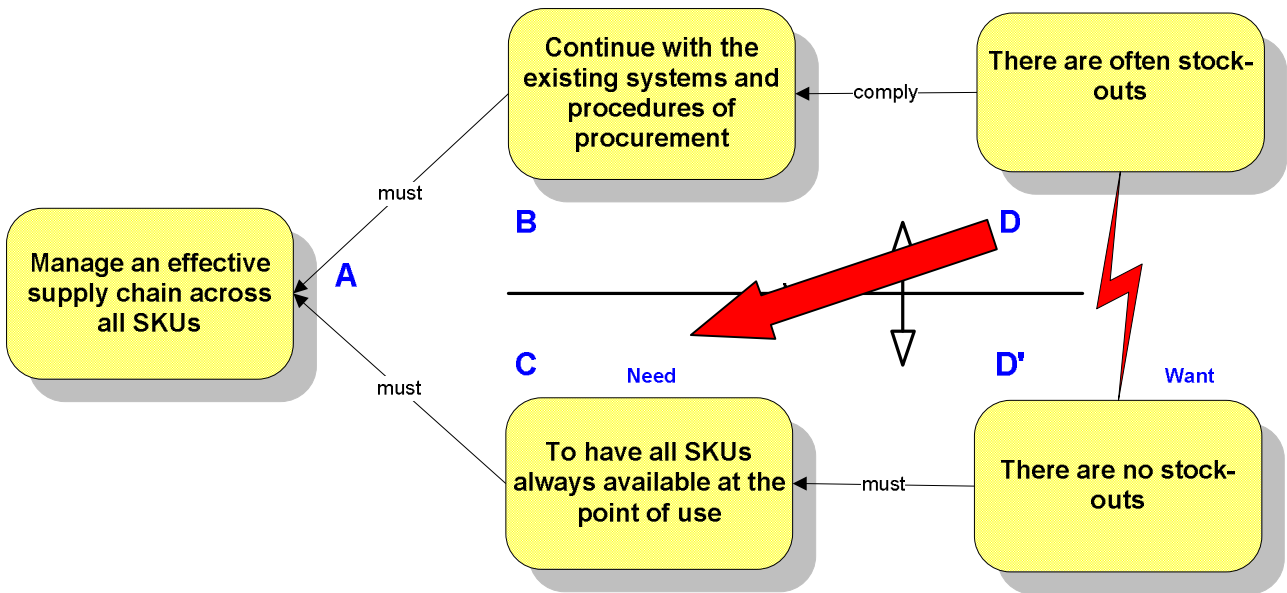
**Because?:**

This is a critical requirement of any supply chain

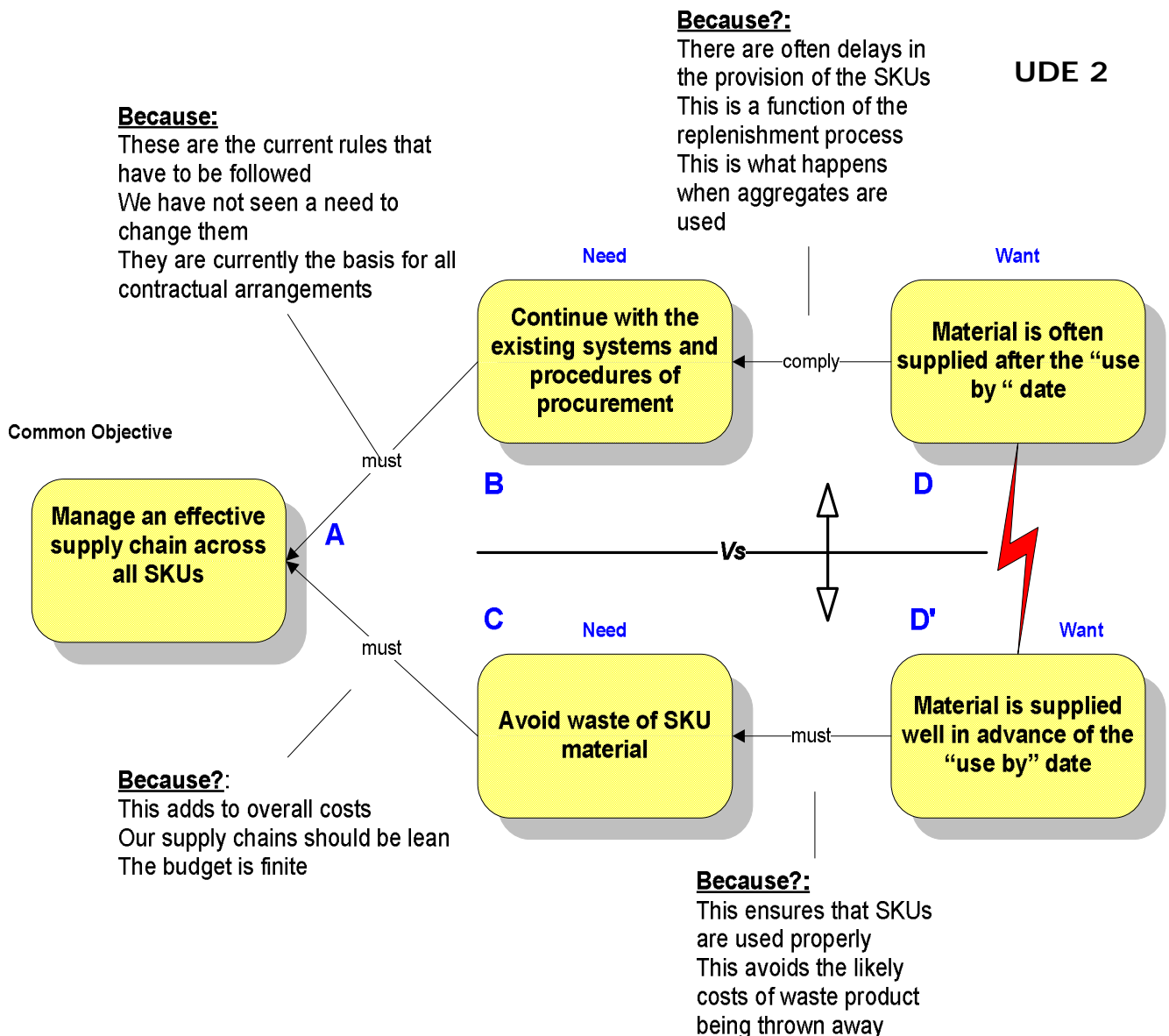
**Because?:**

This has a negative impact on flow through the bay  
 This delays the release of the screen back to the primary user

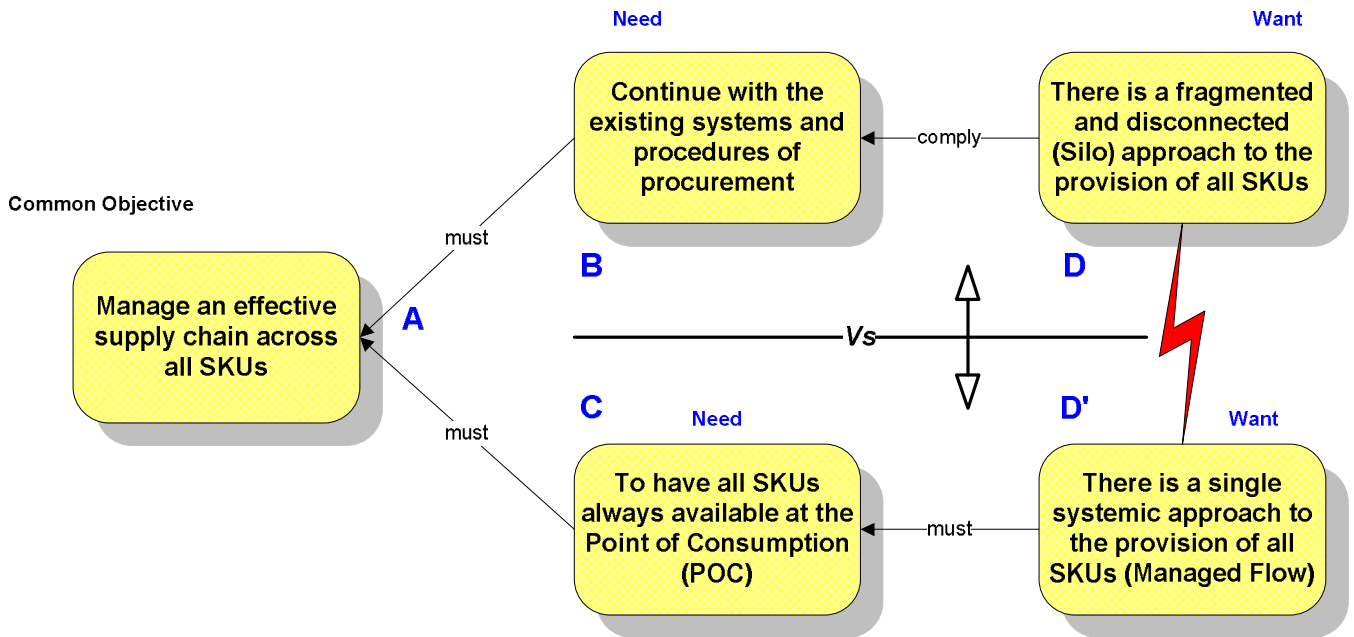
This is not a new discovery as the same result was obtained from a second company in a very different manufacturing environment, this time being supplied from a Chinese manufacturing company, a decision based on moving to a "cheaper" supply base.



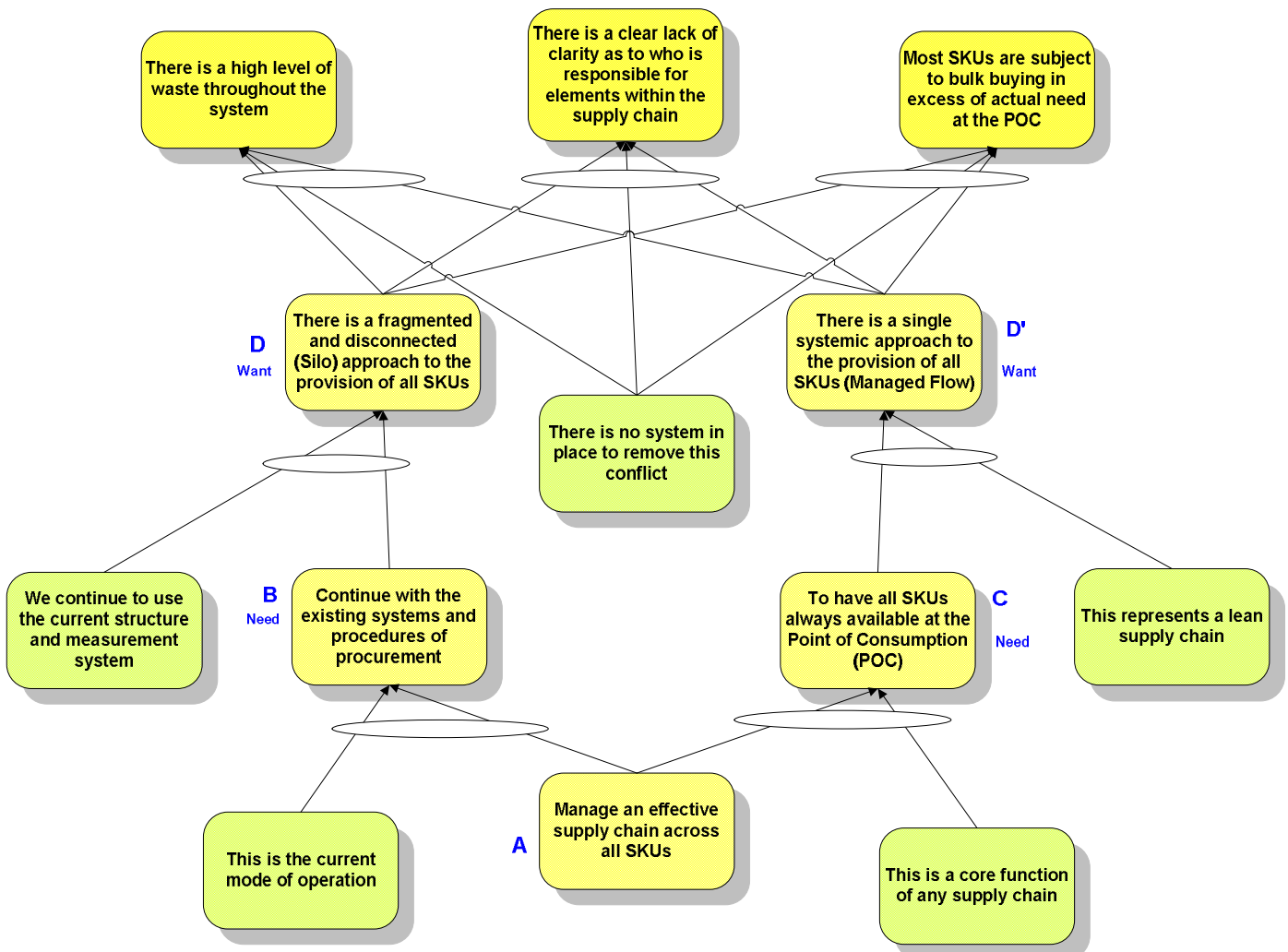
Now if we examine the cross-connection of the UDE to the necessary condition shown in the C box we can see that if the UDE is allowed to continue the necessary condition can never be achieved which in turn means that the goal can never be achieved. Therefore it is essential that we address the existence of the UDE. We then used the same process to analyse a second UDE:



Taking a number of clouds together we can develop a composite cloud as shown below:



This composite cloud, encompassing the analysis of four UDEs was seen as the core driver for much of the behaviours that led to the existence of the range of UDEs that affected not just the primary area under review but many others as well. This then enables us to develop a simple current reality tree which was used as part of the communication to others throughout the supply chain. This is shown below:



So, in this case, the root of the problem lies in the conflict between inability to close the gap between the urgent need to have a single systemic approach to the provision of all SKUs, what we have been calling managed flow, and the current fragmented and disconnected approach that both we, and Dan Jones, have found endemic in many such supply chains. This is coupled with the fact that for most organisations, the dominant measures in use force behaviours that are in conflict with the smooth, and fast, flow throughout the whole of the supply chain. Therefore to suggest that simply using value stream mapping will lead to a solution is simply insufficient, much more has to take place.

A complete review of the supply chain, bringing the key parties together to properly understand how supply chains are supposed to function, is a key feature of moving forward. Applying key TOC applications such as Replenishment and Drum – Buffer – Rope, managed through a rigorous approach to Buffer Management is a sound starting point, as has been recognised by many TOC conferences in recent years.

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## Sales & Marketing in the TOC Approach

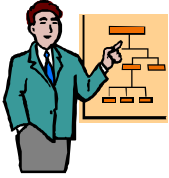
There are many people trying to develop new approaches to sales and marketing, and the people within TOC are no different. Indeed, in the early years it was essential to develop new methods of marketing what was seen as a revolutionary approach. At the same time Neil Rackham was developing what is now widely used as the SPIN approach:

**Situational questions**  
**Problematical questions**  
**Implied Needs questions**  
**Needs Payoff**

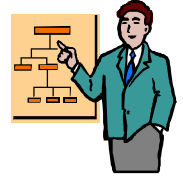
The structure led to the ability to superimpose TOC Thinking Process tools, such as Current Reality Tree (CRT) to aid the situational questions and the problematic questions. Indeed if anyone has been able to construct prior to the sales meeting the generic CRT of the potential client's environment then the task of selling is much improved.

Those of us familiar with Drum – Buffer – Rope (DBR) will also be familiar with the CRT of production. Knowing that means every question we ask is simply confirmation of a logical construct we know must exist. Hence the ease with which we are able to ask questions to which we already know the answer, and can then draw conclusions that the potential client finds both revealing, and remarkable. Revealing in the sense that he/she is learning something they did not fully appreciate before, and remarkable, that we who have never been inside their organisation can describe it so well! So we are able to move through the sequence identified by Rackham quite easily, and lead the potential client to the implied needs and needs payoff rather quickly. As we paint the picture of the solution, they are making connections that we might not make, and can see more benefits than we could ever imagine. Of course those of you who are familiar with Justin Roff-Marsh and the work of Rami Goldratt will recognise much of what I am saying.

There is one further aspect to take into consideration with applying TOC to Sales & Marketing: if we address the first constraint, where would the constraint move to? In other words keep in mind not just the first constraint that must be addressed, but also the second and even the third. If we are successful in addressing the first constraint then it must move, but to where, and if we address that then there is a third, and where is that? And if we are really smart, we need to consider where we would like to design our constraint *into* our system, one that we can control, one that we can easily elevate as and when required by the buffer management: then we are truly moving forward.



## Speaker Programme Engagements



~ On 20th January 2010, Ted Hutchin will be undertaking an evening presentation for IMechE/IET in Sutton Coldfield on the topic of **Change Management and Effective Leadership**.

Please visit the IMechE website for further information and booking details:  
<http://nearyou.imeche.org.uk/events/event.htm?eID=3427>

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~ On 23rd February 2010, Ted will be speaking for the Chartered Institute of Management Accountants (CIMA) in Coventry on the topic of **Measurements and Making Money: the application of Throughput Accounting for decision-making**.

Further information and booking details can be found on the CIMA website:  
[http://www1.cimaglobal.com/cps/rde/xchg/SID-0AE7C4D1-0B153C89/live/root.xsl/events\\_detail.htm?filename=events\\_36308.XML](http://www1.cimaglobal.com/cps/rde/xchg/SID-0AE7C4D1-0B153C89/live/root.xsl/events_detail.htm?filename=events_36308.XML)

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~ Ted Hutchin will once again address the topic of **Change Management via Effective Leadership**, this time on 23rd March 2010 for the Coventry branch of the Chartered Management Institute (CMI).

Please visit the CMI website for further information and booking details:  
[http://www.managers.org.uk/content\\_1.aspx?id=10:697&id=10:635&id=10:598&id=10:579&id=10:15&id=10:4](http://www.managers.org.uk/content_1.aspx?id=10:697&id=10:635&id=10:598&id=10:579&id=10:15&id=10:4)

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~ Ted has been engaged to present morning and afternoon workshops at IMechE's **Essential Management Skills (EMS) Conference** on 23rd April 2010. Ted's topic will be **Lean Thinking** - from a TOC perspective, naturally!

Further information about the 4-day Conference can be found here:  
<http://events.imeche.org/EventView.aspx?EventID=637>

If you are interested in booking Ted to speak at one of your own events, please email Diane Jeary at [dianej@toc-lean.com](mailto:dianej@toc-lean.com), Tel. 01664 520860.  
Visit our website for more details: [www.toc-lean.com/Evening\\_Presentations.htm](http://www.toc-lean.com/Evening_Presentations.htm)

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