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### **TOCICO CONFERENCE 2008**

# The Science of Successful TOC Holistic Implementation

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# Background

- The common perception and experience those who have been involved in implementing TOC is that Implementing TOC solutions results in impressive, beyond expectations performance improvement in relatively short period of time
- According to the findings published in Victoria Mabin and ??? Book, the following are common results:
  - Mmm
- What is the importance of results in any implementation of a change, and what is their importance in a systemwide multi-paradigm shift change?



## The Strategy and Tactics Tree

- How does the introduction on the Strategy & Tactics Tree (S&T) Impacts the speed of achieving, the level and the sustainability of the results?
- Why?



# Understanding the S&T

- The S&T details the minimum mandatory changes required in a system to ensure the company is solidly on POOGI. It does so, while detailing all the necessary logic.
- Having the logic fully explained, enables to use the S&T for effective communication:
  - Along the hierarchy
  - Across Functions
  - Along time
- Let's demonstrate through an example

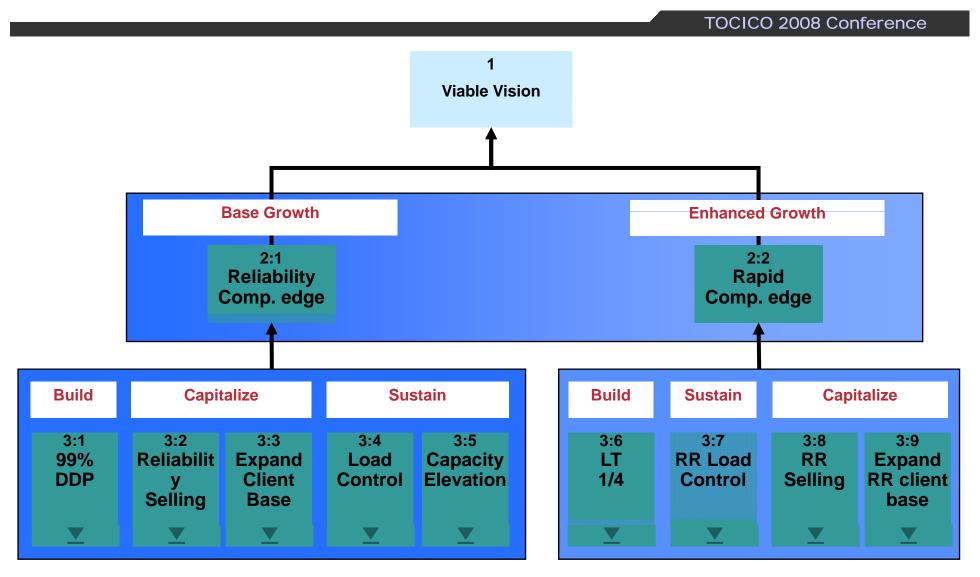


# Entity 4:11 in the RRR S&T

| 4:11                     | Choking the Release  |
|--------------------------|--|
| Necessary<br>assumptions | Having too many orders on the shop floor masks priorities, promotes local optima behavior and therefore prolongs the lead-time and significantly disrupts due-date-performance (DDP).  |
| Strategy                 | The shop floor is populated ONLY with orders that have to be filled within a predefined horizon.   |
| Parallel assumpt ions    | <ul> <li>In traditionally run plants touch time is a very small fraction (&lt;10%) of the lead time.</li> <li>Vast experience shows that, in traditionally run plants, restricting the release of materials, to be just half the current lead time before the corresponding due date, leads only to good results and to no negative ramifications* (lead time shrinks to less than half, DDP improves considerably, throughput goes up and excess capacity is revealed). These results are achieved irrespective of whether or not a bottleneck exists.</li> <li>* Except for environments which are dominated by heavily dependent setup matrixes. Those environments have to be dealt in a different way.</li> </ul> |
| Tactic                   | For each product family, a buffer time is set to be equal to 50% of the current lead-time. Orders are released to the floor only buffer time before their committed due-date (excessive WIP is frozen until its time arrives according to the above rule). Sales people are forbidden from using the shorter lead times to get more sales.   |



# The Hierarchy and time Communication





# Having a tool and effectively using it are not synonymous

- In a multi-paradigm shift system-wide change achieving significant results fast is imperative to create the commitment base required to proceed from one change to the next.
- The S&T provides the guidance so that this condition is met. But:
  - The S&T is much more than what is written in it and it provides the tool to answer (almost) all business questions. However, when it is not clear how to do it, reservations brought up may lead to improper implementation.
  - Past experience in implementation of TOC solutions suggests an order of implementation and a logic of how to deal with reservations. This too may lead to deviations.
- Therefore, even when the S&T exists, and is being used it is not unlikely to use past experience inappropriately, to "modify" the solution to handle reservations and by that to delay results and endanger the level of commitment to implement the solution as a whole.



## So, how to use the S&T

- The first step in using the S&T is to create the required level of commitment of the management team – the commitment to adopt the S&T as the ONLY initiative of the company.
- Correctly communicating, and providing sufficient education to substantiate the S&T assumptions while providing the opportunity to evaluate and remove any and all reservations is a key.
  - Always communicate from entity 1 to whatever lower level entity desired
  - Provide education that substantiates the assumptions
  - Summarize by following the logical S&T structure
  - Provide participants with the option to systematically raise and deal with their reservations



#### Commitment

- What is the commitment required from topmanagement when embarking on a holistic implementation?
  - Focusing on the solution which means:
    - Stop any other initiative that requires management attention and is not currently required
    - Consistency
  - Example VV implementation



# Using the S&T to Implement

- The most important assumption in the S&T concerning implementation is:
  - To ensure an outstanding start of a major project it is vital to ensure that each of the first substantial actions will result in immediate substantial benefits.
- The S&T is designed to ensure that if the implementation follows the logic of "a step at a time"
  - The first step is designed to have no relevant obstacles to implements
  - The successors steps are easy to implement when the first one has demonstrated substantial benefits



# Example - VV implementation

- Some information about the company
  - A relatively large company, about \$1.5B in sales
  - A consumer goods manufacturer
  - Products sold internationally
  - 12 manufacturing plants
  - 2 central distribution centers
  - 40 regional distribution centers world wide
  - About 2,000 different SKU's
  - About 100 sub-contractors that manufacture Finished Goods
  - About 2,000 distributors world wide
  - One new product development facility with about 1,000 employees
- Solution elements include:
  - S-DBR for all plants
  - The distribution solution for all SKU's, distribution centers and distributors
  - CCPM for new product development
  - Sales to Distributors
- How long will it take to implement each solution element? What level of results should be expected?



### What was implemented in 12 weeks

- In production
  - All plants are on SDBR
- In Distribution
  - Both Central warehouses for all SKU's are on replenishment
  - All Sub-contractor SKU's are on replenishment to the central warehouses
  - All Raw materials are on replenishment to the plants
  - All regional warehouses are on replenishment from the central warehouses
  - About 200 distributors are on replenishment from the regional warehouses



### What was implemented in 12 weeks - Cont.

- In Sales
  - About 700 distributors were presented with the offer, rate of offer acceptance is about 98%
- In New Product Development (in the biggest department)
  - Freeze procedure (froze 40% of the load)
  - Preparation procedure (including an organizational change)
  - Project plans templates
  - Project plans
  - Projects staggering
  - Execution procedure



#### Results to-date

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#### In production

- Lead-time shrunk to 50% the original lead-time
- Productivity doubled
- Excess capacity of about 50% revealed

#### In Distribution

- Shortages eliminated
- Availability increased (sales increase of 20% in the first month of service to the market)

#### In Projects

- Lead-time reduced from an average of 920 days to 740 days
- DDP increased from 20% to 83%
- Productivity doubled



## About [Presenter]

#### **TOCICO 2008 Conference**

 A TOC practitioner for the last 18 years. **Goldratt Group CEO and** one of the participants in development of the **Viable Vision solutions,** the resulting advances in **TOC** knowledge and the assimilation of it throughout the Viable **Vision implementations** and TOC practitioners.



