



**TOCICO 2012 Conference**

# **New applications of... ... and developments in... Theory of Constraints' Strategy & Tactic**

**Presented By:** Dr. Alan Barnard (PhD), CEO Goldratt Research Labs

**Date:** 3 June 2012

# Presentation Outline

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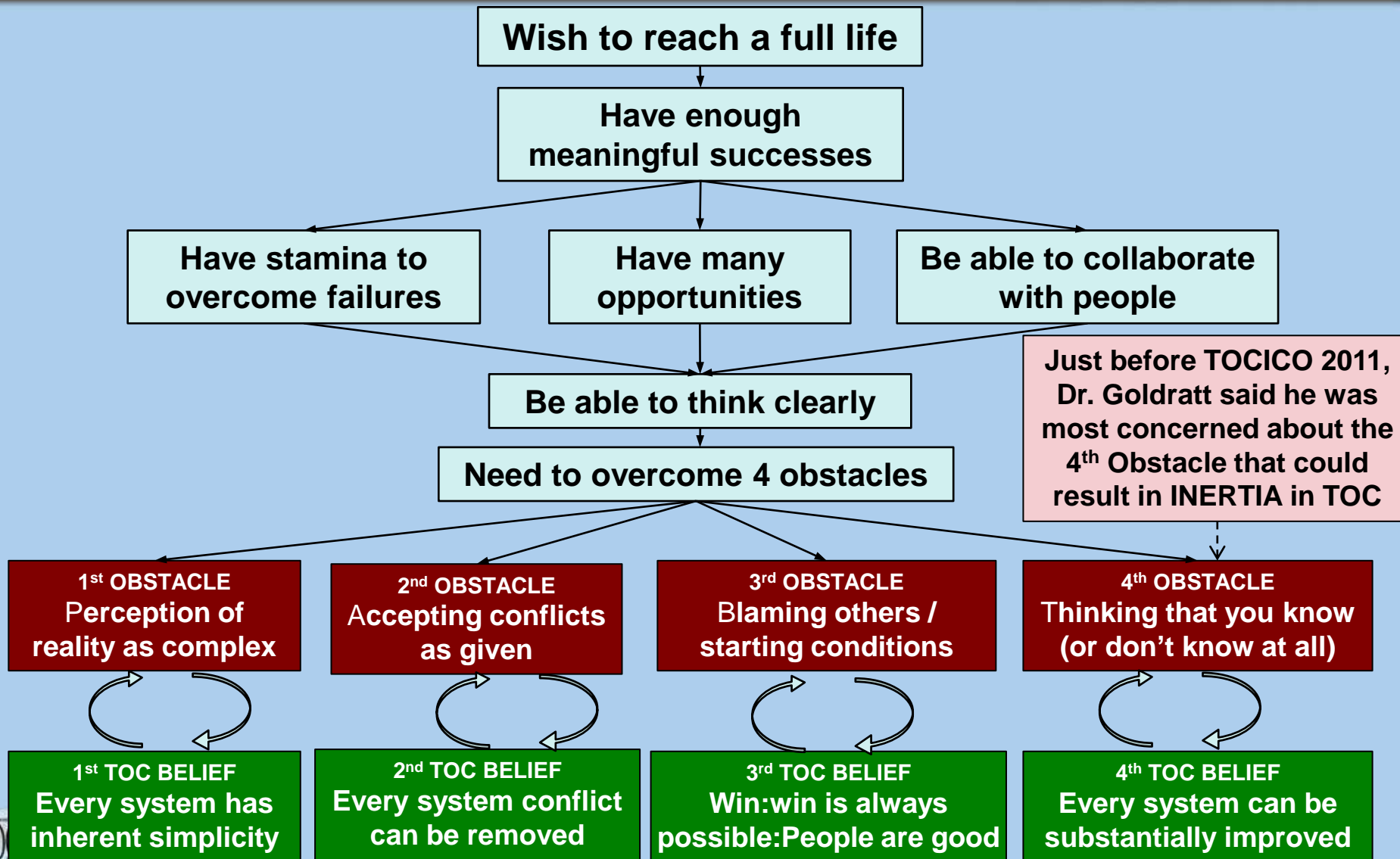
- 1. Dr. Goldratt's 2011 Challenge to TOC Community**
  - The obstacles to reaching personal & organizational goals
  - Overcoming obstacles by being “Outstanding Scientist”
  - The challenge to TOCICO and TOC Community and relevance S&T
- 2. Current Understanding & Challenges within S&T**
- 3. New Applications of Strategy & Tactic Trees**
  - Transformational S&T: Viable Vision project Case Study
  - Organizational S&T: Premier Foods Case Study
  - Content S&T: New Product Design Case Study
- 4. New developments in Strategy & Tactic Design & Auditing  
....by standing on the shoulders of Giants**
- 5. Key Take-aways and recommended future R&D**



# DR GOLDRATT'S 2011 CHALLENGE TO US

Eli's Philosophy of Life - *Overcoming OBSTACLES to live a FULL LIFE*

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# DR GOLDRATT'S 2011 LEGACY

## Overcoming Inertia– “Standing on the Shoulders of Giants” Process

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*If I have seen further, it is by standing on the shoulders of giants.*



### 1. Identify a “**GIANT**” (*not a choopchick*)

- Intuition will guide you – important enough subject for you (and the world)

### 2. Identify (enormity of) **AREA NOT ADDRESSED** by the giant.

- Reality gives the signals that so much more can be done.
- You are aiming for broader, not more confined area not addressed by giant.

### 3. **GET ON GIANT'S SHOULDERS**

- Gain historical perspective – understand giant's solution (e.g. the boundary conditions of validity) better than the giant did.

### 4. Identify the **CONCEPTUAL DIFFERENCE** between the reality that was improved so dramatically by the giant, and the area untouched.

### 5. Identify the **WRONG ASSUMPTION**

### 6. Conduct the **FULL ANALYSIS** (incl. test for your hypothesis...)



# DR GOLDRATT'S "THE GOAL" LEGACY

How to achieve breakthroughs – by being “Outstanding Scientist” ...

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“Finally, and most importantly, I wanted to show that we can all be outstanding scientists. The secret of being a good scientist, I believe, lies not in our brain power. We have enough. We simply need to look at reality and think logically and precisely about what we see.”



Dr. Goldratt said the key ingredients are to have:

(STEP 1) the courage to face **FACE INCONSISTENCIES** between what we (expect to) see and the way things are... and then

(STEP 2) the courage to **CHALLENGE BASIC ASSUMPTIONS** related to these inconsistencies.

These two simple steps is the basis of the “**Scientific Method**” which Dr. Goldratt encouraged us to use as the foundation for **continuously improving our lives and our organizations**...and for evolving **TOC BoK**.



# REALIZING DR. GOLDRATT'S VISION FOR TOC

## Challenge to TOC Community and TOCICO

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For the TOC community to help show how we can continue to evolve “TOC” into a real “Science”, we need to learn and practice *what it means to really think and act like “outstanding scientists”*

**So, what does it mean to think and act like an “Outstanding scientist”?**

- Be **passionate and curious** about questions of **WHAT, HOW and WHY**
- Clearly differentiate between new and useful **Classifications, Correlations, Cause-effect and Applications for these.**
- Use **SOSOG (Scientific Method)** as the main method to further **evolve TOC** as a science for analyzing, managing & improving systems holistically
- Continuously testing our new hypothesis/apps with **“good experiments”**:
  - **Well controlled**
  - **Repeatable**
  - **Honest\*** (as per definition of Richard Feynman)
- **Publishing** (or at least sharing) our research, regardless of the outcomes

But lets start with what are the **common mistakes** made that can turn any **Science into a Pseudo Science...and scientist into pseudo scientist...**



# REALIZING DR. GOLDRATT'S VISION FOR TOC

## Common mistakes that block progress

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### Mistake 1

#### Acting on untested or (worse) invalidated hypothesis

...resulting in *Doing what should not be done* ... (Errors of Commission)

#### Examples:

- *Idle resource is major waste,  $\Sigma$ Local optima = global optima, The earlier we start, the earlier we'll finish, One fair price, More is (always) better, everything is important (even chupchicks), I/we can't because...*

### Mistake 2

#### Not Acting on tested (validated) hypothesis

...resulting in *Not Doing what should be done* ... (Errors of Omission)

#### Examples of typical "Excuses":

- *We didn't know,*
- *We are different,*
- *They will never agree,*
- *We don't have time..*

**Do we as TOC practitioners (still) make some of these mistakes?**

**What can be done to reduce these mistakes?**

**How can we apply these to STRATEGY formulation & execution?**



# REALIZING DR. GOLDRATT'S VISION FOR TOC

## Criteria and Direction of Solution

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### CRITERIA FOR SOLUTION

Must help us **reduce BOTH types of mistakes...**  
**...not simply reduce one at expense of the other**

### DIRECTION OF SOLUTION

**Always check before you act....**  
**...unless acting is the only way of checking**

How can this be turned into a practical tool to help individuals and organizations reduce mistakes that waste the REAL CONSTRAINT - our limited time/attention:

**Type 1: Doing what should not be done (error of commission)**

**Type 2: Not doing what should be done (error of omission)**

**Type 3: Not checking our assumptions (error of detection & correction)**



# STRATEGY & TACTIC TREES

## Background on why & how Dr. Goldratt created S&Ts

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- Dr. Eli Goldratt said he created the S&T when he realized that his own company (Creative Output), that were specialist in helping companies overcome resistance to change, **became THE company that was the most resistant to change** *(at least that is how it felt to him at the time ☺)*
- It was a real mystery. How could it have happened?
- Dr. Goldratt's hypothesis was that the root cause was mainly (his) poor communication.
- He realized two common mistakes:
  - Communicating the **WHAT FOR** without the **HOW** and vice versa
  - Not giving **other stakeholders opportunity** to understand and help **validate / challenge hidden assumptions**.
- How to **make a breakthrough** in an area, especially those, like STRATEGY, that most consider an **ART...rather than a Science...**
- ...using Classification → Correlation → Cause-Effect → Application



# BREAKTHROUGH IN STRATEGY & TACTIC

Facing inconsistency and challenging basic assumptions using classification, correlation and cause-effect...

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## Conventional View

- **Strategy** is the highest level of an initiative and defines the overall direction for the organization to achieve a goal.
- **Tactics** are (lower) details in an initiative and define all the decisions/actions to deploy resources to implement the strategy



## Theory of Constraints View

- **Strategy** is simply the answer to the question: “**What for?**” - i.e. *the objective of a proposed change to achieve a higher goal*
- **Tactic** is simply the answer to the question: “**How to?**” – i.e. *the specific decisions/actions needed to achieve the objective of this change*



But...

1. Where does “Strategy” end?
2. Where do “Tactics” begin?
3. Is there really a “1:Many” relationship between Strategy & Tactic(s)?

Therefore...

1. Strategy & Tactic entities **always exist together**
2. Strategy&Tactic entities **exist at each level**
3. Each Strategy&Tactic entity **represents a necessary “change”** to achieve the higher level goal

# STRATEGY AND TACTIC TREES

## Background on structure of S&Ts

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The S&T blocks in a S&T tree represent **all the changes we believe are necessary & sufficient** and the **sequence we assume they should be done** (left → right) to achieve a goal.

When we make the effort to define and communicate not only a title for each change, but also the **Strategy** (objective or **WHAT FOR**) & **Tactic** (required actions or **HOW TO**) for each of these changes, it can help improve alignment and reduce resistance to change...

However, any logical tree (e.g. a S&T Tree) is **only as valid as the assumptions** on which it is based...yet none of the conventional strategy development approaches explicitly define underlying assumptions.

So, **what are the underlying assumptions** related to any proposed change that are normally not explicitly defined and/or validated with stakeholders and ultimately tested with experiment?



# NEW APPLICATIONS IN S&T

## Types of Strategy & Tactic Trees

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### 1. Transformational S&T

- **What changes** are **necessary and sufficient** to achieve the desired/required improvement for the organization/system as a whole and... What should be the **sequence** of implementation ...
- Examples: *Elwood City Forge Case Study at TOCIC 2012*

### 2. Organizational S&T

- **What clarity/changes** are needed to the roles and responsibilities and **org structure** within an organization to remove or at least reduce what Dr. Goldratt called the “**engines of disharmony**”
- 1<sup>st</sup> Experiments: *Premier Foods Case Study in Appendix*

### 3. Content S&T

- **What clarity/changes** to product, project or service design OR to a **body of knowledge** are necessary and sufficient to meet its objectives
- 1<sup>st</sup> Experiments: *SAP Projects at ABB/ Daiwa House, New Car Design,*



# APPLICATIONS OF S&T

## Types of Strategy & Tactic Trees

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### Transformational S&T

<b>WHY1?</b>	Necessary Assumption <b>Why is the change needed?</b>
<b>WHAT FOR?</b>	Strategy <b>What is the objective of the change?</b>
<b>WHY2?</b>	Parallel Assumptions <b>Why is the change possible Why is the change difficult/risky?</b>
<b>HOW?</b>	Tactic <b>How will the change be implemented?</b>
<b>WHY3?</b>	Sufficiency Assumption <b>What is this level of detail not sufficient? ...as a warning to level below to prevent mistakes (next level doing what should not be done / not doing what should be done)</b>

### Organizational S&T

	Necessary Assumption <b>Why is your job (function) necessary to achieve organizational goal?</b>
	Strategy <b>What must you (your job function) achieve on a ongoing basis (e.g. effectiveness, efficiency and compliance objectives)?</b>
	Parallel Assumptions <b>Why you claim that what occupies your time is necessary and sufficient to achieve your Strategy?</b>
	Tactic <b>Headings of what occupy most of your time to achieve your strategy?</b>
	Sufficiency Assumption <b>What type of responsibility vs. authority gap "fires" consume your time? ...as a warning to level below to help them define what they should do...and not do</b>

### Content S&T

	Necessary Assumption <b>Why is a redesign of this sub-system necessary for higher subsystem to perform to its required level / Why can't we use subsystem from old design?</b>
	Strategy <b>What is the required performance of this sub-system/part?</b>
	Parallel Assumptions <b>Why do we claim the specifications of the new sub-system will ensure required performance?</b>
	Tactic <b>How should the subsystem design be changed (which parts and in what way)?</b>
	Sufficiency Assumption <b>Why is this level of detail not sufficient (i.e. why this change also requires a major redesign of sub-system components)</b>



# APPLICATIONS OF S&T

## All 3 types help reduce/remove engines of disharmony

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Dr. Eli Goldratt called the symptoms of misaligned and/or conflicting strategy and tactic definition, communication, planning & execution the “Engines of Disharmony”

### Engines of Disharmony

How: S&T

### Engines of Harmony

1. Not knowing my **own required contribution to Goal** or not knowing how my contribution will be measured / recognized
2. Not knowing **others contribution** or how their contribution should be measured / recognized
3. **Organizational Conflicts** in which “rules” to use to best achieve organizational goal(s).
4. **Individual Conflicts** due to unresolved Gaps between Responsibility and Authority (e.g. resulting in firefighting)
5. **Inertia/Fear of Failure** blocking necessary changes to achieve ongoing improvement

1. Knowing exactly **how I should contribute** ...and how my contribution will be measured and./or recognized.
2. Knowing exactly **how others should contribute** ...and how their contribution will be measured / recognized.
3. Systematically align “rules” with Goal of the Organization (**replacing local/short term optima with global optima rules**)
4. Systematically close Gaps between Responsibility and Authority using “fire-fighting conflicts as the trigger”
5. Put in place processes, skills and **culture continuously improve by exposing inconsistencies and challenging basic assumptions** (S&T help make these explicit)



# NEW DEVELOPMENTS IN S&T

## Facing Inconsistencies and challenging basic assumptions

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There is no doubt that S&Ts can be very powerful for the formulation, communication, validation and auditing of any change .. **YES BUT** common complaints are...

- 1. Too Complicated...how do you do it?**
- 2. Takes too long...we just don't have time...**
- 3. Only few people can do it...why bother...**
- 4. We spent a lot of time on it...and then didn't look at it again**

Time to **FACE** this inconsistency...and challenge some basic assumptions....to increase S&T adoption & value...  
.... By **STANDING** on the **SHOULDERS** of **GIANTS**



# NEW DEVELOPMENTS IN S&T

Facing Inconsistencies and challenging basic assumptions

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## Five potentially simpler and faster processes to create S&Ts:

1. GAP → Common Mistakes → S&T
2. GAP → UDEs → Cloud → S&T
3. Using 4 Impacts of Change → Cloud → S&T
4. Using SWOT analysis → Change Matrix → S&T
5. Using S&T for Monitoring & Auditing
6. Balanced Score Card Strategy Maps → S&Ts

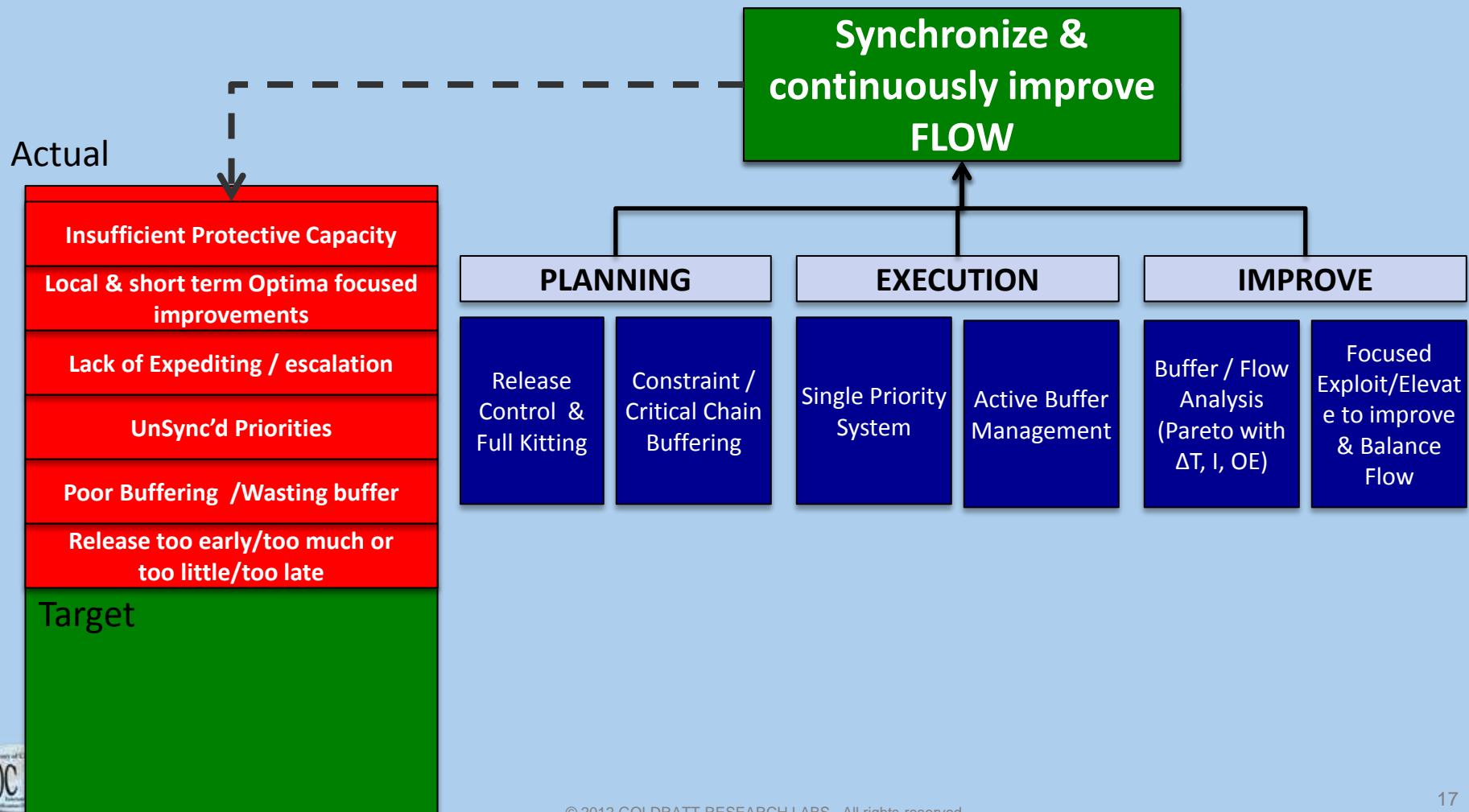


# HYPOTHESIS 1 TO SIMPLIFY S&Ts

FLOW Example: GAP → Common mistakes/UDES → S&T

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Identifying the Planning, Execution and POOGI conditions are needed to continuously Improve and Synchronize Flow by ?

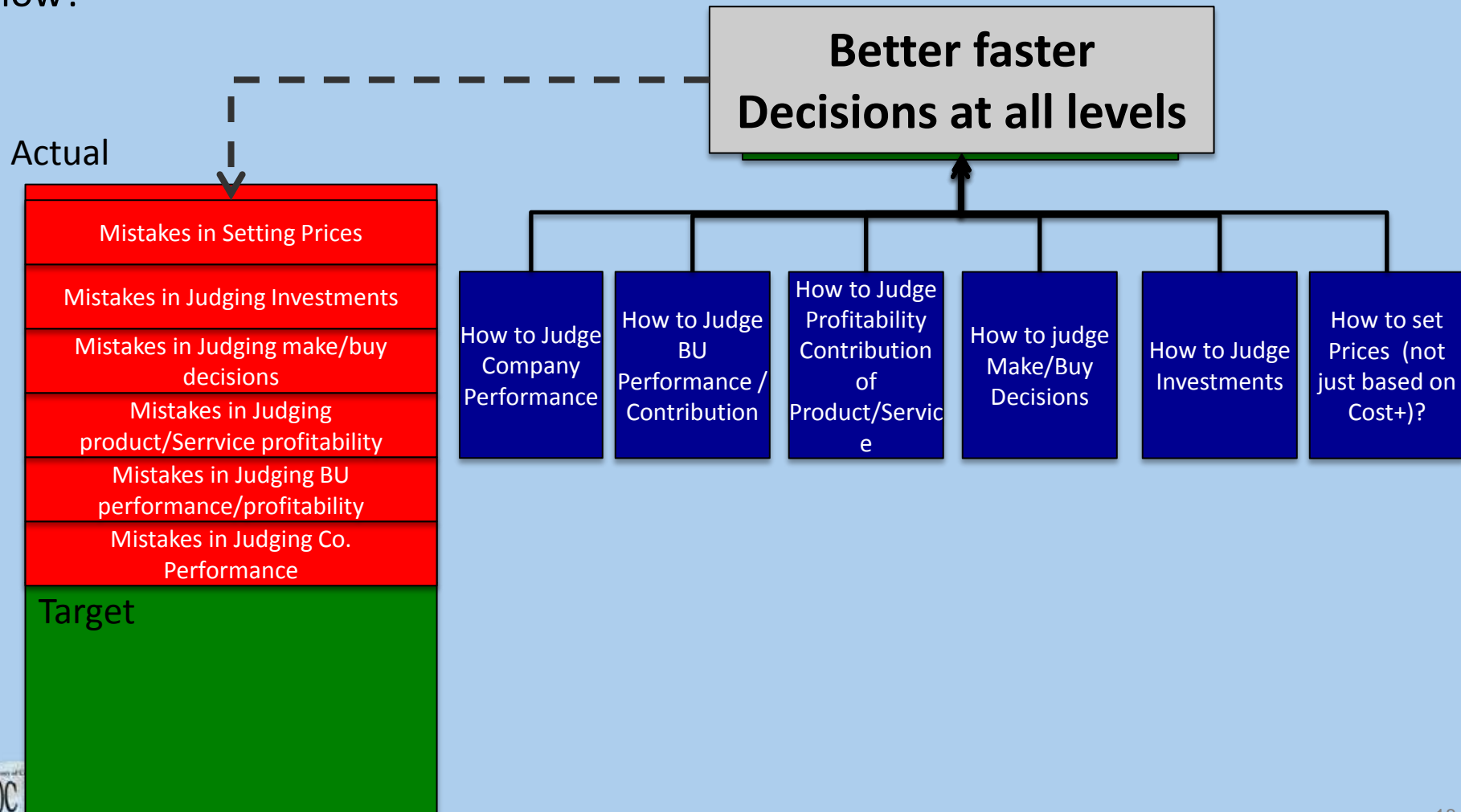


# HYPOTHESIS 1 TO SIMPLIFY S&Ts

DECISION Making Example: GAP → Common mistakes/UDES → S&T

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Which Financial decisions are needed to continuously Improve and Synchronize Flow?

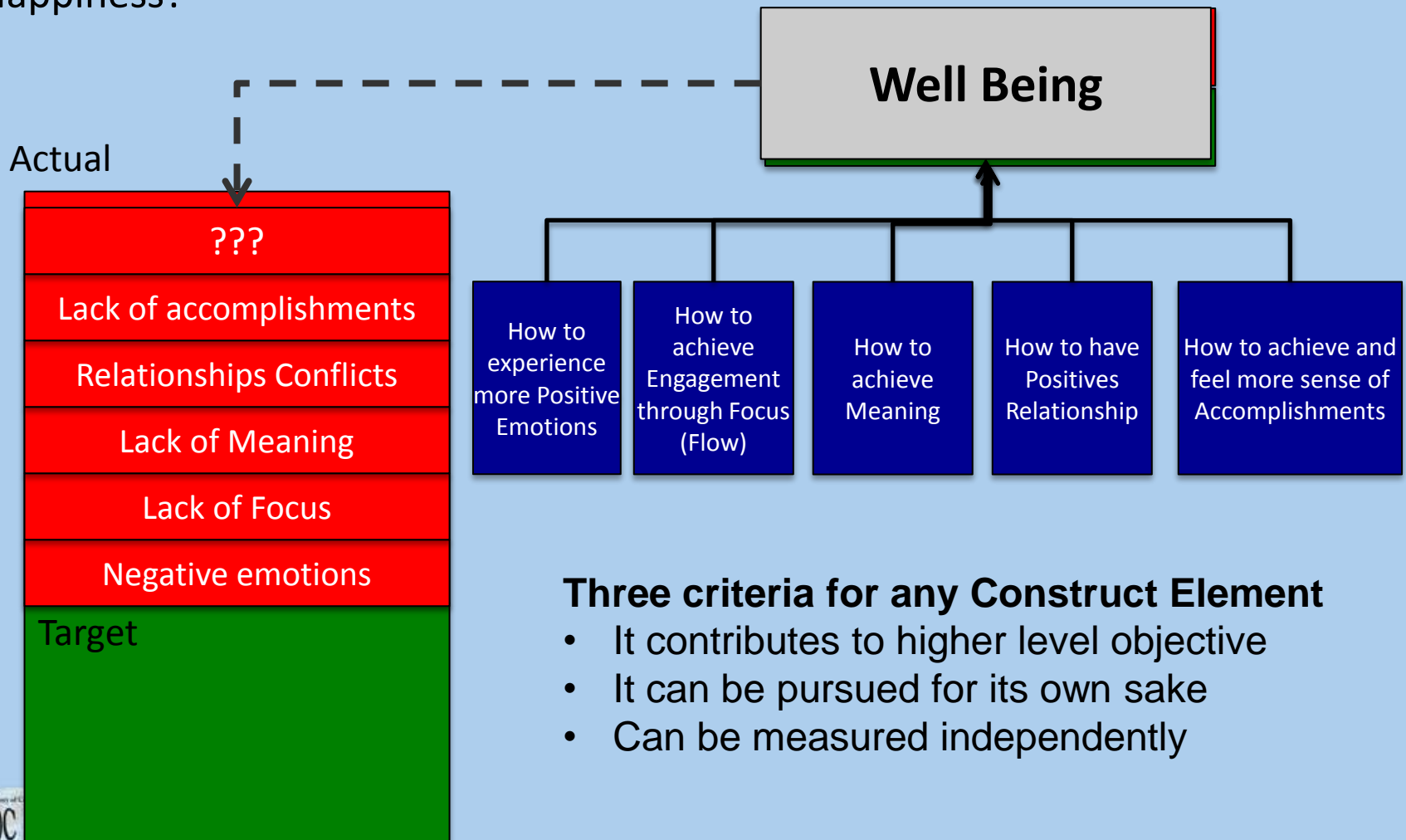


# HYPOTHESIS 1 TO SIMPLIFY S&Ts

POSITIVE PSYCHOLOGY: GAP → Common mistakes/UDES → S&T

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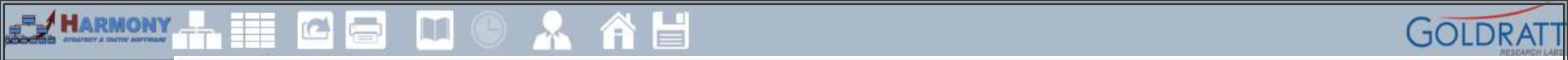
Which conditions are needed to continuously Improve our “Well Being” or Happiness?



# NEW DEVELOPMENTS IN S&T

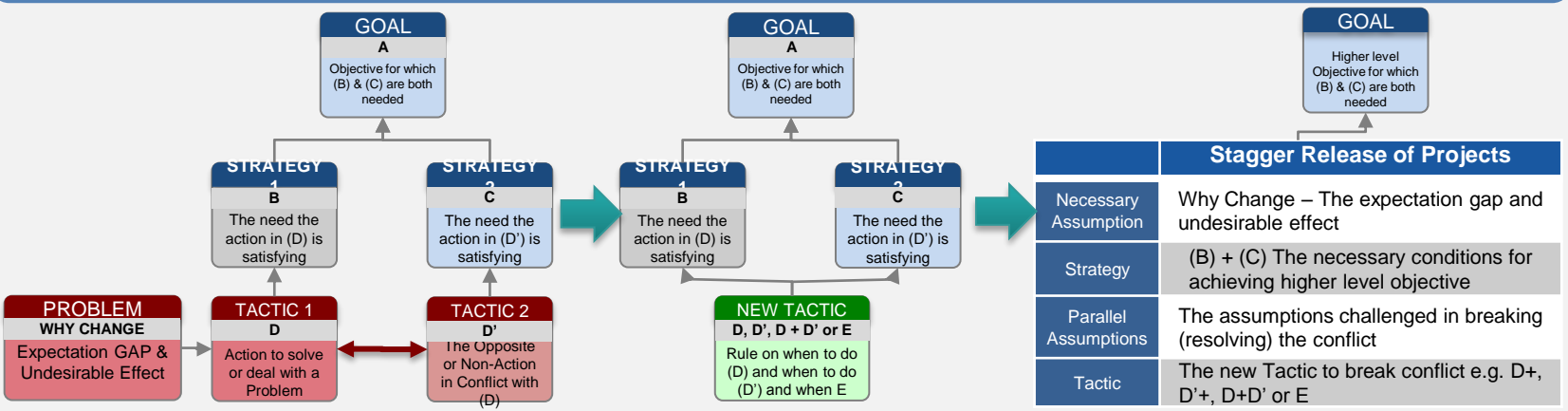
## Research on GAP → UDE → Conflict → S&T Process

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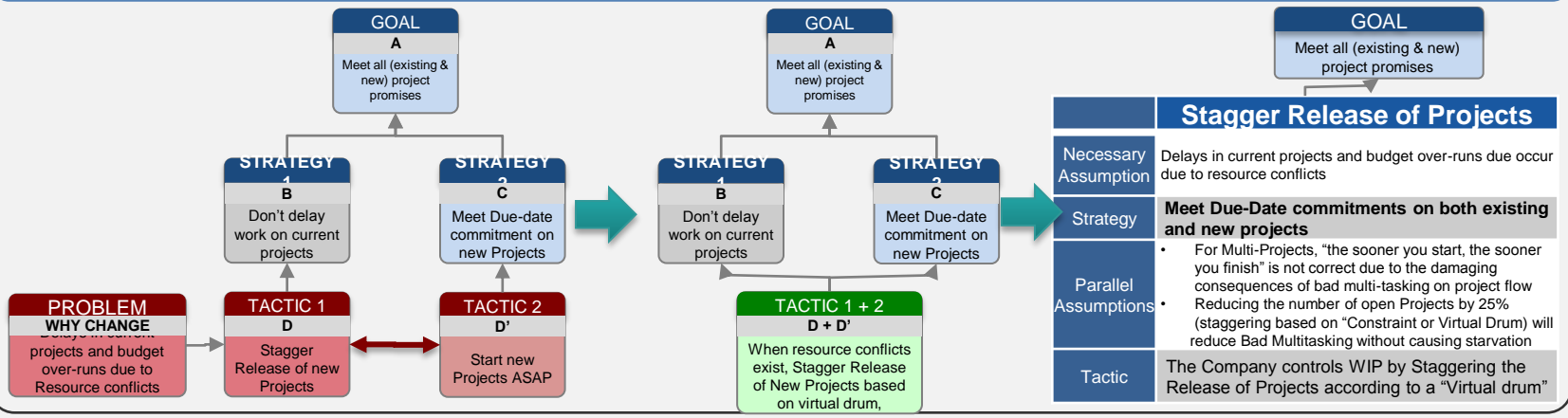


- Process Steps**
- S&T Design
  - S&T Validation
  - S&T Planning
  - S&T Execution
  - S&T Audit

### Template for GAP → UDE → Conflict → S&T Node



### Your Example for GAP → UDE → Conflict → S&T Node



# NEW DEVELOPMENTS IN S&T

New Change Matrix Conflict Cloud to reduce resistance to change, improve harmony and improve solution design...

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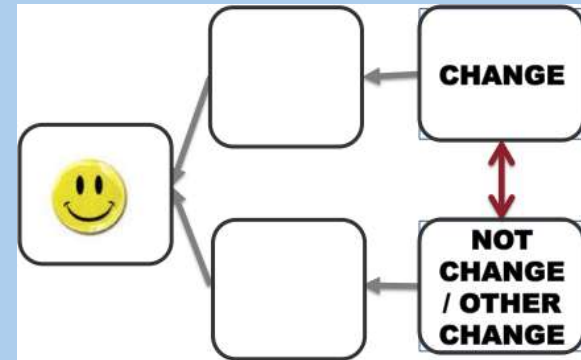
Reminder from TOCICO 2011

## Change Matrix

Decision	Positive	Negative
CHANGE		
NOT CHANGE		

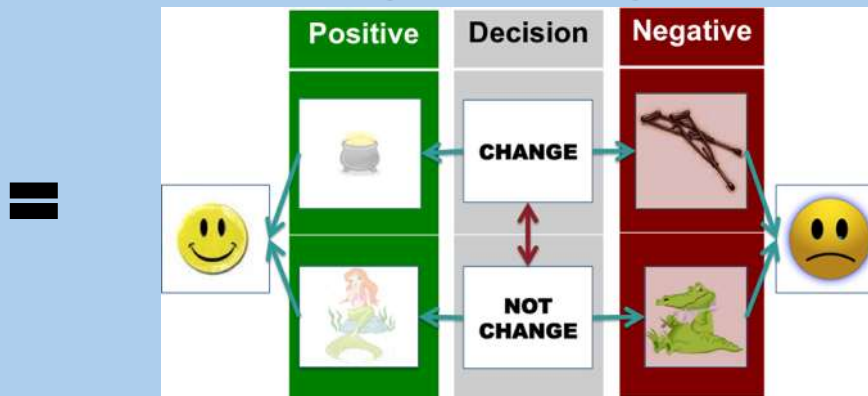
Many benefits, but some limitations

## Conflict Cloud



Many benefits, but some limitations

## What to change - Change Matrix Cloud



Hypothesis: New **Change Matrix Cloud** provides practical solution to address limitations of Change Matrix and Cloud

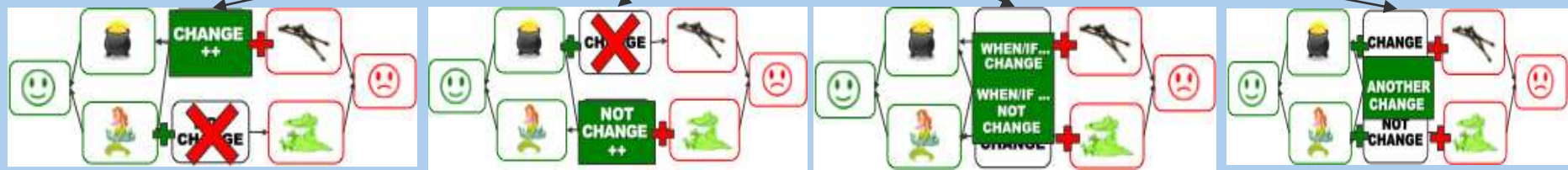
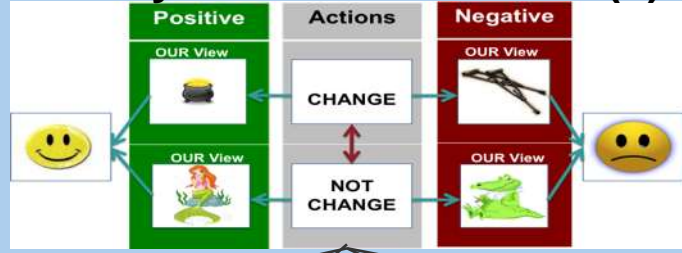
# NEW DEVELOPMENTS IN S&T

## Using Change Matrix Conflict Cloud to Construct / Audit S&T

### STEP 3 - TO WHAT TO CHANGE ?

FINDING A WAY TO BREAK THE CORE CONFLICT WITH A WIN:WIN BY CHALLENGING ASSUMPTIONS WITH 4 METHODS

#### OUR System Core Conflict(s)



Method 1: Change ++

Method 2: Not Change ++

Method 3: Change + Not change

Method 4: Change ++

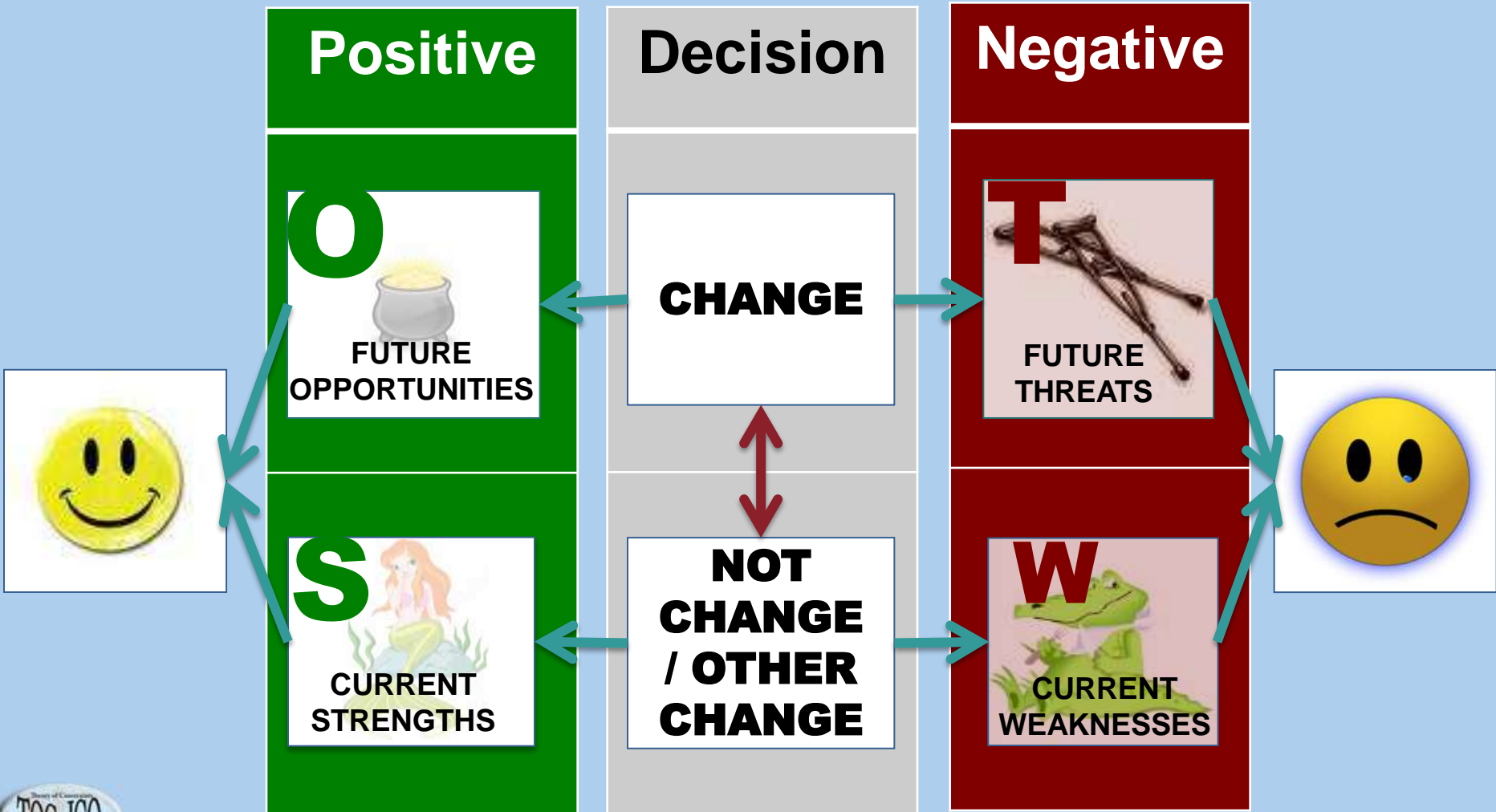
See Appendix for details on using above 4 methods to get win:win injections



# NEW DEVELOPMENTS IN S&T

Using SWOT Analysis → Change Matrix Cloud → S&T

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# NEW DEVELOPMENTS IN S&T

## Using S&T for Execution Monitoring & Auditing

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**Process Steps**

- S&T Design
- S&T Validation
- S&T Planning
- S&T Execution

**S&T Execution Status**

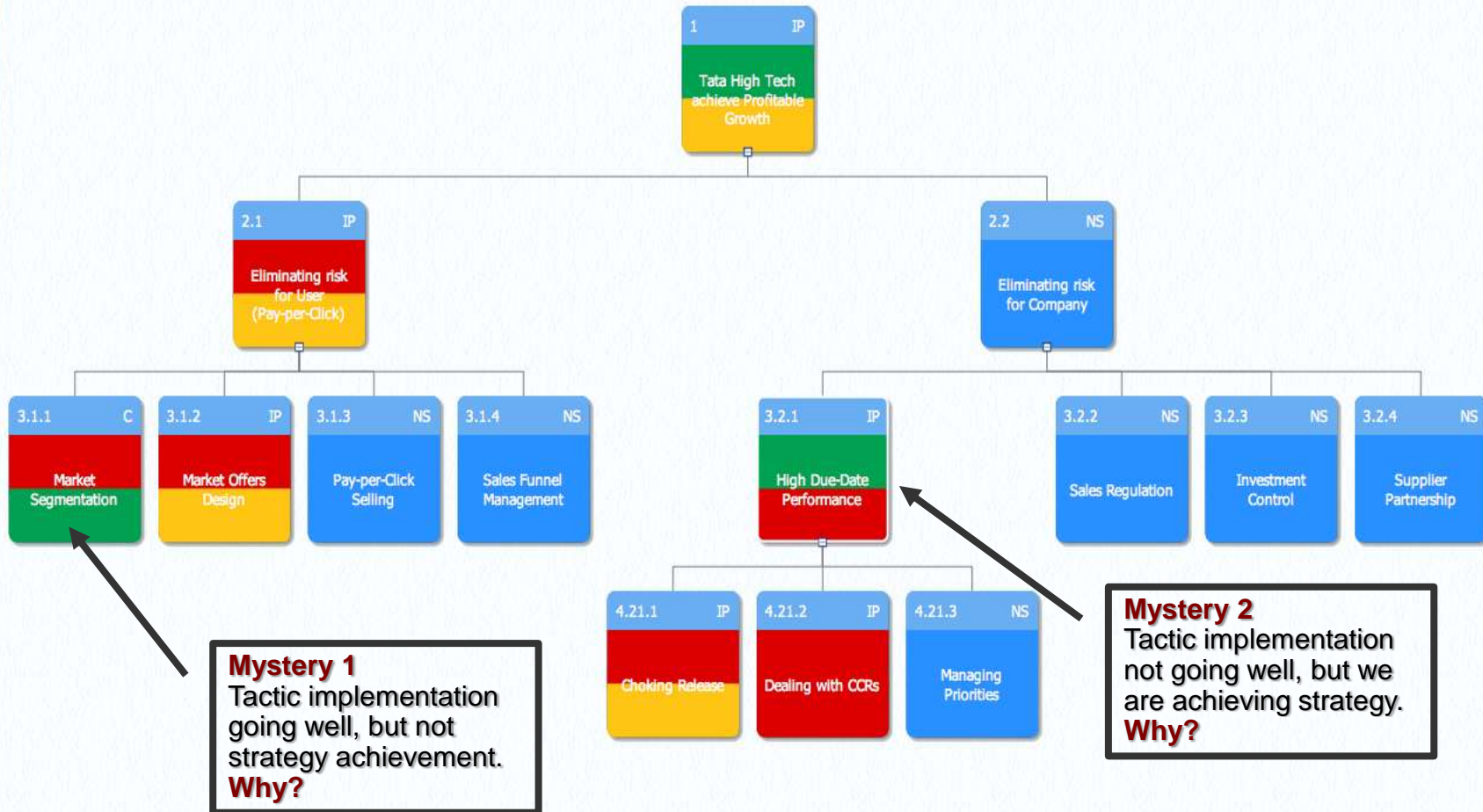
Strategy Owners Buffer Report

Tactic Manager Buffer Report

Send Question to S&T Expert

Node Details

**S&T Audit**



75%

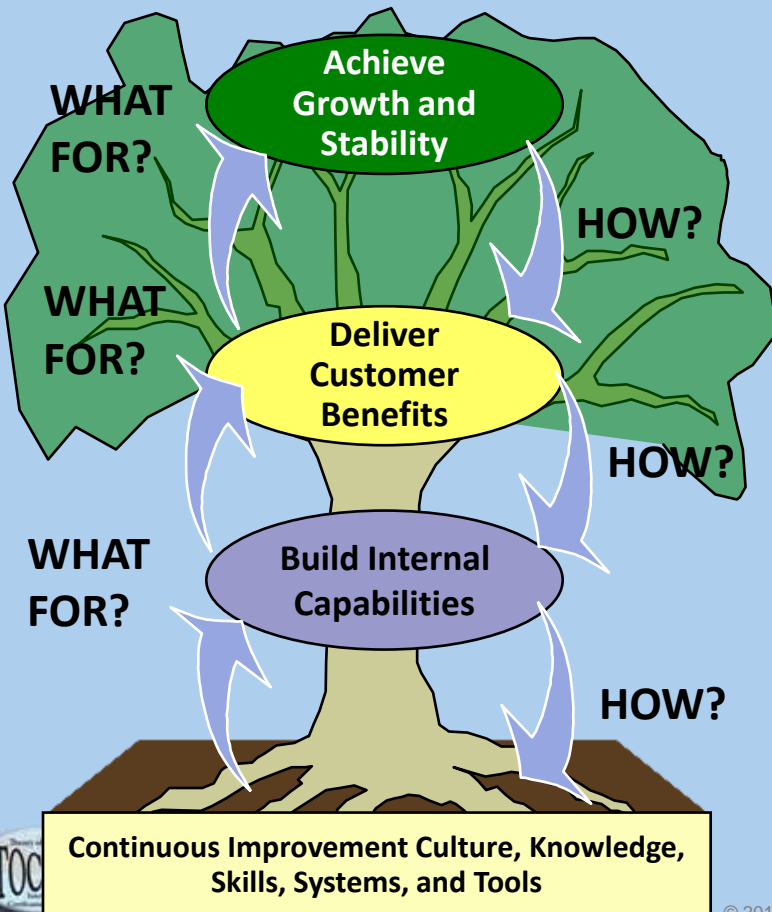


# NEW DEVELOPMENTS IN S&T

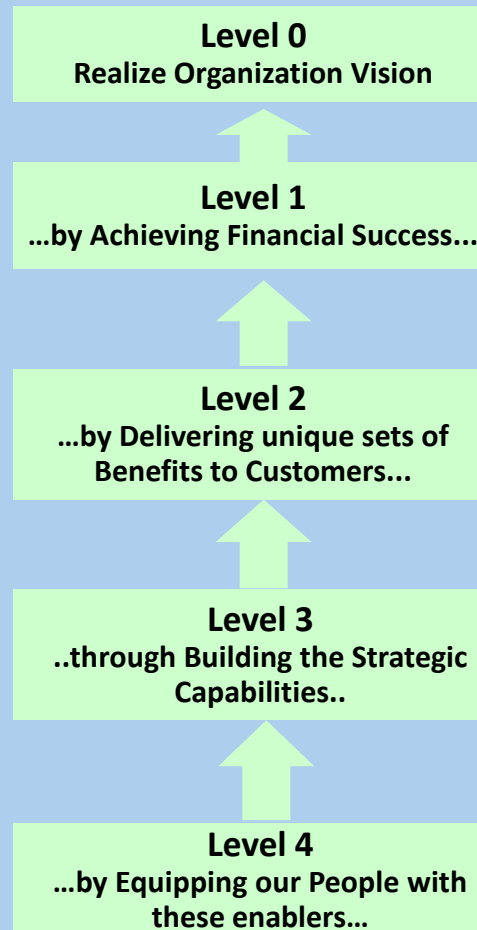
## Converting Balance Scorecard Strategy Maps into TOC's S&T

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Both Balanced Scorecard (BSC) Strategy Maps and Theory of Constraint's (TOC) S&Ts aim to reflect the "Cause and Effect Logic" for improving Organizational Performance



### BSC STRATEGY MAP



### TOC S&T TREE



# NEW DEVELOPMENTS IN S&T

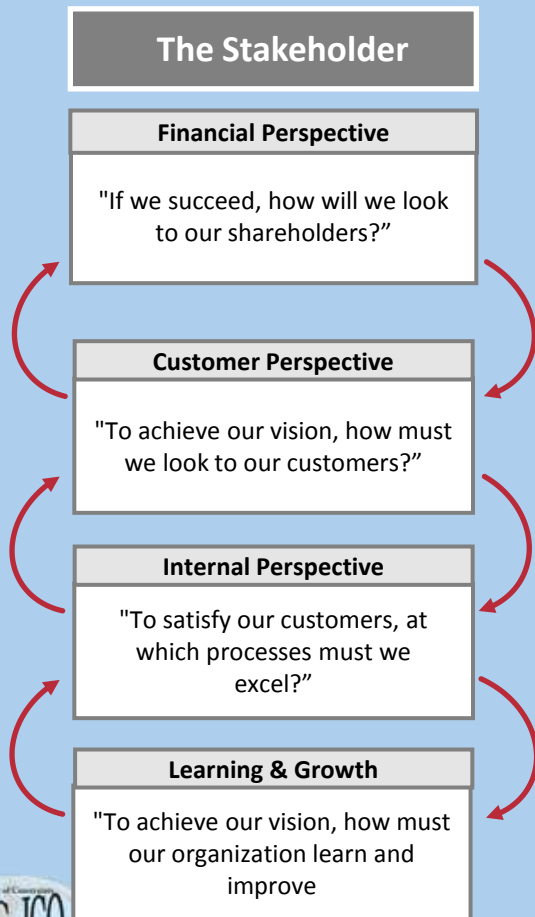
## Converting Balance Scorecard Strategy Maps into TOC's S&T

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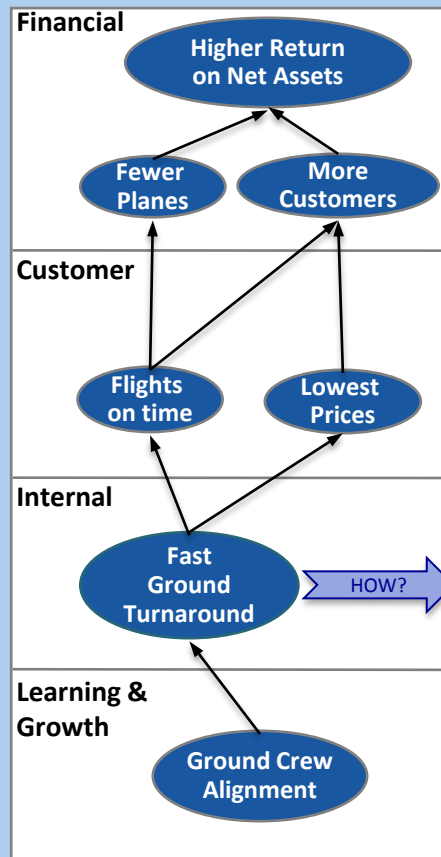
### BALANCE SCORECARD STRATEGY MAPS

*Strategy Maps describes how an organization intends to create value for its stakeholders.*

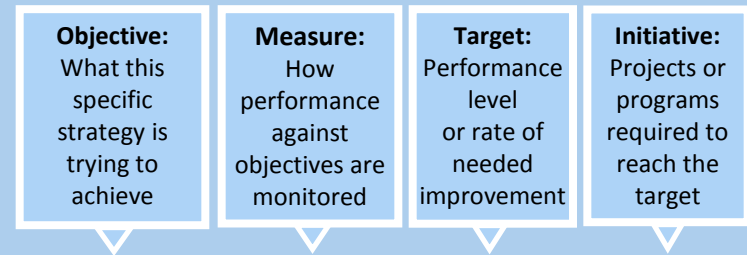
#### Balance Scorecard Strategy Map Template



#### Example Of Strategy Map for Airline Company



#### Example of turning Strategy Map into specific objectives and actionable steps



Objectives	Measures	Targets	Initiatives
I1: Fast ground turnaround	<ul style="list-style-type: none"> <li>On Ground Time</li> <li>On-Time Departure</li> </ul>	<ul style="list-style-type: none"> <li>30 Minutes</li> <li>90%</li> </ul>	I1: Six-Sigma cycle time reduction

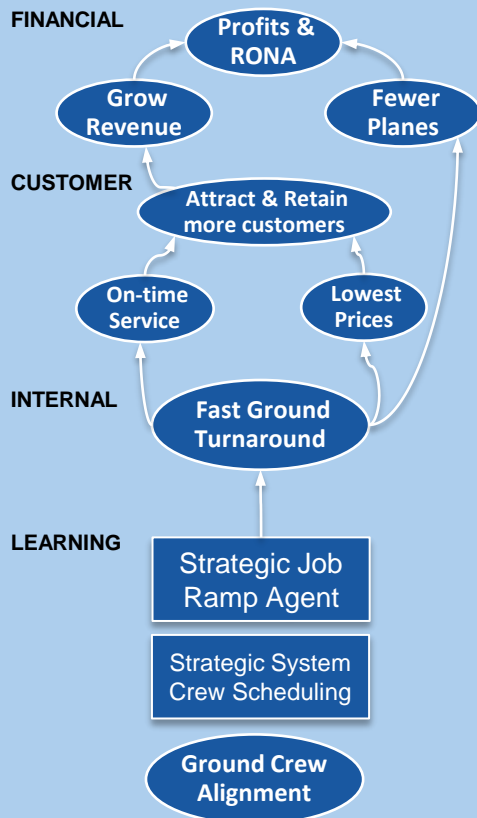
# NEW DEVELOPMENTS IN S&T

## Converting Balance Scorecard Strategy Maps into TOC's S&T

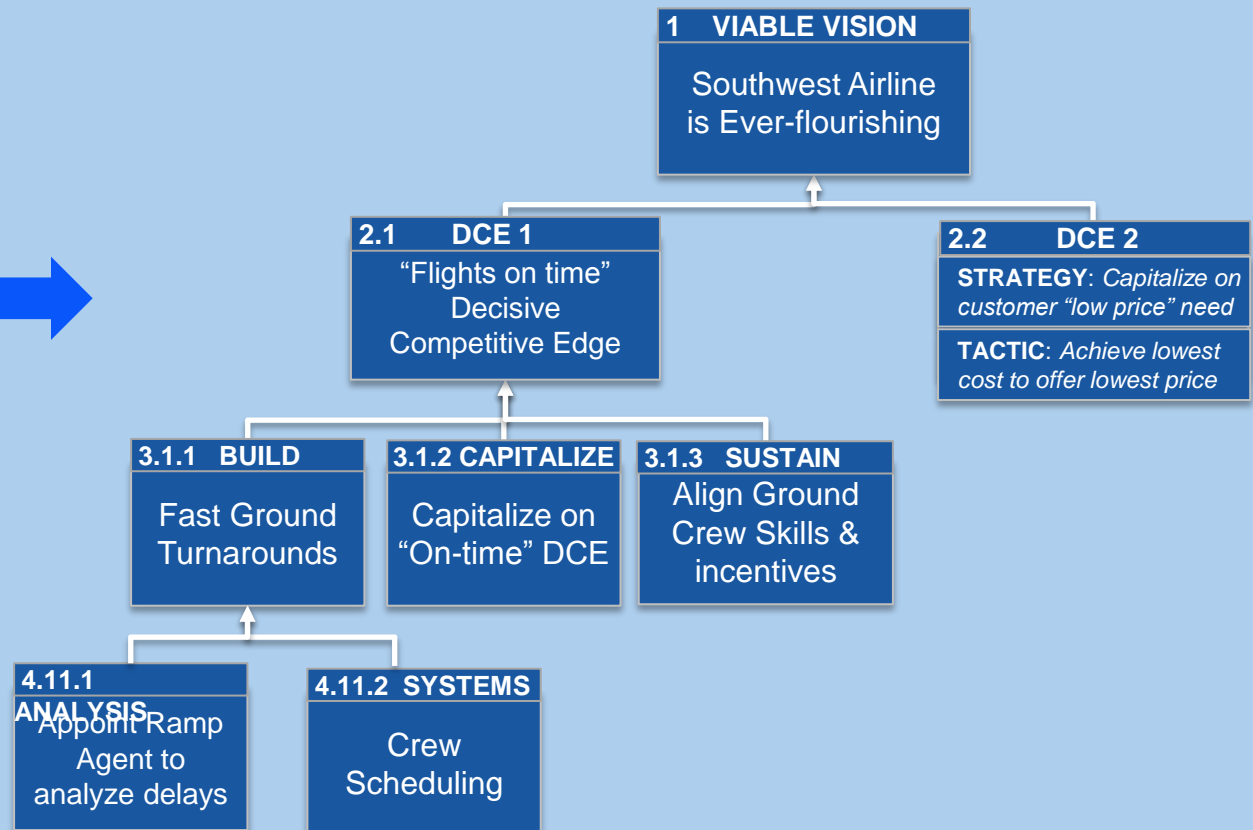
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The example below to illustrates the differences and similarities between BSC Strategy Maps and TOC S&T Trees.

Example Of BSC Strategy Map for Southwest Airlines



Example Of TOC Strategy & Tactic Tree for Southwest Airlines



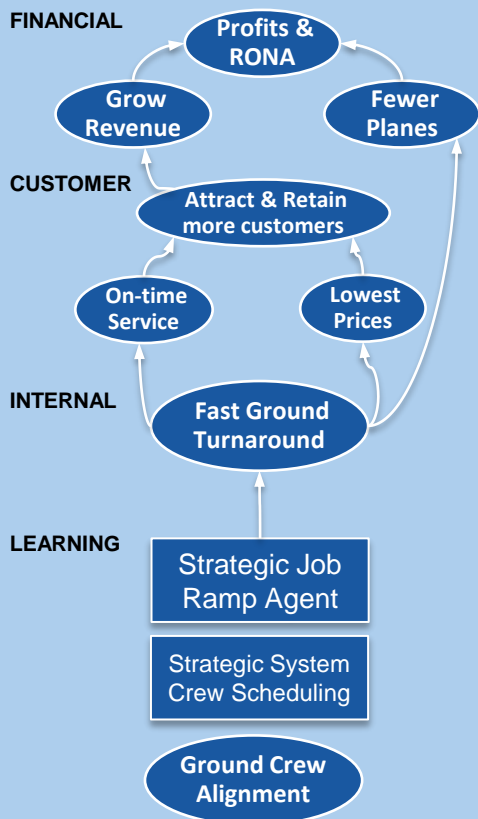
# NEW DEVELOPMENTS IN S&T

## Converting Balance Scorecard Strategy Maps into TOC's S&T

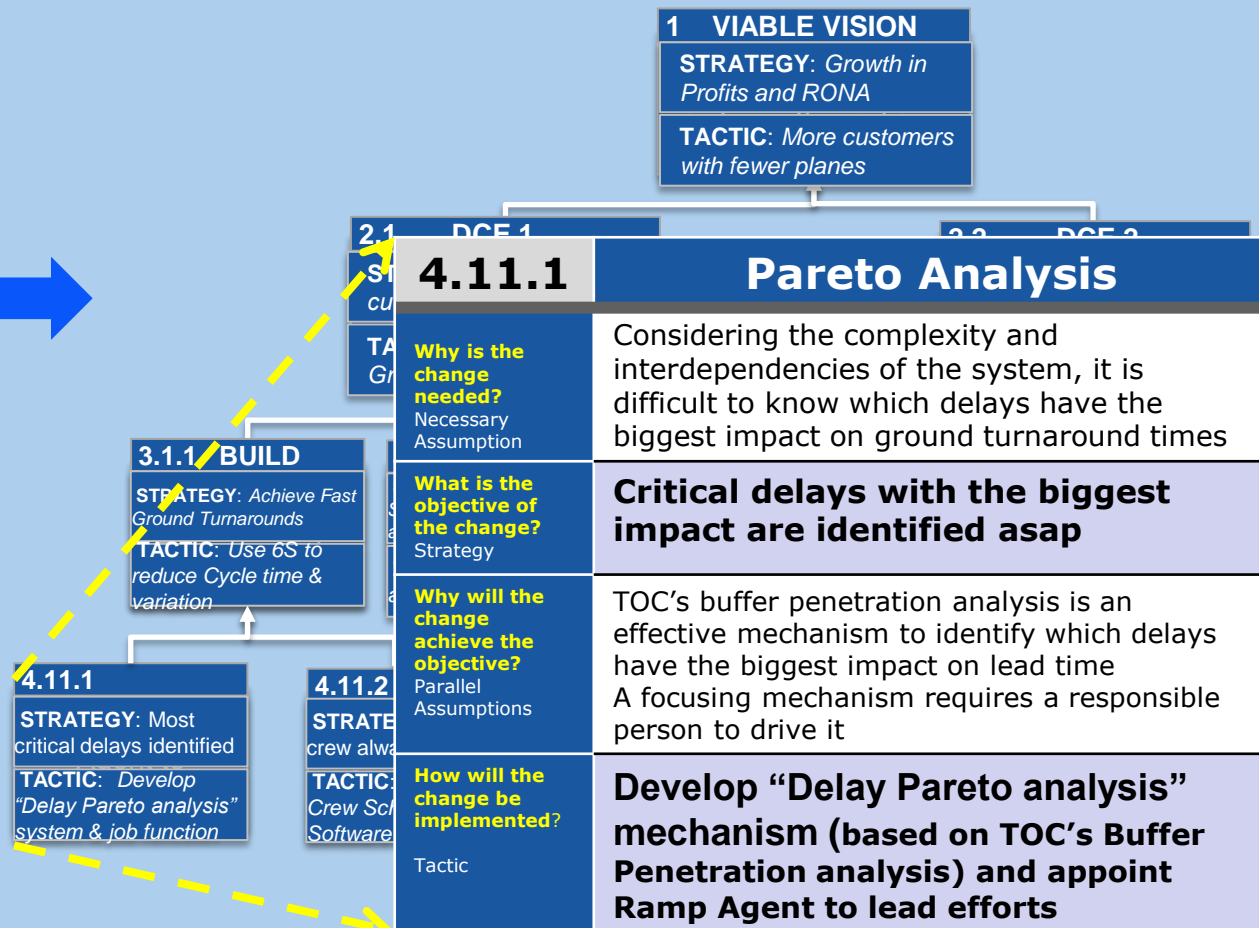
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The example below to illustrates the differences and similarities between BSC Strategy Maps and TOC S&T Trees.

Example Of BSC Strategy Map for Southwest Airlines



Example Of TOC Strategy & Tactic Tree for Southwest Airlines



# Key Take-aways

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- To be outstanding scientist, we need to “have the ***courage to face inconsistencies and challenges assumptions***”
- How: ***Always check before you act...UNLESS....Acting is only way of checking***...using Standing on Shoulders and TP processes
- For assumptions to be challenged, they should be **defined and communicated** in a way that makes it “**safe**” to **pro-actively and/or re-actively challenge assumptions related to changes/expectation gaps.**
- The S&T is an excellent tool for organizing any knowledge...and can help expose gaps and inconsistencies...but can & should be improved – everything can be substantially improved...
- How: Continue research and experiments **to make designing and using all three types of S&Ts simpler, better and faster** ...and continue to find new applications of S&T...

.... **by standing on the shoulders of Giants**



**FUTURE RESEARCH QUESTION**  
**Can S&Ts provide a practical way for TOCICO to meet our dual objectives of “defining and growing TOC BoK”?**

**Remember...**

**The BOTTLENECK is always at the TOP of the Bottle**

# Appendix

# BREAKING CHANGE vs. NOT CHANGE CONFLICTS

## USING Alan's 4 METHODS

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METHOD	CONFLICT	ASSUMPTION	INJECTION
<b>METHOD 1</b> CHANGE ++		CHANGE will jeopardize MERMAID because...[conditions]  CHANGE will cause CRUTCHES because..[conditions]	CHANGE+ will not jeopardize MERMAID when/if...[conditions]  CHANGE+ will not cause CRUTCHES when/if...[conditions]
<b>METHOD 2</b> NOT CHANGE ++		NOT CHANGE will jeopardize POT OF GOLD because...[condition]  NOT CHANGE will cause CROCODILE because...[conditions]	NOT CHANGE+ will not jeopardize POT OF GOLD when/if...[conditions]  NOT CHANGE+ will not cause CROCODILE when/if...[conditions]
<b>METHOD 3</b> CHANGE AND NOT CHANGE		CHANGE is in conflict with NOT CHANGE because...[conditions]	As long as...[condition] We must NOT CHANGE, AND As soon as... [condition] We must CHANGE.
<b>METHOD 4</b> ANOTHER CHANGE		There is not another (better) way(s) to get POT OF GOLD and MERMAID because... [why another solution cant work]	There is another (better way) to get POT OF GOLD and MERMAID if we can...[conditions under which another solution will work]

# How the 4 Methods Works?

Finding way(s) to get more of positives and less of negatives

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## TOP LINE (Positives / Enablers)

Are conditions, behaviours, practices and principles that:

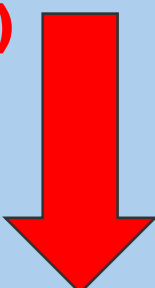
- Are **GOOD** for Us/Organization (System)
- We have to have
- Must be maximised (**NEED MORE**)



## BOTTOM LINE (Negatives / Disablers)

Are conditions, behaviours, practices and principles that:

- Are **BAD** for Us/Organization (System)
- We cannot afford to have
- Must be minimised (**NEED LESS**)



# Org S&T Case Study Premier Foods



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## Using an Organizational Strategy & Tactic tree to remove engines of disharmony within “ever-flourishing company”



Presented By: Dr. Alan Barnard (PhD), CEO Goldratt Research Labs, (VV Project Auditor)

Contributors: Ian Visser, CEO Premier Foods and Henning du Preez, MD, Goldratt SA

Date: 2 June 2012

# Premier Foods Overview


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- Premier Foods has been operating, in one form or another, since **1852** and more than **10 million people** consume its products every day.
- Total sales now exceed **ZAR 5 billion** (US \$700m)
- The group operates ten bakeries, five wheat mills, one maize mill and **16 distribution depots** nationwide,
- Employing over **5 000 people** in the manufacturing, distribution and marketing operations..
- Premier Foods has a strong independent distribution network of 900 bread trucks, which reach over **28 000 outlets daily**.
- In 2004, reported a **loss of ZAR 400 (US \$50m)** ...
- ...so why not get a **new CEO**...who had the wisdom and courage to launch his company on a Viable Vision journey...



# Premier Foods Viable Vision Project

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- VV Project started in 2006 to 2010
- As per Ian Visser, Group CEO Premier Foods, at TOCICO 2010, PF achieved the following through the Viable Vision Project:
  - *A year after VV started, it became clear to use the magnitude of the benefits possible and management decided to do MBO.*
  - *Since then, PF has tripled employment (compared to contraction in SA economy)..so the Unions are very happy*
  - *PF's customers have benefited from much higher availability and response for their products so customers are happier.*
  - *They have paid their banks back earlier (banks not only worry when you pay them back late...but also too early)...so the banks are happy*
  - *Turned the business around from a major loss in 2004 to over 10% Net Profit – unheard of in this industry...so the shareholders are very happy*
- Despite these amazing results, they agreed with Eli that now that they achieved their VV, they are ready to aim for the higher goal of “ever-flourishing company” which requires removing any



**“ENGINES OF DISHARMONY”**

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# The 5 Engines of disharmony

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- 1. Not know my contribution** - Many people don't really know (cannot clearly verbalize) how what they are doing is essential to the organization. Would you be motivated if you were in that position? (And what % of people in any company can answer this question?)
- 2. Not knowing other's contribution** - Most people don't really know how, what many of their colleagues are doing (or not doing) contributes to or can hurt the organization. Would you be collaborative if you were in that position?
- 3. Organizational Conflicts** - People are under operating conflicts such as which of conflicting policies to use or conflicts in resource allocation, etc.
- 4. Individual Conflicts** - Gaps between Responsibility and Authority. We all know firsthand the resulting fire-fighting and disharmony when those with the responsibility do not have the authority to act/make decisions.
- 5. Inertia** - Many people are required to also do tasks for which the reason no longer exists. People's intuition is always strong enough to feel it, but not always is it strong enough to convincingly explain it to their superiors. Would you be motivated if you were in that position?



# How can the Organizational S&T help prevent/ remove engines of disharmony?

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**Engine 1:** The contribution needed from everyone should be clear to them (else the Org S&T is not signed-off by them)

**Engine 2:** Everyone can see what contribution is required by others

**Engine 3:** Any conflicting rules are identified, escalated and removed from the S&T structure by right management level.

**Engine 4:** Use continued firefighting to identify and break conflicts between Responsibility and Authority and add the solution back into the S&T.

**Engine 5:** Use S&T audits to identify when and where changes are needed (and where and when not)



# What is the process to write such an Organizational S&T tree?

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## PHASE 1 – Do a test on Level 3

- Take the organization chart and build the block structure (with the title of each box = name of position e.g. CEO = CEO) down to level 3
- Take one of the boxes in level 3 and try to complete the details of the box. What is the Necessary Assumption, Strategy, Tactic and then only Parallel Assumptions, Tactic?
  - Necessary Assumption: Why is this job badly needed within this type of organization? Hint: Normally there is more than one reason why a specific job is necessary
  - Strategy: What is this Job responsible to deliver on an ongoing basis?
  - Tactic: Write the headings of what occupies most of his/her time.
  - Parallel Assumptions: Why you claim that what occupies most of their time is necessary to achieve the objective.
- Repeat this for each of the level 3 jobs



# What is the process to write such an Organizational S&T tree?

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- **PHASE 2 – Validate it with Level 3**
  - Interview the person repeating the above process.
  - Then ask them what type of Fires are coming to them all the time. From these fires, you can identify gaps between responsibility and authority that should provide the key for the Sufficiency Assumption.
- **PHASE 3 – Start the Process at Level 1**
  - Go to the CEO
  - Do only level 1 box.
  - Review and make corrections
  - Help CEO to do his direct reports (Level 2)

# What is the process to write such an Organizational S&T tree?

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## PHASE 4 – Do Level 2

- Assemble the management team reporting directly to the CEO.
- Show an example (From Level 3) and let CEO shows his box.
- Individually each person is trying to do his or her own box.
- TOC Expert and CEO go around to help those that get stuck and to check.
- Each person comes in front of the group to present their box.
- They listen to inputs and make agreed changes.

## PHASE 5 – Repeat until completed all levels

- Repeat the above process for each level of management, each time having the Manager responsible for that level to be a co-facilitator.

Warning from Dr Goldratt: This process WILL expose overlaps and gaps in responsibility and authority and misalignments between levels on what to focus on and what not. . This is why we should build the Organizational S&T only once we have a good Transformational S&T (or equivalent) to allow everyone to identify their needed contributions and focus.

# Org S&T : The Questions

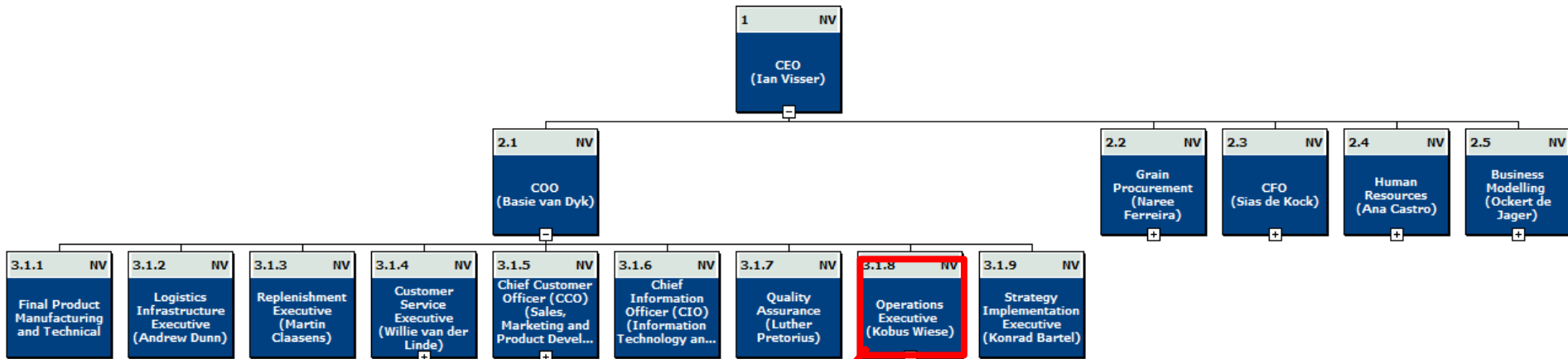
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1. **Necessary Assumption:** Why is your job essential for the organization? Hint: Normally there are more than one reason why a specific job is essential / necessary
2. **Strategy:** What must you (this specific Job) deliver on an ongoing basis?
3. **Tactic:** Write the headings of what occupies most of your time.
4. **Parallel Assumptions:** Why you claim that what occupies most of your time is necessary to achieve the objective(s).
5. **Sufficiency Assumption:** What type of FIRES (like in firefighting) are you dealing with most of the time? From these FIRES, you can identify gaps between responsibility and authority that should provide the key for the Sufficiency Assumption.

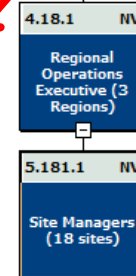


# Premier Foods Organization S&T

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3.1.8	Operations Executive (Kobus Wiese)
Necessary Assumptions: Why is this job necessary?	<ul style="list-style-type: none"> <li>Effective and efficient flow between and through Regions is a necessary condition to enable effective and efficient execution of the operations strategy</li> <li>Disruptions in flow through regional sites can and frequently do impact and/or spread to impact national performance</li> <li>Non-compliance against Safety, Health, Environment, Labour Law and/or other standards at any region can threaten ongoing operations of the company as a whole.</li> </ul>
Strategy: What is the objective of this job?	<b>Effective and efficient performance and compliance (EEC) with minimum standards is achieved at every operations site</b>
Parallel Assumptions: Why is it possible but difficult?	<ul style="list-style-type: none"> <li>Operations primary objective is to ensure high availability for their customers. Their secondary objective is to achieve this with the minimum direct OpEx and Inventory while achieving compliance with all standards.</li> <li>Sometimes, tactics necessary to achieve regional effectiveness and/or efficiency objects can be in direct conflict with the tactics necessary to achieve national effectiveness and efficiency. Regions and Sites MUST always subordinate to global not local optima when such conflicts exist.</li> <li>Some underlying services (health and safety, security, cleaning, human resource provision, administration) is common to all regions.</li> </ul>
Tactic: How will you achieve your objectives?	<ul style="list-style-type: none"> <li>The Operations Executive responsibility is to ensure effectiveness, efficiency and compliance at regional and national level. This requires:               <ul style="list-style-type: none"> <li>Identifying and resolving any regional conflicts in achieving local vs. global effectiveness, efficiency and/or compliance objectives. If these conflicts impact and/or involve functions outside operations, these must be elevated immediately to the COO</li> <li>Setting clear EEC objectives for regional executives for effectiveness, efficiency and compliance objectives, ensuring these are directly in line with overall Transformation S&amp;T.</li> <li>Ensure Regional Executives have necessary resources, systems and alignment of responsibility &amp; authority to achieve their objectives.</li> <li>Audit achievement of all Strategies at Regional Operations Level and ensure corrective actions are taken soonest.</li> </ul> </li> </ul>
Sufficiency Assumption: What fires should not reach you?	<p><b>Warning 1:</b> In Distribution, number 1 priority is to be effective, not efficient. Trying to be efficient before being effective will jeopardize our competitive edge and compromise my ability to achieve my goals.</p> <p><b>Warning 2:</b> Regional Executives role is to resolve conflicts between site and regional needs and offer flow constraints, not cause them.</p>



# The Pyramid Principle

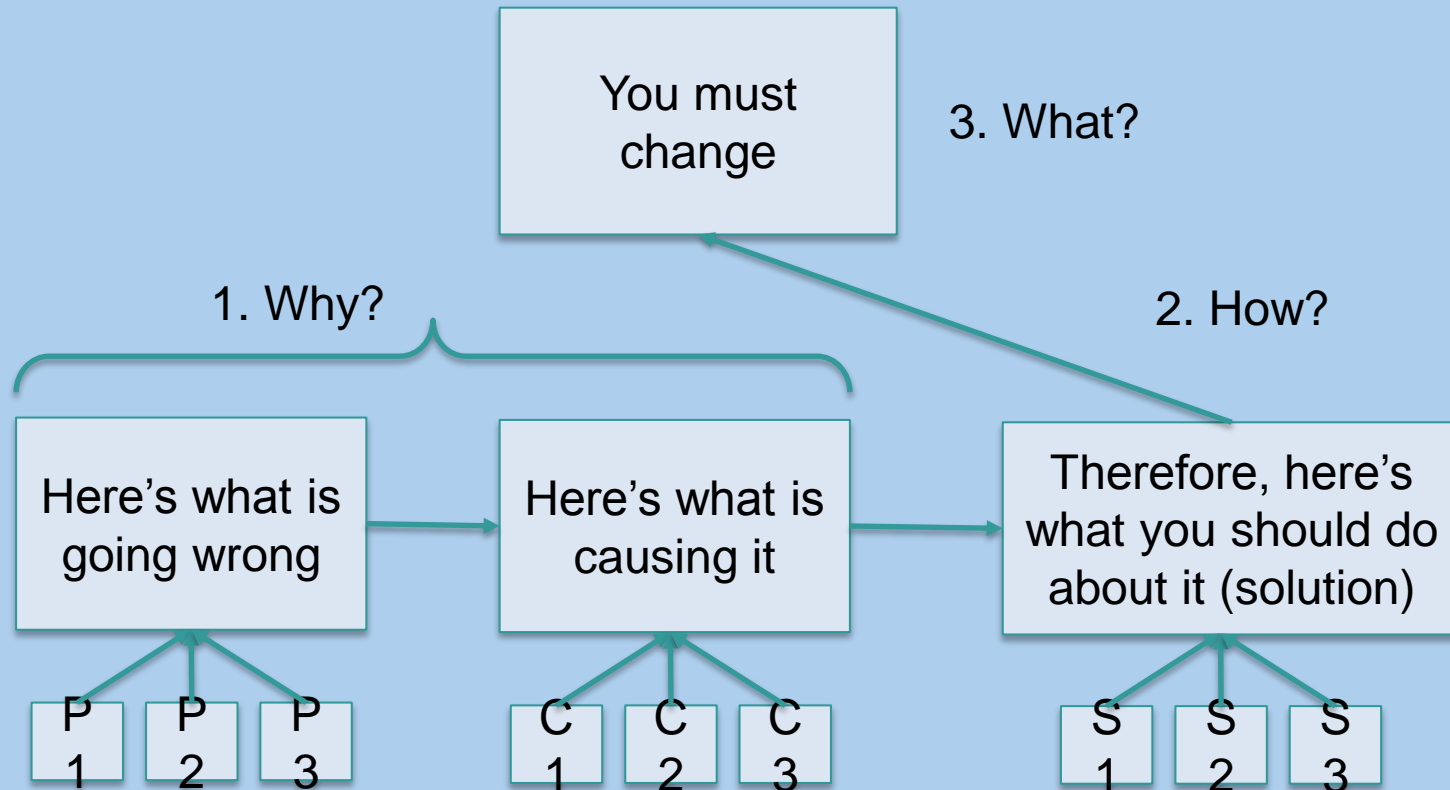
**Barbara Minto**



**Notes by Dr. Alan Barnard**

# Deductive Reasoning

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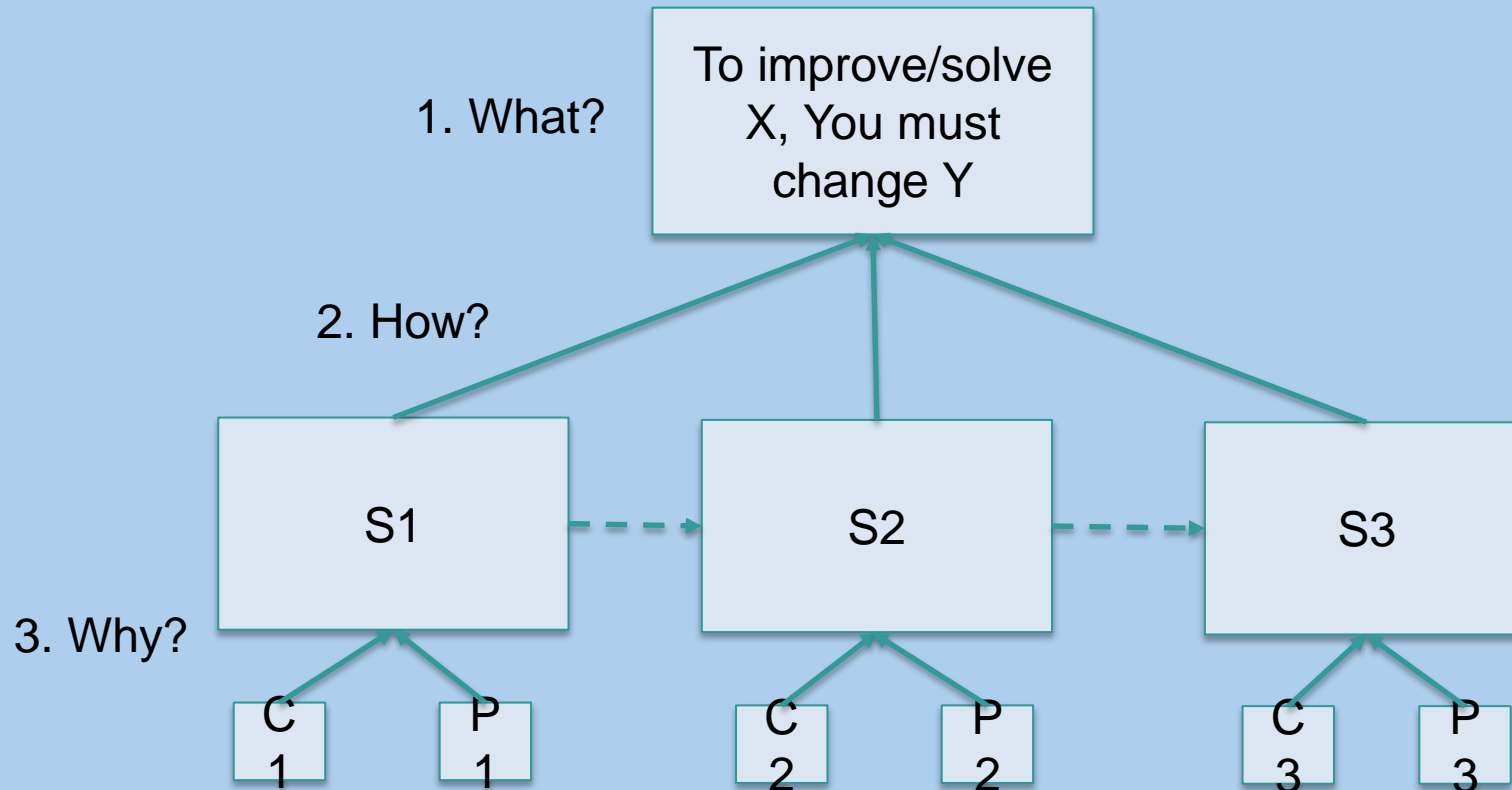


If we write with deductive reasoning, we tend to force our reader to re-enact our entire problem-solving process (why→how→what). Its almost as if the writer is saying to the readers:

*"I worked extremely hard to get this answer, and I'm going to make sure you know it"*

# Inductive Reasoning

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If we write with deductive reasoning, we start with answering the reader's major question directly (the essence of our hypothesis) and expose more details of the how and why if they are interested (what→how→why).