

START HERE, NOW

IN THE PREVIOUS INSTALMENT OF JASON FURNESS AND MICHAEL MCLEAN'S RECENT BOOK MANUFACTURING MONEY, THE AUTHORS DISCUSSED THE FINANCIAL ASPECTS OF STOCK AND EQUIPMENT. IN THIS ISSUE, THEY DESCRIBE SOME DANGERS OF WHICH BUSINESS OWNERS AND MANAGERS HAVE TO BE AWARE ON THEIR WAY UP TO A 'BLACK BELT' IN A MANUFACTURING AND DISTRIBUTION BUSINESS, TO CREATE "A BUSINESS THAT IS TRULY IN CHARGE OF ITS OWN FINANCIAL DESTINY".

So far we have defined what you want as an outcome of the change program; we have looked at how to understand our financial statements and how to use them to assess options. We have looked at the obstacles that lay in our path.

Now we are going to start to look at YOUR business, specifically.

Why your business is like a chain

Within the Theory of Constraints body of work that was developed originating with Eli Goldratt, there is a commonly used metaphor for a business that is referred to as the 'Chain Analogy'. We are going to use that metaphor to help get started.

Think of your business as a series of operations and activities that each form one link in a chain. The work flows from one link into the next where it is processed, and then ultimately, once the work has progressed through all of the links, it is delivered to the customer, and the cash flows back to your company. In a simple, form the work may start out with marketing activities that generate an

enquiry, that leads to a quote, a sale, then an order, moves into production, despatch, invoicing, and finally to receivables.

The financial performance of our business is like the load capacity of our chain. The stronger the chain, the stronger the business.

"The secret of getting ahead is getting started."

Mark Twain

What do we all know about chains? When you increase the load on a chain, any chain, the chain is going to break down at the weakest link.

How to focus your efforts for the fastest and most profitable improvements

As managers we are always being asked to improve the business, so that is what we work on. However, often we are responsible for only a small section of the business, one link in the chain, so that is where we focus our improvement efforts.

Think about our chain again. If we are working on improving a part of the chain that is not the weakest link, we are not going to strengthen the chain as a whole, therefore we will not see great improvement in the overall performance of the business. Investment projects are notorious for under-delivering on paybacks to the overall company bottom line. We show performance improvements in our local areas, but the overall company bottom line does NOT change in a breakthrough fashion.

The invalid assumption we make is that improving performance locally results in improving performance in the global system. Investing to improve performance in anywhere but the weakest link in the chain will not result in the best possible return on investment for your business.

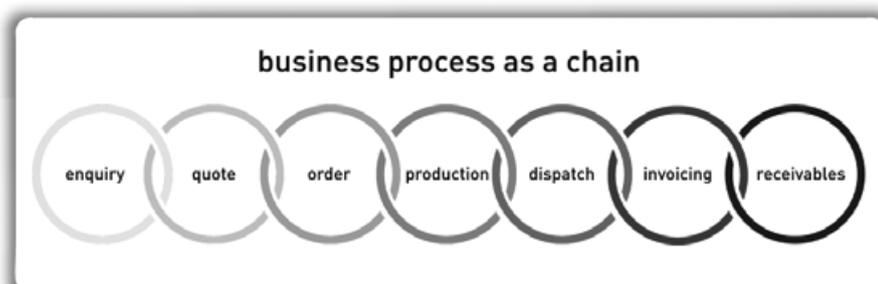
It is a waste of money, and indicative of a poor understanding of what drives cash flow, for any company to undertake a 'company-wide' improvement program. Why would you strengthen all of the links in the chain when it is only the improvement activities on the weakest link that will deliver a solid return on investment?

To achieve the speed and magnitude of results that are required in the rapidly changing and increasingly demanding world of 21st century business, we focus our attention on the weakest link and lift its strength as quickly as we can.

So, where is it, and what do we do when we find it?

The five focusing steps to improvement in any environment

The five focusing steps was also developed as part of the Theory of Constraints. It is a simple and rapid to use tool to begin to help you and your team work out how to begin improving your business.



five focusing steps

1	inertia	eliminate complacency
4	elevate	how to increase capacity
3	subordinate	can we help?
2	maximise	how can we get more out of it?
1	identify	what is the key system constraint?

is to look for the most heavily loaded resource, look for where stock piles up, or what piece of equipment everyone is terrified of breaking? It could be a supplier, a skill set, or just about anything.

This not a process that should be buried in weeks of data analysis, it is an intuitive perspective of the group of people who work on the business (chain) you are looking to improve.

Step two: Maximise

In the original TOC (Theory of Constraints) literature, the stage is called 'Exploit'. I find that this term has too many negative connotations attached to it and it tends to alienate people with whom we are trying to work to implement the concepts. I do want to be faithful to the original material, however.

In 'Maximise' we look to change the way you run the constraint so as to maximise its output. This may include some of the following ideas that we have used with clients when a machine has been the constraint:

- Run it through meal and shift breaks.
- Speed up cycle times.
- Make sure the operator never has to leave the machine causing it to stop.

Step one: Identify

Here we identify where in the system the flow of money is being blocked up. Remember, here the chain analogy that encourages you to think of the business as the entire system is broken up into departments or processes (links). Some common bottleneck examples include:

- A certain machine within a factory.
- A process that produces less output than the

rest of the system, e.g. marketing can be a constraint on the money flow of the business if there are insufficient leads flowing into the sales process.

- Policies, e.g. batch sizes in shipping or processing that mean we overproduce some products while being out of stock of products that could be sold immediately.
- Some clues to help you find this bottleneck

**2SHIFTS
1CHARGE
GUARANTEED**

MORE ENDURANCE. MORE PERFORMANCE.
16 hours with one single battery charge

**READY
TO GO THE
DISTANCE.**

Learn more now at:
www.ntpforklifts.com.au
131 687

NTP FORKLIFTS AUSTRALIA
A JUNGHEINRICH COMPANY

JUNGHEINRICH
Machines. Ideas. Solutions.

- Shorten setup times.
- Ensure the raw materials are always present.
- Ensure all information needed by the operator is provided, and is clear.

Stand by the constraint activity and watch. Look for anything that reduces the output. Standing by the constraint activity and watching is not a five-minute activity. This activity is described by former Toyota Chairman Fujio Cho as “Go see, ask why, show respect.” We want to station ourselves at the constraint, see what is happening, ask why things are being done in that way, and show respect to

are easier and faster for a constraint operator to complete.

- Increase maintenance focus on this machine to reduce downtime.
- Purchase a more expensive raw material in order to improve yield.

In the initial enthusiasm, we will subordinate; maintaining this change in organisational priorities is tricky and requires constant monitoring. They say ‘Old habits die hard’ for a reason. This reversion to old behaviours, old organisational policies or structures and move away from the subordination to the constraint is

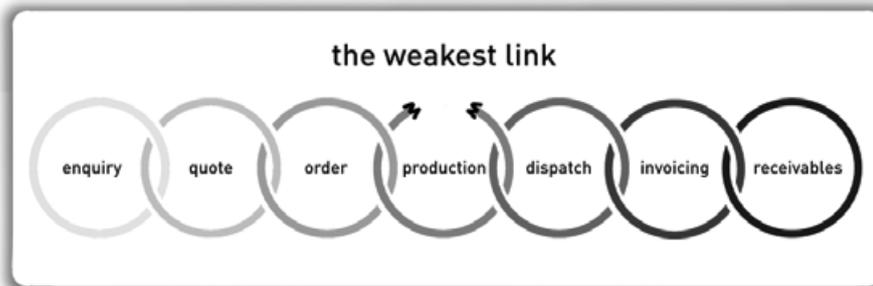
Step four: Elevate

If after having first sweated out all the capacity you can, by genuinely following Steps One to Three, you still need more capacity, you can further elevate it by finding another machine, person, whatever it takes as long as any increase in investment or expense is less than the income generated by the throughput.

Step four is where investing in equipment and software can add value to increase capacity at the constraint. Investing in software, equipment, people, training is a waste of time and money on a non-constraint as the throughput of the system does not increase. Investing in the constraint before you have implemented the first three steps will probably give you an improvement in throughput but at greater cost than was necessary.

Step five: Don't let inertia set in

Often steps one to three are sufficient to break the constraint and achieve a breakthrough in performance. To develop and then maintain a sustainable competitive advantage, an organisation must always be looking to improve.



the human beings that are conducting the activity. We will need to spend hours, possibly a few days to truly understand all of the issues that are hurting the constraint.

Apply whatever continuous improvement tools and resources (Lean Manufacturing, TPM, Six Sigma, or all of them) that you have onto this process, and ONLY this process. There are 24 hours in a day, this equates to 86,400 seconds. Until all 86,400 of these seconds are used productively to generate throughput you do not have a capacity problem, you have a management problem.

This is good.

Management problems can be changed easily, far more easily than technical design failures, or tolerance stack ups, fatigue test failures, and many other more complex ways that a process can fail.

Step three: Subordinate

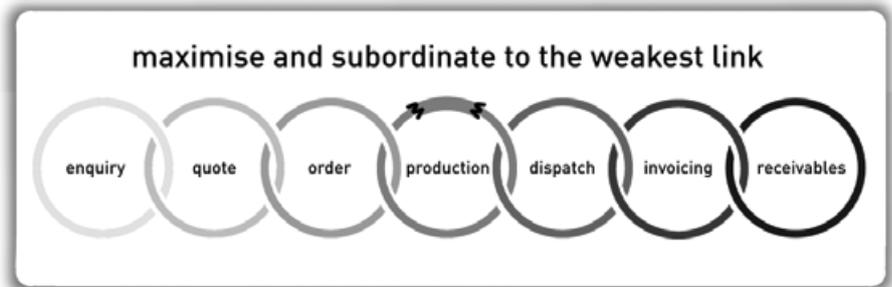
This is the trickiest part of the process. The whole organisation must change its behaviour to support the constraint. What is best for the constraint is the most important thing, and this often means other parts of the organisation may have to wait, share or give up resources, change operating policies, etc.

For example, they might have to:

- Make more regular and special deliveries to ensure that the constraint never runs out of material.
- Buy more expensive and higher quality tools to reduce breakages.
- Modify forms and paperwork so they

the most common reason I have encountered for an organisation to experience deterioration in the rapid improvements that have been achieved. Many of our clients experience this problem (even if we have warned them). They have their learning experience, and then restore the old behaviours and see the performance improvement disappear. This is the hidden killer of organisational change.

Part of subordination is to examine what you should stop doing. Very simply, you stop undertaking any improvement activity, or any activity on a non-constraint, that can be stopped. Redeploy any of this capacity that can usefully be used by the constraint. Eliminate the distraction of anything that does not relate to supporting the constraint and can be stopped without hurting the business. Stop them all. Now!



“Discontent is the first step in the progress of a man or a nation.”

Oscar Wilde

Go back to step one and repeat the cycle.

Life is better, memories of the bad times fade, the wounds heal somewhat and we can fall victim to the enemy of great human progress, contentment.

The leadership of a company should celebrate the changes, regather the teams, and then define a new compelling future to move to. Contentment will lead to complacency and then decay. A leader who is never happy because that is a proxy emotion for contentment may drive towards great heights but will not have much fun along the way, nor will their people. The paradox for a leader is to be simultaneously discontented with the status quo and happy with the progress made thus far.

Jason's book excerpts will continue in the May-June issue of MHD magazine. In the meantime, for more information visit www.manufacturing.com. *mhd*