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New Developments

A Revitalised Web Site from I & J Munn Ltd

February saw an invigorated web site for I & J Munn with some amendments also appearing on the TOC-Lean Institute site. This reflects the changing focus of our work, with more for service organisations and the start of work for not-for-profit organisations. It also highlights the impact that our focus on organisational behaviour is having, whether it is at the personal level, team level or indeed that of the whole organisation. Please take some time to visit the site - we would welcome any feedback you might like to make; the address is www.constraintmanagement.co.uk and we look forward to hearing from you.

Why Combine Lean Manufacturing with Theory of Constraints (TOC) Techniques?

For many years now, 'Lean' has been a watchword of the manufacturing industry worldwide. Lean has been defined as 'a manufacturing philosophy that shortens the timeline between customer order and shipment by eliminating waste' and there is no doubt that the rigorous and continuous application of Lean principles can result in benefits such as reduced lead time, lower inventory and increased capacity utilisation.

However, because Lean's ultimate goal is 'perfection' throughout the entire organisation, many companies find implementation somewhat daunting – if everything must be improved, where do they start? Conflicts can arise when every different department thinks it should be the priority.

The Theory of Constraints, however, provides a cast-iron methodology for identifying the priority area and focusing improvements where they will have the most impact on the company as a whole.

Prof. Dan Jones in his recent newsletter makes this point: "We are all guilty of one of the greatest sins with lean – not having the patience to really understand the problem we are trying to solve and then jumping to a solution that may or may not be the right way to solve this problem. This results in lots of Muda – wasted effort that does not really make a difference, neither to your organisation nor to your consumers". Indeed in a previous newsletter he rightly advocates NOT using Lean everywhere but making sure that it is used in the place where it will have the greatest impact – the constraint.

This is why we, within the TOC-Lean approach, are arguing that the application of the focusing power of TOC substantially enhances the power



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of Lean to eradicate problems and issues. It is not as if the two approaches are in conflict for there are key areas of overlap:

Some of the fundamental similarities between TOC and Lean:

- Both Promote measures to protect due date performance, using a 'pull' system.
- Both techniques recognize that improvement must be continuous and encompass the *whole* company.
- The process flow/value stream must be accurately mapped at the start of the programme.
- Improvements must enhance the value of the product from the *customer's* viewpoint.

However, the techniques diverge in a number of key areas, and it can be seen that TOC has several advantages:

- Whereas Lean sees an organisation as a collection of parts which can be improved individually, TOC focuses on that one area (the 'constraint') which, when improved, will have the greatest *holistic* benefit. Improvements elsewhere are then made, but the priority at all times remains the constraint resource.
- Lean aims to reduce lead time and inventory and thus costs by eliminating waste; TOC aims to reduce lead time and inventory in order to gain capacity, increase *Throughput* (i.e. the rate at which money is generated through the sale of products) and provide a competitive edge - thus enabling the business to grow.
- Lean promotes maximum resource efficiency, whilst TOC promotes maximum resource *flexibility*.
- Lean strives to eliminate inventory, idle capacity and variability; TOC recognizes that in practice, variability can never be completely eliminated - but its effects can be protected against by the use of *time* buffers, whilst protective capacity and inventory can safeguard Throughput against variability of supply.

Thus it is evident that TOC methodology can provide Lean techniques with a high degree of focus which is both in tune with reality and achievable on a practical level, effectively bridging the knowledge gap that can exist between Lean *in theory* and Lean *in practice*. Because the bottom line benefits to be gained from increasing Throughput are greater than those likely to be realised via Lean waste/cost reduction alone, TOC provides Lean Manufacturing with a forward-thinking framework which not only directs improvement efforts where they will be most beneficial, but which is also an excellent platform for future growth.

The Implementation Approach of TOC-Lean follows the path described below:

- Identification of the core problem/s through robust analysis, e.g. value stream mapping and the collection of appropriate and accurate data.
- In-depth training in combined TOC/Lean principles.
- Use of collected data to plan implementation stages.
- Implementation of TOC-Lean principles and associated improvement techniques, e.g. 5S, Six sigma.
- Mentoring and ongoing support to forestall/overcome any obstacles that may hinder implementation.
- Mentoring and sustained support to ensure that continuous improvement can be sustained.

Currently we are developing this approach within both the car body repair industry and the Health Service – areas both reliant on fast and effective flow in order to meet the prime measures used within their respective environments.

What robs us of fast (value) flow?

In our work with many different types of companies where flow is critical to success we have come across one very interesting phenomenon – *capacity thieves*. As one of the key aspects of Lean and TOC, flow is where we focus our attention. If organisations wish to win new markets and retain existing customers, then being able to deliver right first time, every time and on-time is critical. At the same time there is continuous pressure to reduce the overall lead time without jeopardising delivery performance, so a fast flow must be maintained too. Hence our interest in what we have called a capacity thief – defined as ‘that which robs flow of capacity and thus slows, or even stops, flow in its tracks’. The three capacity thieves that we deal with most often are:

- Breakdowns**
- Set-ups**
- Defects**

In order to address these thieves we have been developing programmes to remove the impact they have on fast flow.

Breakdowns are addressed through the application of Production Led Maintenance (PLM), or what used to be known as Total Productive Maintenance. Here we use a combination of training and in-house activity to create an internal PLM specialist. Through the provision of simple spreadsheets to capture and analyse information it is possible to keep clear accurate records which provide critical information such as Mean Time Between Failure (MTBF) and Mean Time To Repair (MTTR) which enable those responsible to see trends in machine capability, understand when processes are going out of statistical control and take the necessary action.

Set-Ups and the impact they have on flow are addressed through the application of the SMED tools and techniques coupled with a clear understanding of the distinction between internal and external set-up time. Through the use of video it is possible to gain a clear picture of what is happening in the lifetime of a changeover and start to address the timeliness of the set-up.

Defects are addressed through a combination of tools and techniques such as kaizen, DMAIC and the approach pioneered by Deming. These involve statistical process control and other tools for capturing data and then using it to analyse the issues through cause and effect and develop solutions that ensure the causes are no longer effective.

We have been able to develop training programmes to address issues created by capacity thieves and thus remove them, leading to fast and effective flow.

TOCICO Examinations—Summer 2008

The next examinations will also be held at our training centre in Melton Mowbray on the following dates:

| | |
|-----------------------------------|-----------|
| Fundamentals exam..... | 14th July |
| Supply Chain Logistics exam | 15th July |
| Thinking Process exam..... | 16th July |
| Project Management exam..... | 17th July |
| Financial Management exam | 18th July |

For more information contact Diane Jeary in our training office on +44 (0)1664 502860 or e-mail dianej@toc-lean.com These dates, and further information, can also be found on our web site and the TOCICO web site: www.tocico.org

Introductory Seminars

The dates for our next set of seminars are as follows:

| | |
|---|------------------------------|
| The Goal Breakfast Briefing..... | 12th May, 7.30am – 9.30am |
| Critical Chain Project Management | 12th May, 1.30pm – 4.30pm |
| Operations Management..... | 13th May, 9.00am – 12.30pm |
| Financial Management..... | 13th May, 1.30pm – 4.30pm |
| Thinking for Change—Organisational Focus .. | 14th May, 9.00am – 12.30pm |
| Thinking for Change—Team Focus | 14th May, 1.30pm – 4.30pm |
| Sales & Marketing..... | 15th May, 9.00am – 12.30pm |
| Supply Chain Management..... | 15th May, 1.30pm – 4.30pm |
| Lean-Flow Car Bodyshop Solution - FREE Introductory Workshop: | |
| | 12th March, 10.30am—2.00pm |
| | 13th March, 10.30am—2.00pm |
| | 22nd April, 10.30am - 2.00pm |

For more details contact the training office on 01664 502860 or email dianej@toc-lean.com

Thinking For Change – Organisational Focus Workshop

After the successful January launch of our first Organisational Focus Workshop, we will be running four further blocks of Workshops throughout 2008 - please see below for dates. The programme, of ten days duration, is aimed at those people in any organisation who are charged with facilitating change. It is designed to enable those attending to release the potential within their organisation and to address the problems and issues which are preventing the business from achieving sustainable profits growth, from creating sustainable customer relations and from ensuring a real sense of commitment and responsibility within the workforce. The programme achieves this by answering four key questions:

What to change? - What is it that must change within the organisation if we are to move forward against the goal?

What to change to? - It is all very well being able to articulate the core issues holding the business back, but it is also necessary to construct the solution.

How to achieve the changes necessary? - Once we know what it is we are aiming for, we can construct the roadmap – the implementation plan that achieves the objectives.

How to maintain the change process? - This is accomplished by learning the tools and techniques of the TOC approach so that those attending can do it for themselves when they return to their organisation.

Each Workshop comprises 2 days per week for 5 weeks:

March start:

10th/11th March
17th/18th March
31st March/1st April
7th/8th April
14th/15th April

June start:

2nd/3rd June
9th/10th June
16th/17th June
23rd/24th June
30th June/1st July

October start:

6th/7th October
13th/14th October
20th/21st October
27th/28th October
3rd/4th November

November start:

17th/18th November
24th/25th November
1st/2nd December
8th/9th December
15th/16th December

Thinking for change - Team Focus workshop

Our Team Focus Workshop concentrates on developing the group into a properly functioning team that performs to the highest level, and centres around the tactical aspects of managing. Issues such as team conflicts, achieving team objectives, developing logical rules and procedures and enhancing delegation/supervisory skills are dealt with as the following questions are addressed:

What is it that has to change in my team?

What is it that I am leading the change to?

How do I move the team from where it is to where I want it to be?

How do I maintain progress within the team?

Each Workshop comprises one day per week for five consecutive weeks, and is aimed at team managers whose teams are responsible for leading change within the business and who wish to maximise the potential of their team.

Our 2008 programme is as follows:

| May start: | October start: | November start: |
|------------|----------------|-----------------|
| 22nd May | 8th October | 19th November |
| 29th May | 15th October | 26th November |
| 5th June | 22nd October | 3rd December |
| 12th June | 29th October | 10th December |
| 19th June | 5th November | 17th December |

If you wish to book a place on any of the Organisational Focus or Team Focus Workshops, please contact us on 01664 502860 or email dianej@toc-lean.com
