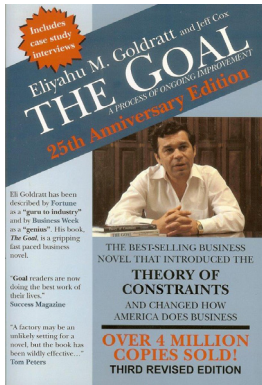


Introducing Lewis Trigger – Theory of Constraints



Many of you may have read the business novel, "The Goal", written by Eliyahu Goldratt in 1984. Memories of the learnings from boy scout hike, Herbie and the wisdom of Jonah, that led to Alex Rogo saving his manufacturing plant from closure, may come

flooding back to you as you were first introduced to the concepts of the Theory of Constraints, that was developed by Goldratt.

For those of you who haven't read "The Goal" and are not sure what Theory of Constraints is, the following provides a brief overview.

Theory of Constraints

The central insight of Theory of Constraints (TOC) is that at any time a single constraint or pace-maker determines the capacity of any system which seeks to maximise performance.

The constraint may be inside or outside the enterprise. Lost time at a constraint cannot be recovered. The constraint must be identified. Non-constraints must supply the constraint with quality, on-time inputs, protect it from interruptions and unnecessary tasks, and protect the throughput of the constraint from damage. Enterprises can improve their bottom line only by better managing the constraint. Cost cutting and improvement activities which do not protect the constraint may reduce performance.

Even though TOC is a powerful universal management tool that is applicable to any system, the most obvious applications and successes are in the manufacturing / maintenance environment. Hence, Constraints Management, the application of Theory of Constraints, complements TPM & Lean (TPM³) implementation in the Australasian environment, by providing focus and early results.

While Goldratt is perhaps best known for internationally acclaimed management bestseller, "The Goal", he went on to publish a number of other books including:

- *The Race* (1986);
- *The Haystack Syndrome* (1990);
- *What is this thing called Theory of Constraints* (1990);
- *It's Not Luck* (1994);
- *Critical Chain* (1997);
- *Necessary But Not Sufficient* (2000); and
- *The Choice* (2008).

Unfortunately Eliyahu Goldratt passed away in 2011, however, over the years he has directly taught a number of students the finer points of the Theory of Constraints. One of those students was Lewis Trigger from Lewis Trigger – Consultants and Management Ltd.

Introducing Lewis Trigger

Lewis is a recognised international expert in Theory of Constraints. An Australian born, Israeli resident, Lewis is an industrial engineer, having graduated from the University of Queensland. He has over 20 years experience in applying Theory of Constraints within the Israeli's military technology and logistics systems, and within government and industry. In addition to his consulting work, Lewis also teaches management courses in a number of Israeli colleges, including the prestigious MBA program at the University of Tel Aviv.

Figure 1: Lewis Trigger



Lewis has been exporting his expertise to Australia for the last 10 years, presenting his workshops to a wide variety of leading Australian companies and organisations. The list of organisations includes:

- Visy;
- Holden;
- The Adelaide Health Service;
- Spotlight Retail Chain;
- Dairy Farmers (NSW);
- The Australian Submarine Corporation;
- BAE Systems;
- Thales; and
- Coopers Brewery.

Theory of Constraints Workshop Training

Lewis provides a three day workshop that typically comprises senior management from all functions. The workshops are structured as follows:

Day 1: - The "Building Blocks"

The focus is on improving the system's performance through a powerful methodology of continual process improvement. This methodology is broken down into 7 steps:

- Defining the "Goal" both of the system and it's sub-systems;
- Developing effective performance measures;
- Identifying the constraint (i.e. the "bottleneck");
- Exploiting the constraint (i.e. Take what you've got to get 100% use of the constraint);
- Subordinating to the constraint (i.e. Rearranging other activities to maintain 100% use of the constraint);
- Elevating the constraint (i.e. Innovate to increase the capacity of the constraint to greater than 100%); and
- Identifying the new constraint – a continual improvement loop.

Day 2: - Synchronising Shared Resources

Building on what was learned on day 1, time is spent learning an effective and practical application of resource synchronisation and scheduling, called "Buffer Management", sometimes known as "Drum - Buffer - Rope". The following areas are addressed:

- How should idle capacity be addressed?

- The balanced production line - a vision or a curse?
- The optimum batch size?
- Set up reduction policy?
- Off loading from one resource to another?
- How to reduce inventory build ups? and
- Cost reductions - where and when?

Day 3: - Effective Performance Measures

TOC's set of measurements allow managers to tie local decisions to overall system performance, selecting four key areas of decision making. These are:

- Infrastructure investment;
- Make or buy;
- Inventory build ups; and
- Product mix.

The remainder of the day is devoted to developing an effective implementation plan. The outcome is a realistic implementation plan with tasks, milestones and the delegation of responsibilities.

CTPM Australasia and Lewis Trigger - Consultants and Management Ltd

CTPM Australasia is proud to announce that we have entered an arrangement with Lewis, to assist him with his Theory of Constraints training and consulting activities within Australia as we see Lewis's skills and knowledge as a valuable addition and extension to the services we are able to provide our clients.

Lewis is typically in Australia 3-4 times per year. If you would like to meet Lewis, or arrange a workshop on one of his visits, please contact CTPM Head Office on 02 4226 6184.

When Lewis is in Australia, he also holds public workshops. A list of these dates will be on our website as they are arranged.

For further information please contact:



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