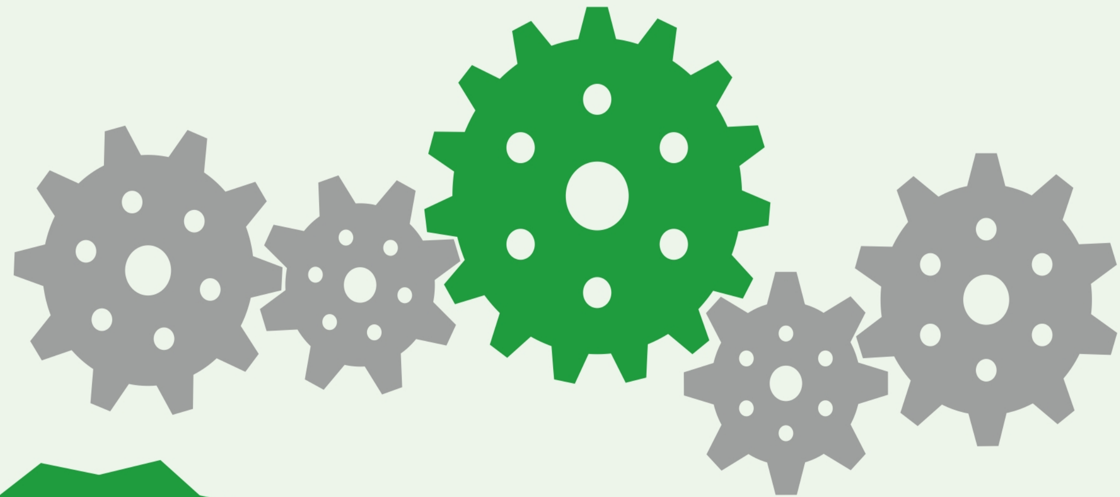
DO IT YOURSELF

theory of constraints



Step-by-Step Guide for Business Owners, Managers, Consultants and TOC Implementers

a DO-IT-YOURSELF kit
for small and medium sized enterprises for

MANUFACTURING

RAJEEV ATHAVALE

Theory of Constraints - Do It Yourself Kit for Small & Medium Size Enterprises for Manufacturing

Step by step guide for Business Owners, Managers, Consultants and TOC Implementers

Rajeev Athavale

This book is for sale at http://leanpub.com/tocdiymanufacturing

This version was published on 2015-09-24

Also By Rajeev Athavale

Theory of Constraints - Do It Yourself Kit for Small & Medium Size Enterprises for Distribution

Theory of Constraints - Do It Yourself Kit for Small & Medium Size Enterprises for Projects

The Echoes of Theory of Constraints (TOC) - Volume 1

The Echoes of Theory of Constraints (TOC) - Volume 2

Theory of Constraints (TOC) Basic Concepts and Decision Making

Theory of Constraints (TOC) - Application for Manufacturing

Theory of Constraints (TOC) - Application for Projects

Theory of Constraints (TOC) - Application for Distribution

Theory of Constraints - Introductory Presentation for Projects

Theory of Constraints - Introductory Presentation for Distribution

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Preface

You are a small business owner. You are making money - your profits may be consistent or fluctuating or steadily growing. You are ambitious. You want to make more and more money now as well as in future. You are eager to quickly learn new ways of managing business. If this is your description, Theory of Constraints is the right choice for you. It can help you to grow faster than what you can imagine, without taking undue risk and without exhausting your resources.

But everybody may not always be making money, some of you are doing just fine and some of you are even losing money. You are up to your neck in deep water full of alligators and these negatives are part of your daily reality. You are barely able to tread water and drowning is your realistic possibility. On one hand, you do not have time to do much beyond the daily chores of running your business and on the other hand, you are getting more and more desperate to do something to improve your business dramatically. You know you need to take actions – rather quick actions - and you know you don't have many bullets in your gun, so you better pick your targets carefully and be very accurate with your shots.

Theory of Constraints and perhaps these eBooks could be your right choice.

You wish there is a way for you to quickly get some basic knowledge about TOC. You wish you are able to identify the core problem or a leverage point for your business. ("If I' find a leverage point, I can move the earth" - Archimedes). You wish you quickly learn the TOC applications. You wish you get a step by step guide as to how to implement those applications. You wish you have suitable software to support this new endeavor.

Probably, the time has come for fulfilling these wishes! No, no, I don't have a magic wand. But here is the way I thought could be helpful to you.

First, you need to understand TOC's Five Focusing Steps which are at the heart of TOC. I have explained them in Appendix A.

Second, you may seek some help from a local consultant, who would perhaps use TOC's Thinking Processes to identify your core problem or the leverage point.

Third, you can get a good understanding of TOC applications by viewing Goldratt's CDs (and may be some other resource).

Four, this eBook gives step by step guidance for implementing a specific TOC application. It is an instruction manual. It also gives a list of available software.

In this eBook, I have suggested using some external resources such as Goldratt CDs, Training, Consultant and Software. If this is so, why do I call it "Do It Yourself"? It is important to note that your profits will not increase simply by acquiring or engaging these resources. You need to take ownership of implementation and use these resources effectively. You need to understand, take leadership and drive the whole process. You cannot delegate the implementation to a consultant or expect a software tool to implement it or even making it available to your people and expect them to implement it. You will have to get down and work with your people using these external resources and the eBooks. That is what I mean by "Do It Yourself".

I have come up with three different eBooks giving detailed steps for implementing TOC's solutions for Manufacturing, Distribution and Projects.

What is the objective of these eBooks?

Is it to teach you TOC? Is it to teach you TOC applications? Nope.

If you want to learn TOC, there are enough resources available. There are books, websites, videos, training programs etc. that can impart the knowledge. I would recommend you to go through all that if you want to be an expert in TOC. It may take some years to gain real expertise.

But you are a businessman. You may not afford to spend the required time and money to get expertise in TOC and then apply it to your business. You may ask a question: "If I want to implement TOC without becoming an expert, is there a way?" And the answer to the question is "Yes". Of course, it does not mean that you don't need to learn TOC at all. You need to gain some basic knowledge about TOC and have a good understanding of the application that you are going to implement. Can this be done in a short time? Again, the answer is "Yes".

This is necessary, but not sufficient.

After having understood the basics, you need a set of instructions about how to implement. And this is precisely the objective of these eBooks.

Now, you may want to know what knowledge to gain, where etc. Therefore, these eBooks give pointers where you can gain this knowledge.

If you are a business owner or a consultant or a manager in manufacturing business and you have problems in delivering orders on time, your lead time is increasing over a period of time and you have high inventory on the shop floor, the relevant eBook can certainly help you.

If you are a business owner or a consultant or a manager in Distribution business, and you have frequent shortages and surpluses and are carrying high inventory, the relevant eBook can certainly help you.

If you are a business owner or a consultant or a manager engaged in Projects, and you are struggling to deliver the projects on time, within Budget and with full scope, and your project lead time is increasing over a period of time, the relevant eBook can certainly help you.

If you are a TOC consultant or an implementer implementing one or more of these applications, these eBooks will serve as a handy guide or checklist for the steps to be followed.

If your core problem is identified and it causes you to improve any of these three areas, the relevant eBook is for you.

You may even check the applicability. Before you buy, use "Check the Symptoms" chapter in the sample book to determine the need for a particular eBook. Also, have a look at the "Table of Contents" shown on this eBook's site.

There may be a need to customize the steps depending on your situation. The need and extent of customization may vary from situation to situation.

It is important to note that by improving any of these three areas will not improve your profits, if the area is not your core problem or a leverage point. It will only achieve local optima. Therefore, it is of utmost importance to first identify your core problem or leverage point and then carefully choose the solution. Here, a TOC consultant can play an important role, unless the core problem is very obvious.

I don't intend to boast about the results that can be obtained by implementing TOC. I only want to share the following:

One of the most comprehensive studies on TOC was done by Professor Victoria Mabin and Steven Balderstone, based on an analysis of published case studies of TOC implementations. The findings of the analysis showed mean improvements as follows:

- Lead Times: Mean Reduction 70%
- Cycle Times: Mean Reductions 65%
- Due Date-Performance: Mean Improvement 44%
- Inventory Levels: Mean Reduction 49%
- Revenue: Mean Increase 83%
- Throughput: Mean Increase 65%
- Profitability: Mean Increase 116%

This is only an indication and I do not claim that my eBooks will deliver these kinds of results. But they will certainly help you to go in that direction.

Rajeev Athavale

Check the Symptoms

Print the table below and put ticks in appropriate columns:

Sr.	Description	Yes	No	Some Times	Not Applicable
1	Your orders are delivered late, many times				
2	You have piles of inventory on the shop floor				
3	Your Lead Time (Time from the receipt of order till the full order is delivered) is increasing over time				
4	You have piles of inventory in your Stores which is not moving				
5	There is constant fire-fighting				
6	It is difficult to manage workload, from time to time				
7	Materials and parts shortage is frequent				
8	Everything is important or nothing is				
9	Processes are unpredictable in terms of time and quality				
10	Machine break downs have severe impact on delivery, many times				
11	There are frequent interruptions in work				
12	You lose time and money due to quality issues				
13	Customers push for shorter delivery times				
14	Customers do not see you as reliable, in general				
15	You are unable to quickly and easily respond to urgent customer requirements				
16	When customers change their mind, you struggle to respond, many times				
17	There are many customer complaints, from time to time				
18	There are fights for priorities and resources, from time to time				
19	There are frequent changes in priorities				

Sr.	Description	Yes	No	Some Times	Not Applicable
20	There is inconsistent prioritization among groups, at times				
21	Other parts of the organization do not provide what is needed in time, many times				
22	There is too much of expediting for many orders				
23	There is too much of overtime, from time to time				
24	Communication between people is a problem, at times				
	Count				

Summarize the data as follows:

No. of ticks in column "Yes":
No. of ticks in column "No":
No. of ticks in column "Some Times":
No. of ticks in column "Not Applicable":

If the number of ticks in column "No" is in majority, Manufacturing does not seem to be your problem, currently.

If the number of ticks in columns "No" and "Some Times" put together is in majority, check your information. There may be some interpretation issue for "Some Times". It may almost be "Yes". Also, there is no column for "Don't Know" and you might have put ticks for such cases in "Some Times" columns. You need to be sure about your ticks.

If your ticks are correct and the number of ticks in columns "No" and "Some Times" put together is in majority, Manufacturing is not likely to be your problem. You need to take a judicious call whether you want to follow the steps given in subsequent chapters. However, if you have more ticks in "Yes" than "No", you may have a good case to use the steps given in this eBook.

Look at the number of ticks in column "Not Applicable". If they are too many, you need to check whether your situation is unique. You may need different steps than that given in this eBook.

If ticks in column "Yes" are in majority, this eBook is for you.

If you have problems in delivering orders on time and your lead time is increasing, over a period of time and you have high inventory on the shop floor, this eBook can certainly help you.

Follow the steps given in this eBook.