HARMONY

TOC Strategy & Tactic Planning & Execution

HARMONY S&T WEB APP
QUICK START GUIDE

This guide will help you get started with HARMONY S&T Web App – a new Theory of Constraints based Online Strategy and Tactic (S&T) software tool that help organizations and individuals design, validate, communicate, plan and monitor execution and audit achievement of their strategies and tactics to achieve organizational or personal goals. This quick guide provides answers to the following questions:

GOLDRATT RESEARCH LABS

1. GENERAL QUESTIONS ON HARMONY

1.1 How can Harmony be of value to me and/or my organization?

Typically 70% of all the changes fail despite the fact that these were made with the best intent - either resulting in targeted improvement not being achieved and/or sometimes even causing damage. The reason for this is that many organizations don't have an effective and efficient way to connect, communicate, and align top-level goals to the specific required initiatives and contributions of each part and each level of the organization making it very difficult to align and maintain FOCUS and to react quickly to FEEDBACK on what worked and what did not.

The biggest obstacles to aligning and maintaining FOCUS and receiving and reacting quickly to FEEDBACK include:

1. Wasting scarce resources on changing the many things that CAN be improved (wrong changes) rather than the few high leverage ones that MUST be improved (right changes);
2. Not clearly communicating and/or getting key stakeholder's contribution to help validate the WHAT, HOW and WHY of each necessary change to secure stakeholder buy-in and ownership
3. Not having a prioritized plan, sufficiently resourced to achieve desired outcomes without bad multi-tasking.
4. Stakeholders losing focus by not following the plan and getting distracted
5. Not learning from experience to reduce the time to detect and correct mistakes in assumptions

HARMONY, offers a better, faster and simpler way to reduce these mistakes by guiding YOU through a process to:

1. Define the few right (high leverage) changes using the Strategy and Tactic Tree format, quantify their financial impact and how these relate to each other (S&T DESIGN module)
2. Define and Validate the WHAT, HOW and WHY of each change with stakeholders…and in the process identify and correct any bad assumptions (S&T VALIDATION module)
3. Plan the implementation to clearly communicate the priority and required contribution for execution to everyone to prevent bad multi-tasking and ensure synchronized execution (S&T PLANNING module)
4. Execute the S&T one-change-at-a-time and maintaining FOCUS through updating progress to see which strategies are not being achieved/which tactics are not implemented (S&T EXECUTION module)
5. Do more frequent Audit reviews to provide us with FAST FEEDBACK on identifying and resolving planning and execution conflicts that block achievement of strategies and or implementation of tactics (S&T AUDIT module)

But what is Strategy and Tactic Trees and how can you use HARMONY to help you to design, validate, plan, execute and audit an S&T for your organization?

That is the question we hope to answer with "*Harmony Web App Quick Start User Guide*"

1. GENERAL QUESTIONS ON HARMONY

1.1 How can Harmony be of value to me and/or my organization?

The development by Dr. Eli Goldratt, author of THE GOAL and creator of “Theory of Constraints” of a new “Theory of Constraints” based thinking process called “Strategic & Tactic Tree” (S&T) is probably “one of the most important breakthroughs in organizational strategy design, validation and communication over the last few decades. As with many breakthroughs, this breakthrough started with a simple question: What is “Strategy” and what is “Tactics” and is there really a one: many relationship between these?

Dr. Goldratt realized that the words “strategy” and “tactic” had to be defined more clearly than before. His new definitions were inherently simple, yet powerful. He proposed that “Strategy” was simply the answer to the question “What for?” (the objective of a proposed change) and “Tactic”, simply the answer to the question “How to?” (the details of a proposed change). From these definitions, it is clear that every Strategy (What for) should have an associated Tactic (How to) and vice versa and that therefore Strategy and Tactic must always exist as “pairs” and must exist at every level of the organization.

To better formulate and communicate “strategy” we really need to build a Strategy & Tactic (S&T) Tree, with each S&T node defining the “What for” and “How to” for the few high leverage changes we believe are necessary and sufficient to achieve organizational goals as well as the implementation sequence of these (left to right). But since any logical structure is only as valid as the assumptions on which it was based, the S&T tree should also include the assumptions of why each change is necessary, why (under what conditions) it is possible and lastly why it is sufficient.
The resulting S&T Tree structure is what HARMONY has been custom developed for to help us with S&T design, validation, planning, execution and auditing.

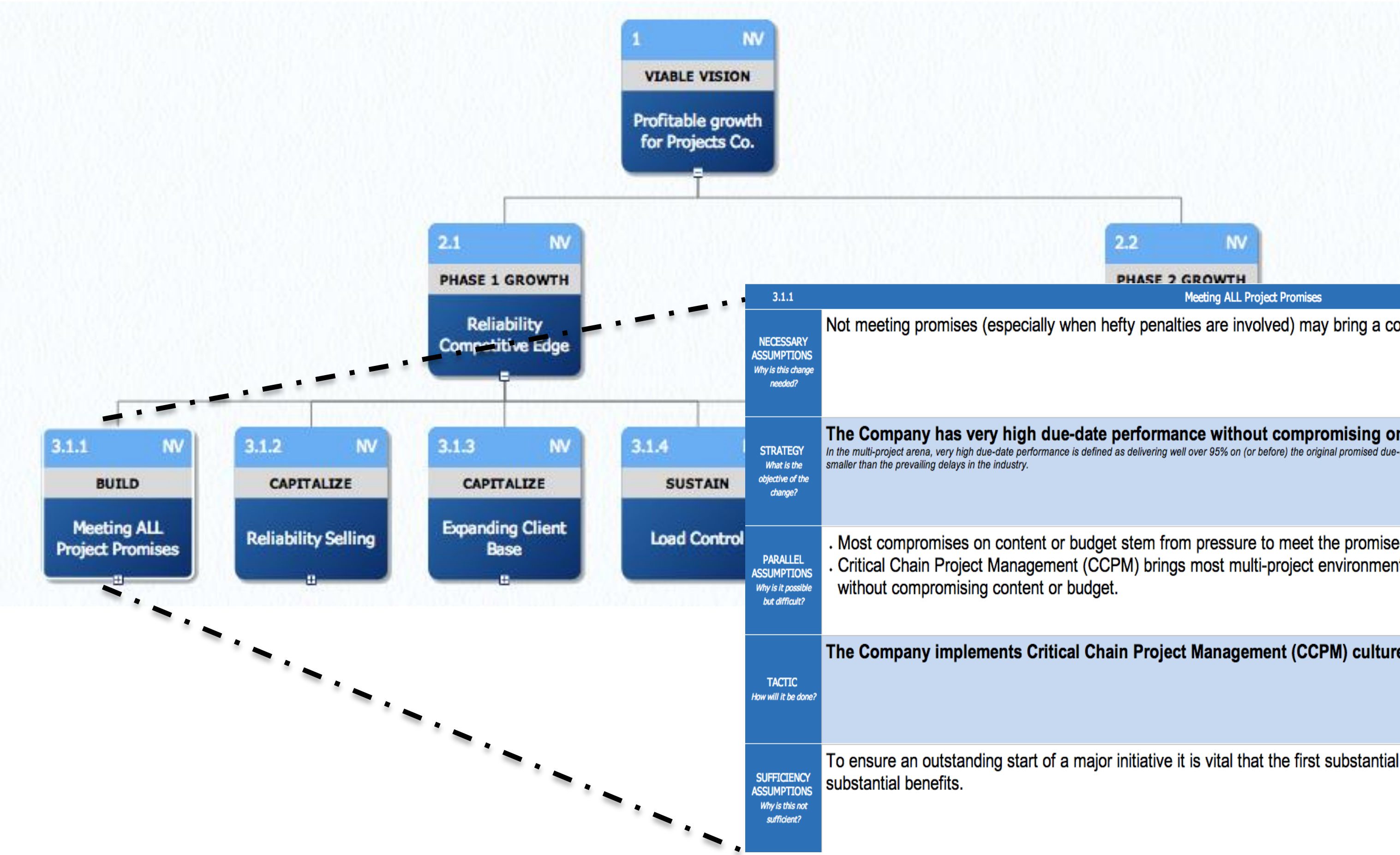
STRATEGY AND TACTIC (S&T) TREE

1. GENERAL QUESTIONS ON HARMONY

1.1 How can Harmony be of value to me and/or my organization?

HARMONY contains a library of S&Ts developed by Dr. Goldratt which can be customized for creating a specific transformation plan for companies from industries including Manufacturing, Distribution and Projects. There is also a growing library of S&Ts submitted by HARMONY users from around the world for organizations such as High-Tech, Startups, Government Agencies, Hospitals etc.

The example below shows what a typical "transformational" S&T looks like for a Projects based organization.



3.1.1	Meeting ALL Project Promises
NECESSARY ASSUMPTIONS *Why is this change needed?*	Not meeting promises (especially when hefty penalties are involved) may bring a company to its knees
STRATEGY *What is the objective of the change?*	**The Company has very high due-date performance without compromising on the content or on the budget.** *In the multi-project arena, very high due-date performance is defined as delivering well over 95% on (or before) the original promised due-dates, while in cases of late delivery the delay is much smaller than the prevailing delays in the industry.*
PARALLEL ASSUMPTIONS *Why is it possible but difficult?*	. Most compromises on content or budget stem from pressure to meet the promised due date. . Critical Chain Project Management (CCPM) brings most multi-project environments to high due-date performance without compromising content or budget.
TACTIC *How will it be done?*	**The Company implements Critical Chain Project Management (CCPM) culture and procedures.**
SUFFICIENCY ASSUMPTIONS *Why is this not sufficient?*	To ensure an outstanding start of a major initiative it is vital that the first substantial actions will result in immediate substantial benefits.

1. GENERAL QUESTIONS ON USING HARMONY

1.2 How to subscribe and use different versions of Harmony S&T Software?

Visit our website www.Harmonytoc.com to subscribe today. We offer a Desktop PC and a new Web App option of HARMONY, both available in 3 versions – the free VIEWER, or the paid DEVELOPER and IMPLEMENTER versions, both available on a FREE 30 day trial.

Step 2:
Existing users can login here …
New users will receive their login details via email and can then proceed to login

Step 1: Click SUBSCRIBE to begin

Harmony Desktop PC App

Our first version of the Desktop app was developed in 2009 for Windows-based computers. It now contains 4 modules – Strategy and Tactic (S&T) Design, S&T Validation, S&T Planning and S&T Execution. It can be run on a Mac but requires a Windows emulator such as VMWare or Parallels Desktop. There is a free S&T Viewer, and subscription based S&T Developer and S&T Implementer versions.

Harmony Cloud-based Web App

The new online Web App version offers all the functionality of the Desktop version but also includes expanded functionality for S&T Audit including GAP and Conflict Analysis, Conflict Resolution and Best Practice definition. All S&Ts and related data is stored "in the cloud" on secure Amazon servers, securely accessible from any device with a web browser - anywhere, anytime - allowing easy sharing and collaboration with other stakeholders. The Web App version can also be used in offline mode to ensure you can continue working on your S&Ts or conflicts even when you aren't connected to the internet.

Harmony iPhone/iPad Mobile Application

To enable users to view S&Ts directly on their iPhones or iPads we created a Mobile version available from the Apple App Store. With the Free Viewer version, users can view the 5 generic S&Ts created by Dr. Eli Goldratt as well as use a Theory of Constraints based Financial model to check impact of decisions on profitability and ROI. There is also a paid version that allows users to import any S&T created on the Harmony Desktop or Web App version for viewing on their iPhone or iPad. Both versions can be found in the Apple App Store by searching "Harmony S&T + Goldratt"

1. GENERAL QUESTIONS ON USING HARMONY

1.3 What functionality do different versions of Harmony offer?

We offer 3 levels of subscription for both the Harmony Web App and Harmony Desktop versions:

1. Harmony S&T Viewer
   Always free, this subscription allows any user to view any Strategy &Tactic (S&T) trees that was created with Harmony
2. Harmony S&T Developer: S&T Design + S&T Validate
   S&T Developer enables users to design, validate and communicate S&Ts either from scratch or from customizing generic S&Ts available from the Goldratt S&T library consisting of S&Ts developed and approved for release by Dr. Eli Goldratt OR from the Community S&T Library containing S&Ts developed and shared by a growing Harmony user base. It also contains a Theory of Constraints based Financial model to quantify the impact of all changes on Organizational Sales Revenue, Variable Cost, Operating Expenses and Investment to check if changes are sufficient to meet financial goals.
3. Harmony S&T Implementer: S&T Design + S&T Validate + S&T Planning + S&T Execution + S&T Audit
   S&T Implementer offers users access to the full functionality of our Harmony software solution, including S&T Design, Validation, Planning, Execution and Audit. The S&T Planning module can be used to allocate Strategy Owners, Tactic Managers and Task participants to each change, to estimate times to achieve each strategy and implement each tactic and create a prioritized project network for execution. The S&T Execution module allows users to update implementation progress and monitor the execution status of an S&T. The Harmony Web App Implementer version also contains new S&T Audit functionality to analyze and resolve planning and execution conflicts and to convert these into "Best practices" that can be added to a library and used to build/customize S&Ts.

Standard pricing is listed, but be sure to check our website for specials and promotions! * shows best value options

Subscription Period	Web App			Desktop App			Web + Desktop App		
	Viewer	Developer	Implementer	Viewer	Developer	Implementer	Viewer	Developer	Implementer
Monthly	Free	$7.99	$15.98	Free	$9.99	$19.99	Free	$13.99	$27.97
6 Months	Free	$39.95	$79.90	Free	$49.95	$99.95	Free	$69.95	$139.95
per month	Free	$6.66	$13.32	Free	$8.33	$16.66	Free	$11.66	$23.33
12 Months	Free	$59.95	**$99.99**	Free	$79.95	$159.95	Free	$109.95	**$199.95**
per month	Free	$5.00	**$8.33**	Free	$6.66	$13.33	Free	$9.16	**$16.66**

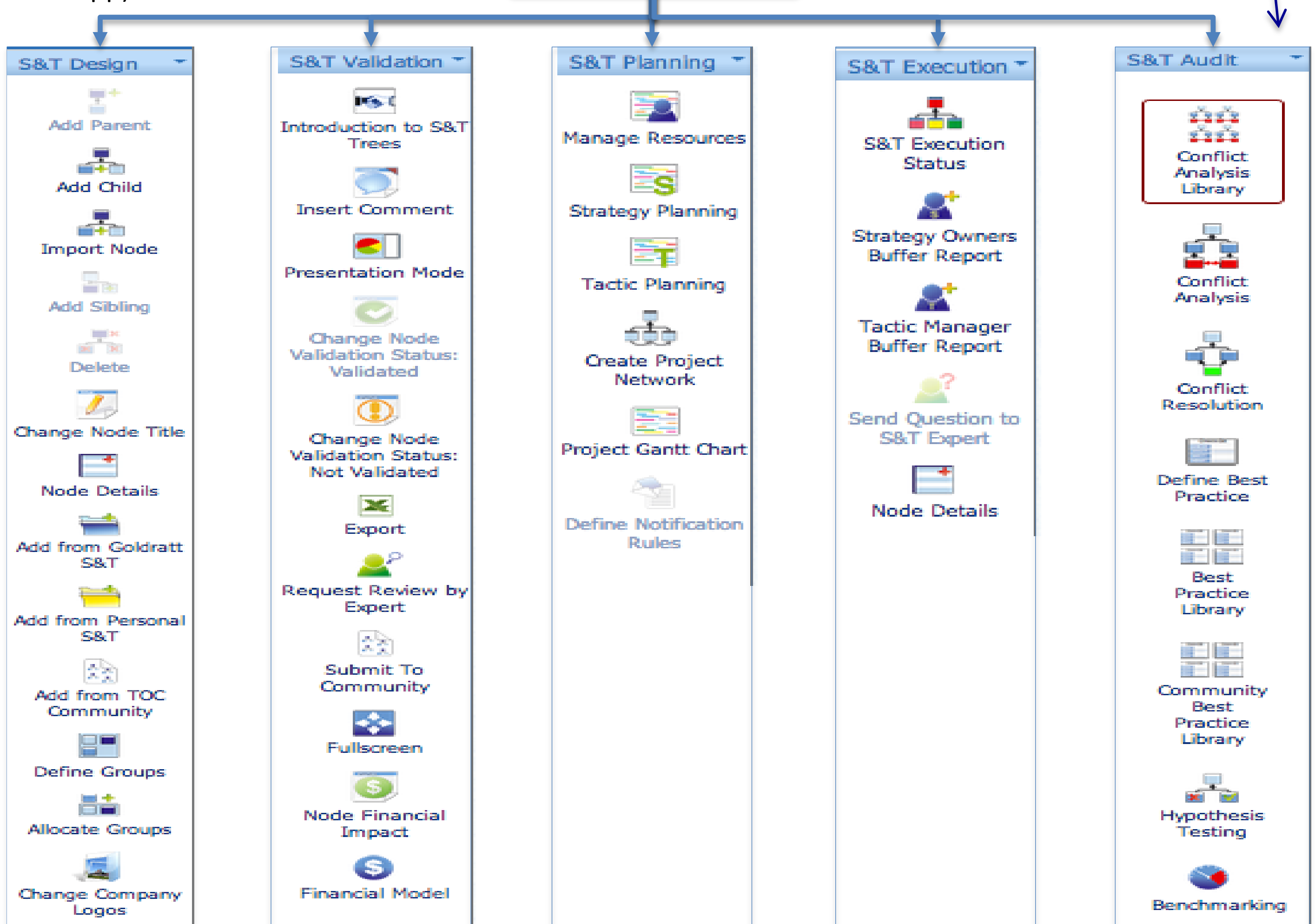
Go to www.harmonytoc.com/FAQ for additional information on HARMONY.

1. GENERAL QUESTIONS ON USING HARMONY

1.3 What functionality do different versions of Harmony offer?

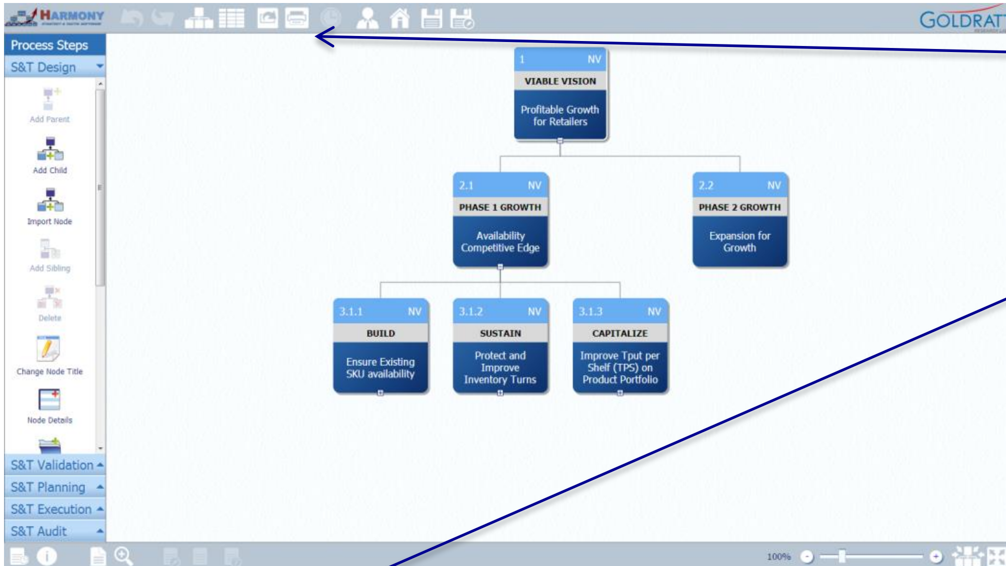
HARMONY Desktop and Web App contains 5 modules. These 5 modules include the functionality to support S&T Design, S&T Validation, S&T Planning, S&T Execution and S&T Audit (Only Web App)

New S&T Audit Functionality only available within the Harmony Web App



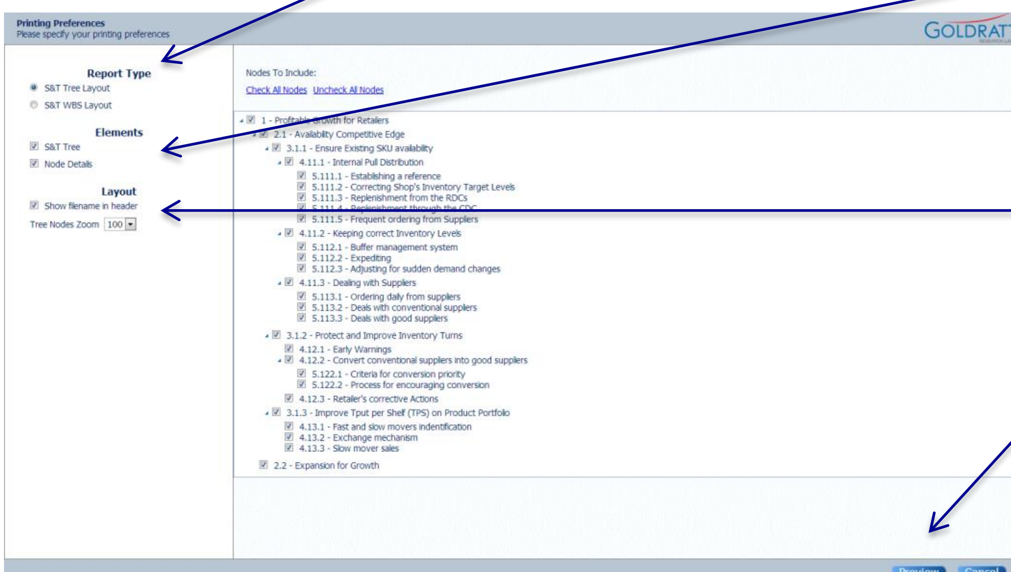
1. GENERAL QUESTIONS ON USING HARMONY

1.4 How to print from Harmony Web App



Step 1. Click the printer icon from the top menu bar.

Step 2. Determine Report Type.
S&T Tree Layout will print nodes in a graphical tree, similar to the S&T Design view.
S&T WBS Layout will print node titles in a hierarchal outline format



Step 3. Determine Elements to print.
S&T Tree will print node levels & titles
Node Details will print all detailed node content . Details will print below the S&T structure in numerical order.

Step 4. Determine Layout for printing.
Show Filename in Header and
Tree Node Zoom.

Step 5. Preview your printout to check that your preferences are as desired.

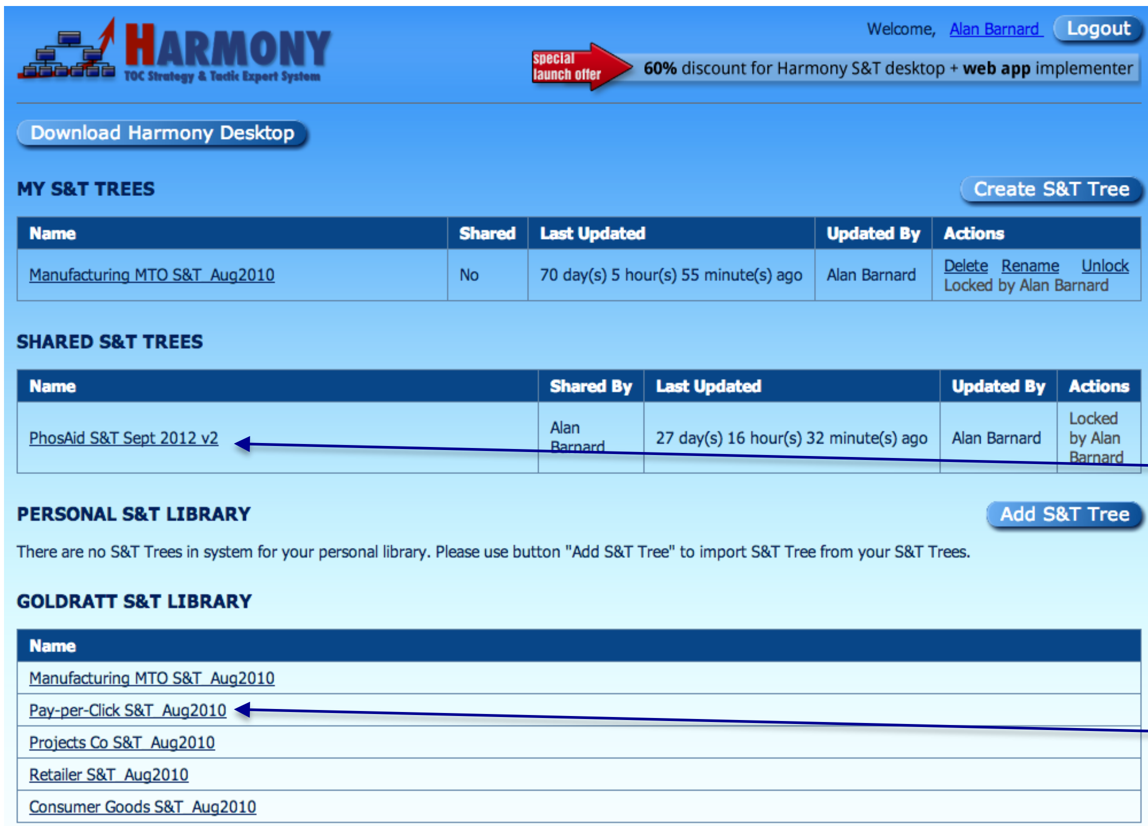
Helpful Hint: you can print to PDF to share a copy of your tree and details via email.

2. STRATEGY & TACTIC DESIGN

2.1 How to design your own Strategy and Tactic Trees

You can design your own or customize an S&T by:

1. Creating a new S&T from scratch
2. Opening and updating a S&T tree that is shared with you by another user
3. Opening and Customizing a S&T tree from the Goldratt S&T Library that contain S&Ts to sustainably improve, using the latest Theory of Constraints best practices Manufacturing, Technology, Projects, Retail , Consumer Goods Manufacturing and Distribution companies.



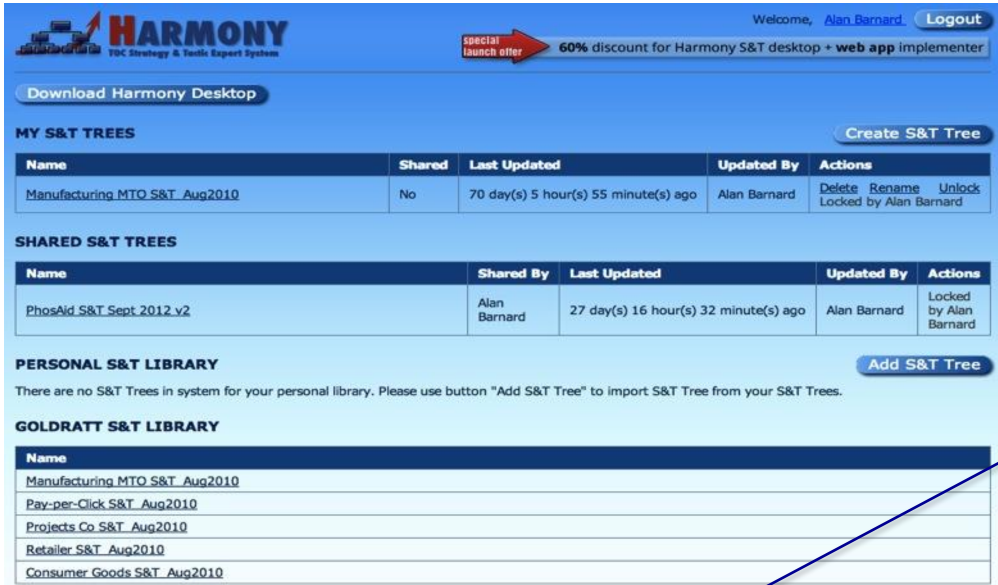
1. To Create a new S&T Tree

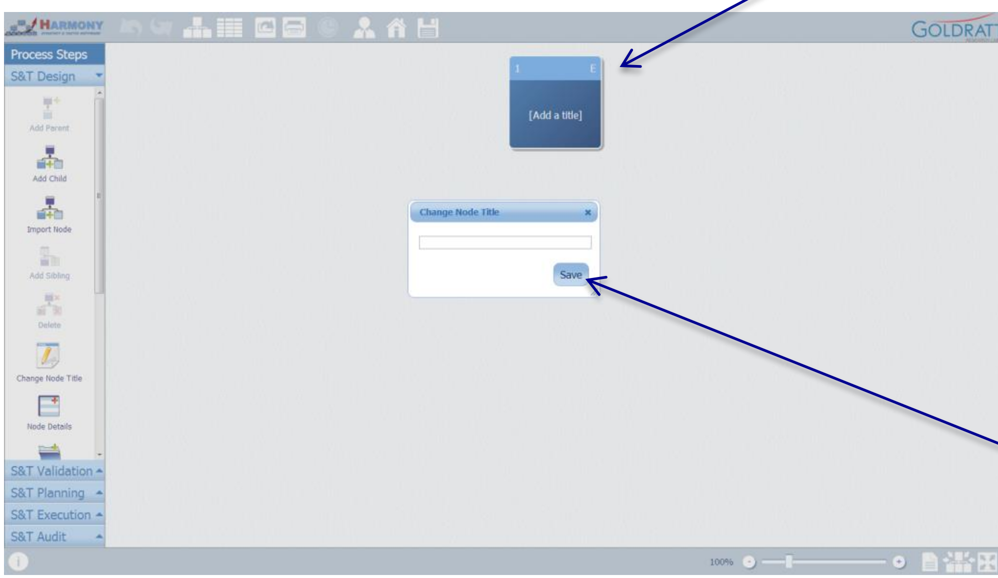
2. To Open and Update a S&T Tree shared with you

3. To Open and Customize a generic Goldratt S&T Tree

2. STRATEGY & TACTIC DESIGN

2.1 How to create your own Strategy and Tactic Tree from scratch





Step 1. Click Create a new S&T Tree to start a new S&T from scratch

Step 2. Begin with a Title for your top level node.

This represents the highest goal of your organization or system.

Some examples are "Ever- Flourishing Company" or "Best Managed Government"
Titles will help describe the content in the Node.
Don't worry- you can change it later.

Step 3. Click Save to begin working in your S&T

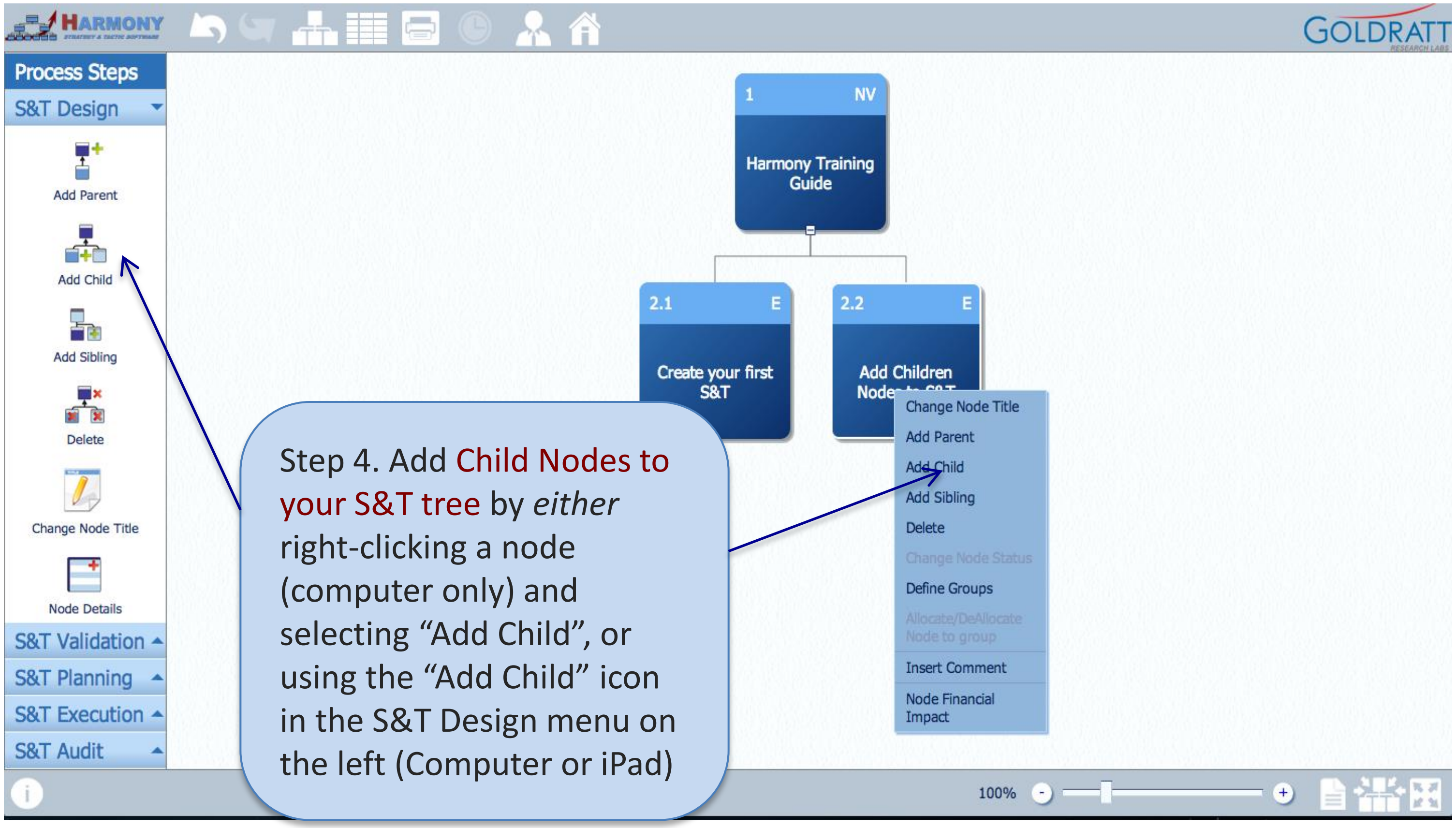
2. STRATEGY & TACTIC DESIGN

2.1 How to create your own Strategy and Tactic Tree from scratch

Now you are ready to being adding the next level to your S&T. This level contains the necessary conditions to achieve the higher level objective. Once you've defined the "child" nodes, you can arrange them to ensure they are positioned in the right sequence. You can move nodes around by clicking and holding while dragging on the top right corner. The required implementation sequence of these are always from left to right.

Child Nodes are placed at a level below the selected node.

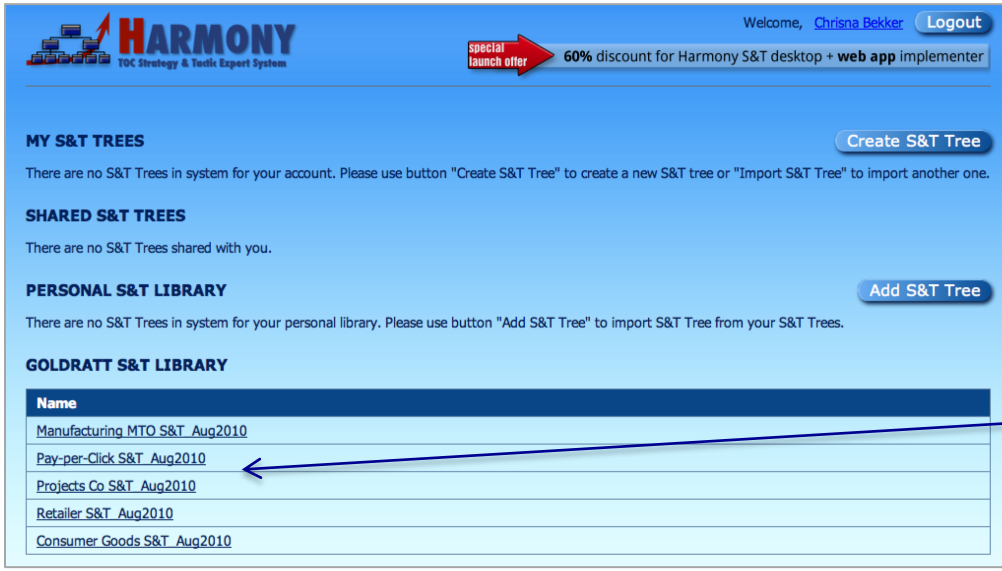
Sibling Nodes are added in parallel to a selected node.

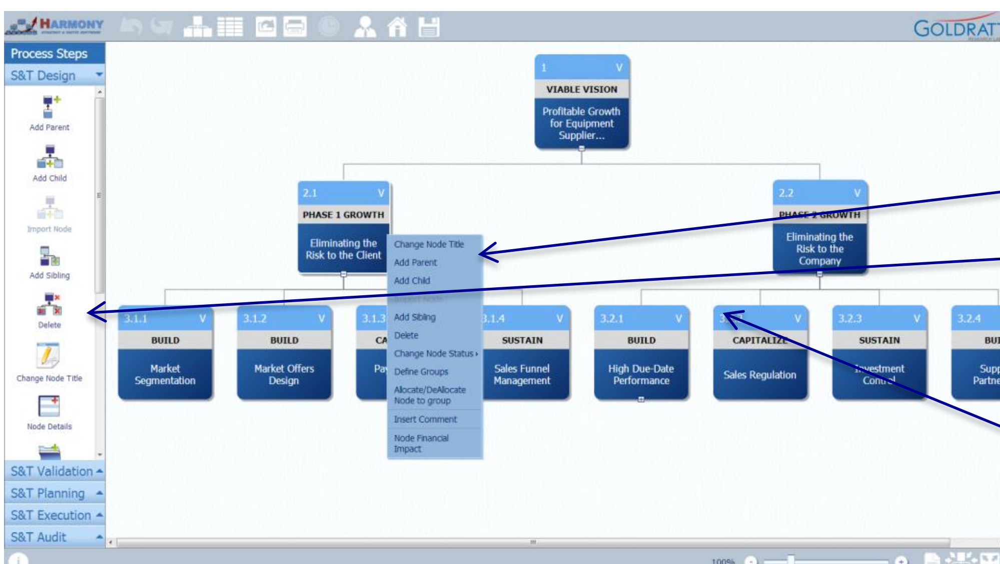


Step 4. Add Child Nodes to your S&T tree by *either* right-clicking a node (computer only) and selecting "Add Child", or using the "Add Child" icon in the S&T Design menu on the left (Computer or iPad)

2. STRATEGY & TACTIC DESIGN

2.2 How to create your own S&T from the Library of generic S&Ts





There are 5 generic trees in the Goldratt S&T Library. These can be a helpful starting place, and you can customize one of these to fit your organization

Step 1. From the Home page, click on one of the trees from the Goldratt S&T Library

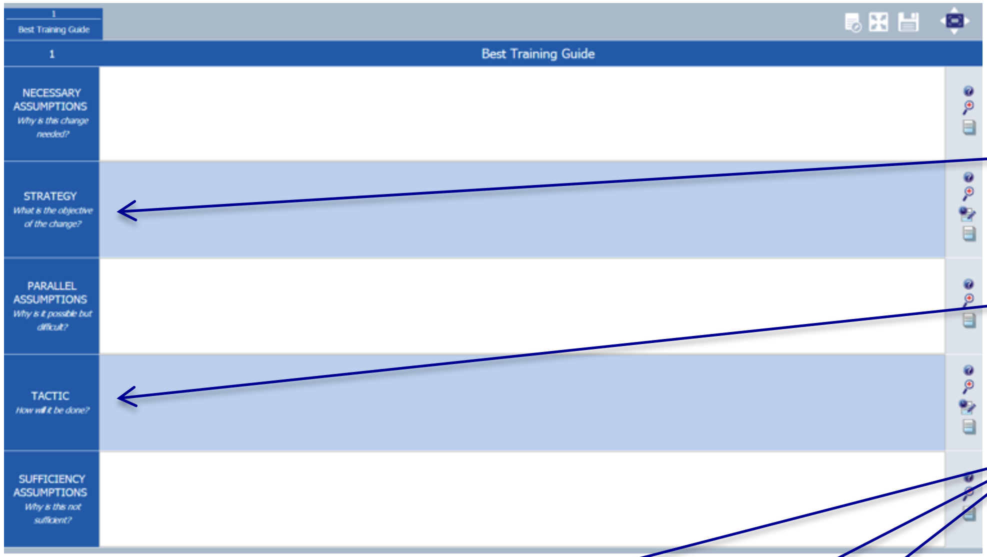
The full S&T tree will open and you can begin customizing or modifying the S&T structure by adding, deleting or moving nodes.

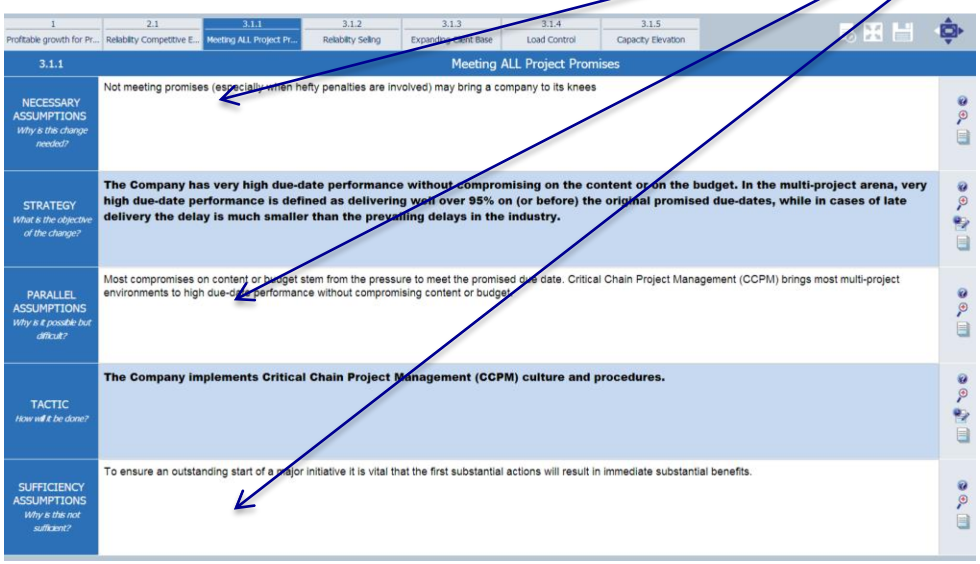
Step 2. To add/delete nodes or change node titles, either right-click on a node (computer users) or use the left-hand menu (computer) after selecting node by clicking on it or touching it (iPad)

Step 3. To move a node around click and hold (computer) or touch and hold (iPad) on the top left hand corner of a node

2. STRATEGY & TACTIC DESIGN

2.3 How to add details on the What, How and Why of each proposed change?





Double-click a node to add or modify details. Click in each cell to being typing.

Step 1. Ask WHAT are you trying to achieve? This is the STRATEGY or change objective

Step 2. Ask HOW will you do it? This is the TACTIC or policy, process or metric change.

Step 3. Now answer the 3 WHY's. These are the Necessary, Parallel and Sufficiency Assumptions related to the change

Hint: Necessary Assumptions answer the question WHY this change is needed – i.e. the undesirable effects or conditions that create the need for change.

Hint: Parallel Assumptions connect the Strategy & Tactic, and answers the question WHY or under what conditions is it possible to achieve the strategy and WHY is it difficult or risky – considerations that explain why the selected Tactic is the BEST or even the ONLY way for achieving the Strategy

Hint: Sufficiency Assumptions are normally warnings that answer why this level of detail in the Tactic is not sufficient to ensure the Strategy is achieved. These warnings help to check necessity, sufficiency and sequence of level below

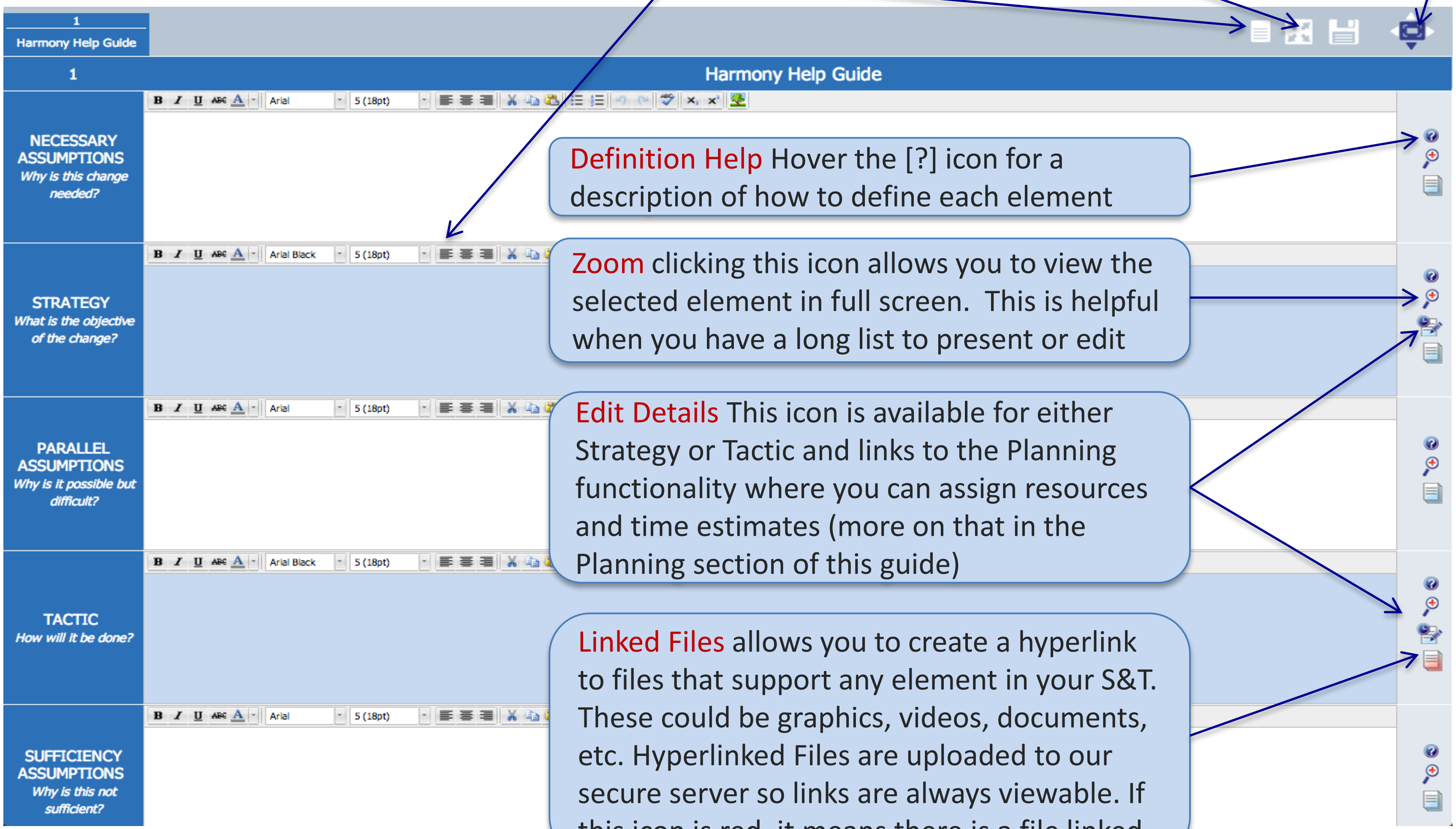
2. STRATEGY & TACTIC DESIGN

2.3 How to add details on the What, How and Why of each proposed change?

Show Formatting provides full text formatting menus for each node element

Presentation Mode reveals one element at a time for presenting

Close Editor by clicking in center of navigator



Definition Help Hover the [?] icon for a description of how to define each element

Zoom clicking this icon allows you to view the selected element in full screen. This is helpful when you have a long list to present or edit

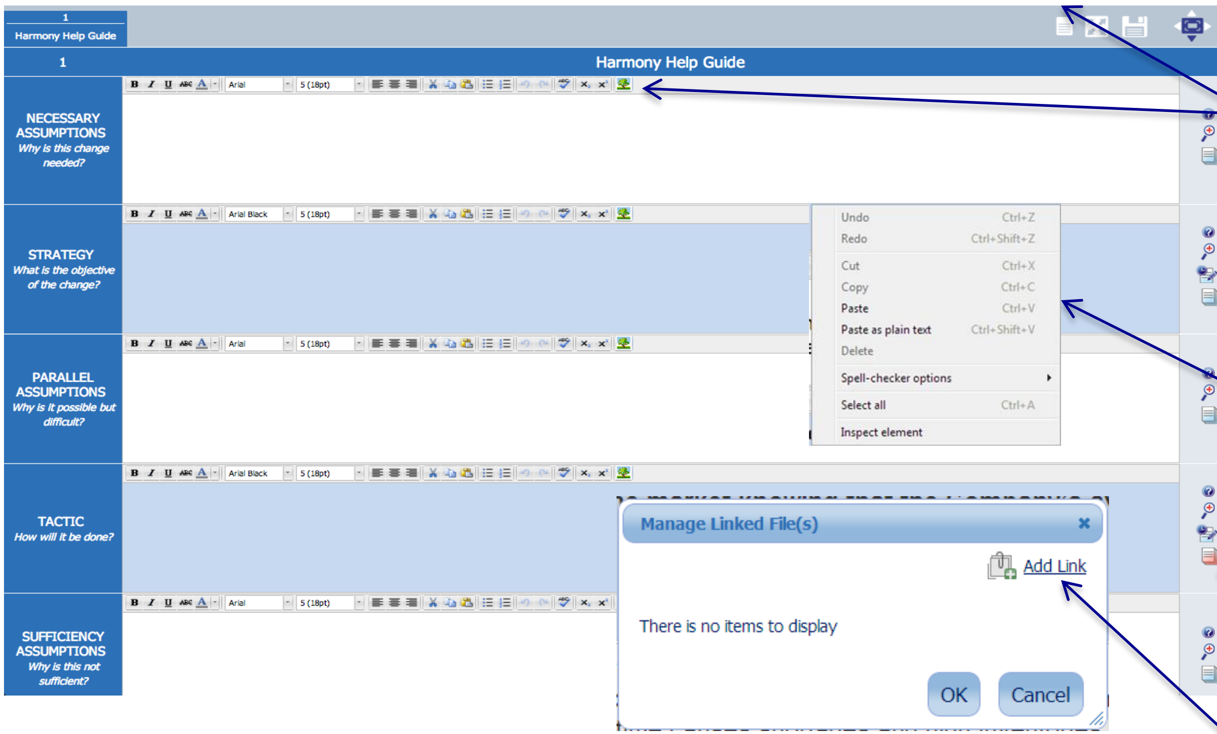
Edit Details This icon is available for either Strategy or Tactic and links to the Planning functionality where you can assign resources and time estimates (more on that in the Planning section of this guide)

Linked Files allows you to create a hyperlink to files that support any element in your S&T. These could be graphics, videos, documents, etc. Hyperlinked Files are uploaded to our secure server so links are always viewable. If this icon is red, it means there is a file linked

2. STRATEGY & TACTIC DESIGN

2.4 How to hyperlink documents and media to specific change details to help explain these?

You can add documents or media, such as images, PowerPoint slides, process documents, etc. to specific node details to help further explain the change.

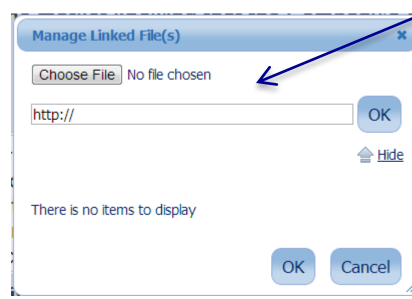


Method 1: Click the Format button from the top menu bar. Click the image icon to upload an image.

Method 2: Copy an image, PowerPoint slide, screenshot, etc. and right click to paste in line with text in any of the detail sections.

Method 3: Click the Linked Files button on the right of each section.
Click Add Link to create a new link.
Enter a web address or click Choose File to upload a file from your computer.

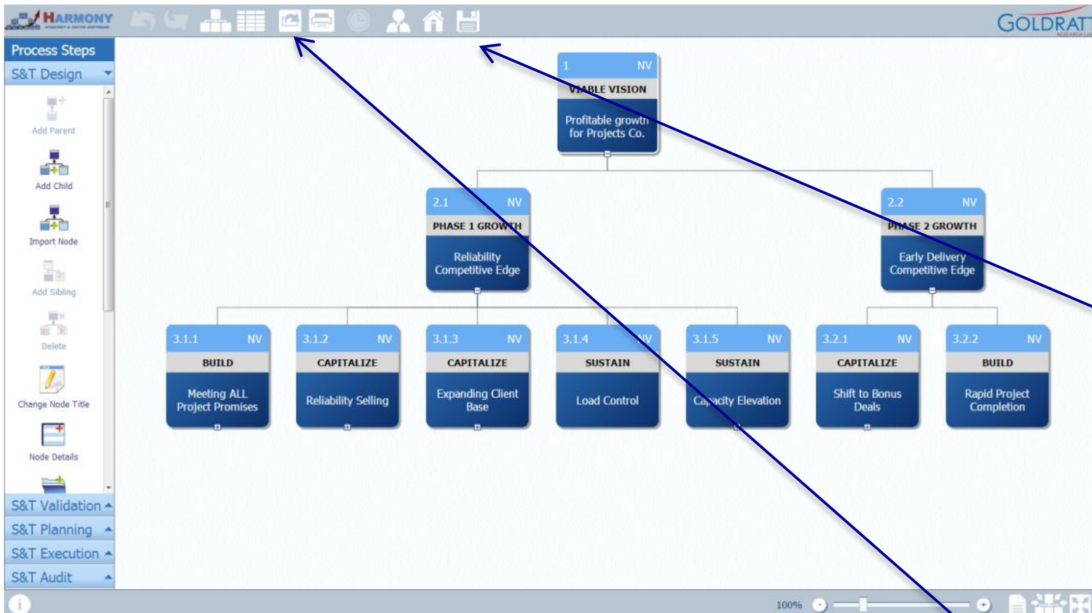
Helpful Hint: Uploaded files should be the smallest size possible to ensure optimal functionality. Programs such as iSpring can convert large animated PowerPoint files to compressed HTML files



Helpful Hint: Saving your work

At Goldratt Research Labs, we appreciate how valuable the content is and that you can not afford to lose any work.

There are a number of ways to insure your work isn't lost when working in the web application.



1. Auto-save is activated every 10 minutes.

2. Please use the **SAVE** button every time you add significant content

3. A forced save function appears whenever you close a node as a safety.

4. You can use the EXPORT icon to export the content into a .tocxml file that can be imported as an S&T with both Web or Desktop apps

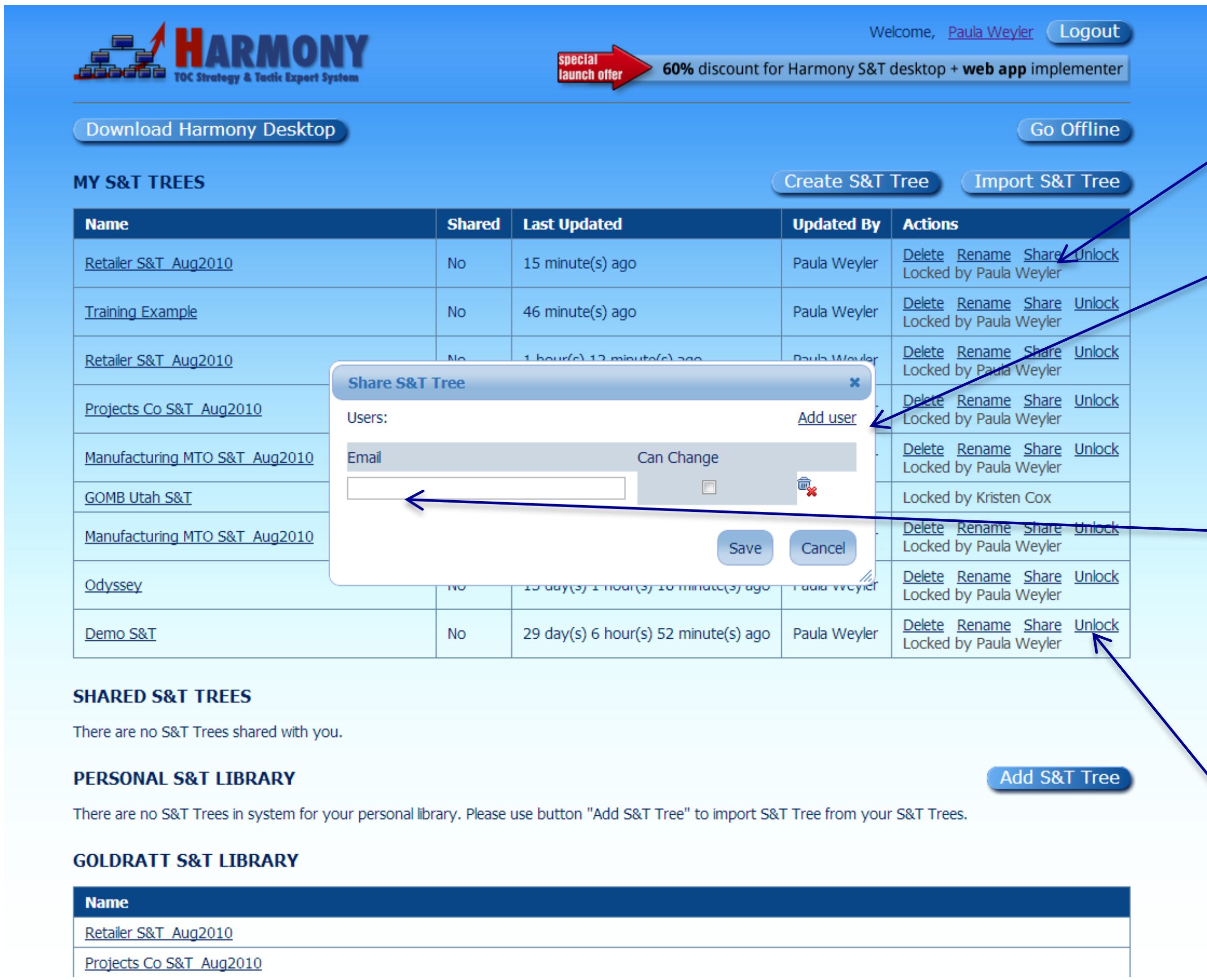
Helpful Hint: clicking the [i] icon in the lower left corner will display your history of saved data. This is useful to check when last your changes was actually saved to the cloud

Remember, it is better to save too many times than to lose any work!

3. STRATEGY & TACTIC VALIDATION

3.1 How to share S&Ts with other users such as key stakeholders whose contribution or buy-in is needed

You can present your S&T to other users for review and validation or SHARE the tree with multiple users so they can review and make comments on it or modify content. To Share, return to the Home Screen.



Step 1. From your My S&T Trees list, click Share for the tree you wish to share

Step 2. In the pop-up window, click Add user

Step 3. Type the Email Address of the person with whom you want to share. The Can Change box option determines if you want to allow users to change your tree. The user will receive an email notification.

Step 4. To allow other users to change an S&T shared with them, you have to select "Unlock"

3. STRATEGY & TACTIC VALIDATION

3.2 How to communicate S&Ts to stakeholders to help check assumptions?

An important element in the successful implementation of your S&T is the validation step where you communicate the S&T and its WHAT, HOW and WHY details to other stakeholders and allow them to contribute by checking the necessity, sufficient and sequence of all proposed changes and related assumptions.

Step 1. Using the left-hand menu, open the S&T Validation menu.

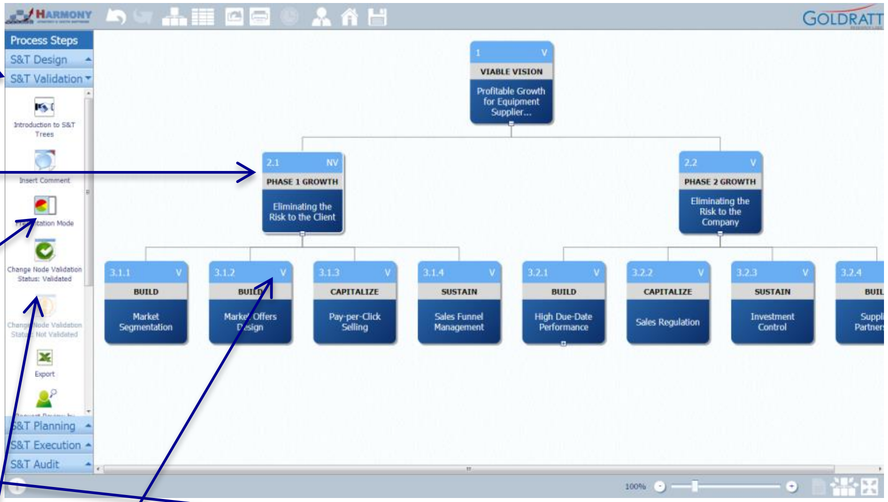
Step 2. Select the node which you want to present (trees should be read top to bottom, left to right).

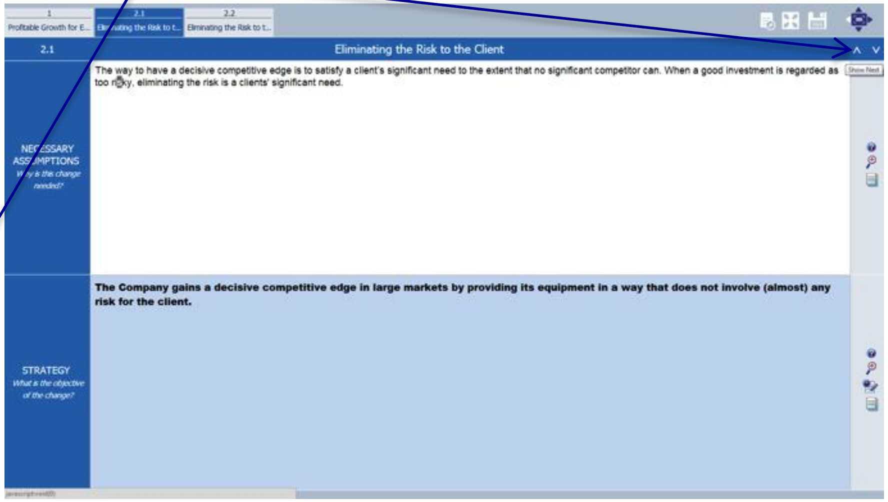
Step 3. Click on Presentation Mode from left menu.

Step 4. Presentation Mode unfolds each element of the node step by step. Use the navigation arrows (upper right) to reveal each sequential element.

Step 5. Ask your stakeholders to help validate your assumptions and contribute any changes to resulting Strategy and/or Tactic

Step 6. Change the Node Validation Status (left menu or right-click) once you have validation from all stakeholders. The upper right of each node will show NV for “not validated” or V for “validated”





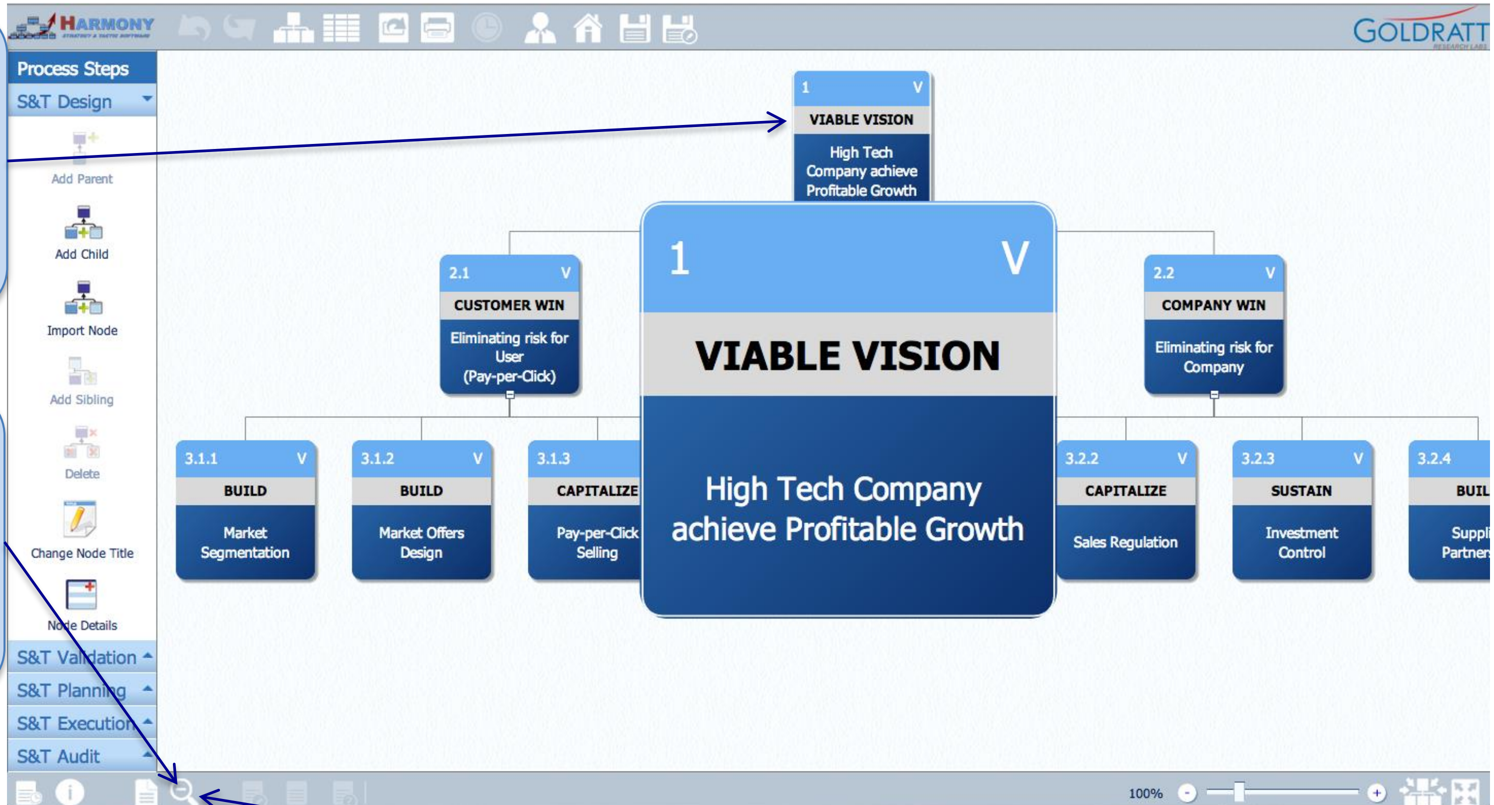
3. STRATEGY & TACTIC VALIDATION

3.2 How to communicate S&Ts to stakeholders to help check assumptions?

When presenting to a group to help validate an S&T and its details on the WHAT, HOW and WHY for each proposed changed, HARMONY offers the ability now to "zoom in" on a specific node to focus the group on a specific node by using the "Magnifying Glass" icon on the bottom left of the screen. This works with all modules in Harmony

Step 1. Select the S&T node you want to present to the group by clicking on it

Step 2. Click on the Magnifying Glass to zoom into the selected node.



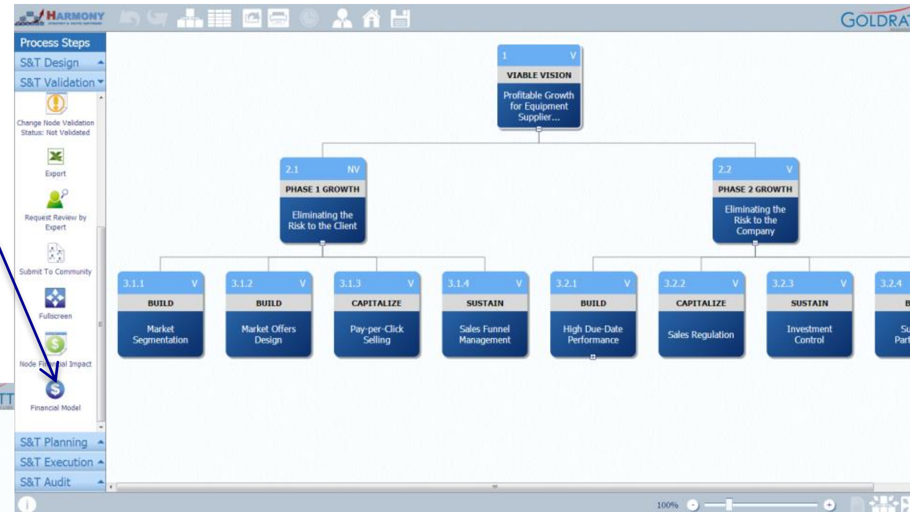
Step 3. By clicking on other nodes in the order that you want to present them, it will show these in zoom mode.

Step 4. To return to the normal view (i.e. to remove the zoomed node), simply click on the magnifying glass again.

3. STRATEGY & TACTIC VALIDATION

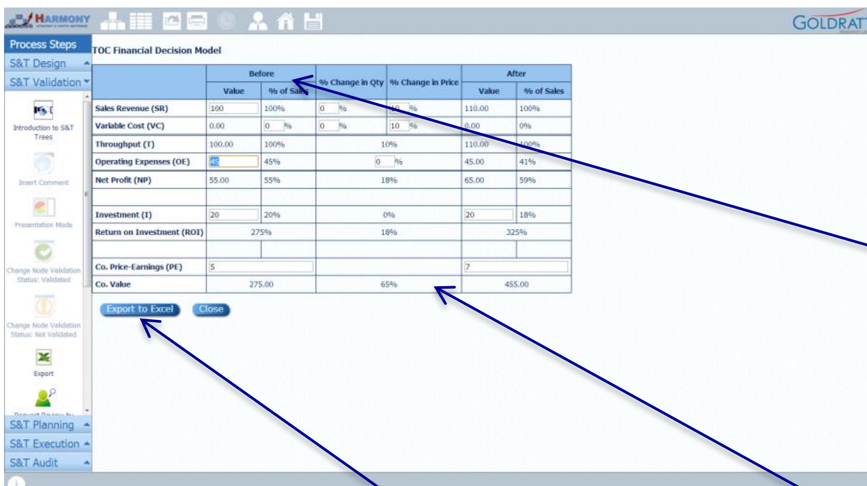
3.3 How to quantify the financial impact of proposed changes in an S&T?

Harmony offers 2 important ways to quantify the impact of your change: *the overall financial model* and a financial *impact by node.*



For overall financial model:

Step 1. Using the left-hand menu, open the S&T Validation menu. Scroll down to Financial Model



Step 2. On the left side of the model, fill in your current baseline figures [Before] for revenue, variable cost (only the totally variable cost not cost of goods sold), Operating Expense (all other fixed costs), Investment, and Co. Price Earnings

Step 3. In the middle Change section, fill in the change values associated with your proposed change. The model will calculate the results in the right-side [After]. You can see for example how just a 1% increase in Selling price can result in a 20% increase in net profit

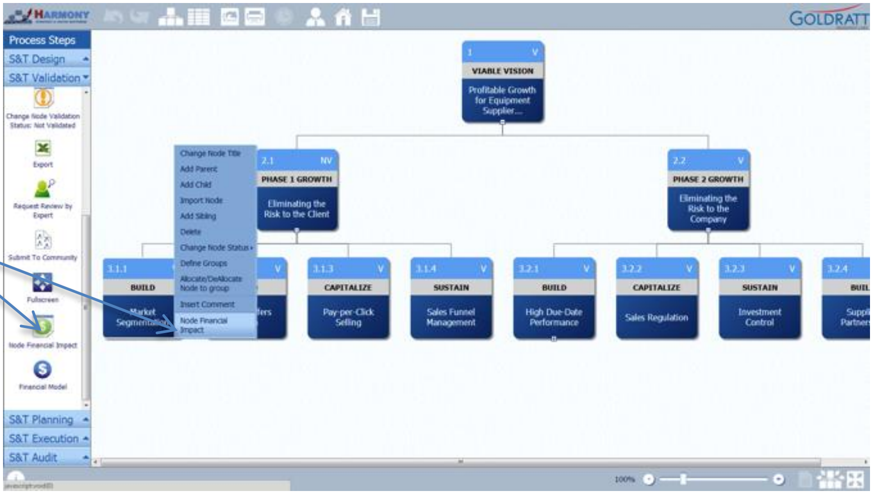
Step 4. When finished, you can Export to Excel. Click Close to return to your S&T tree

3. STRATEGY & TACTIC VALIDATION

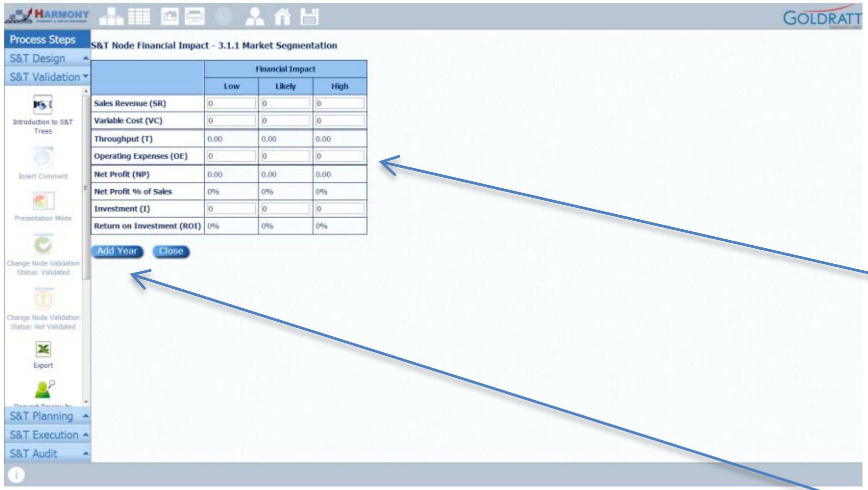
3.3 How to quantify the financial impact of proposed changes in an S&T?

Harmony offers 2 important ways to quantify the impact of your change: *the overall financial model* and a financial *impact by node.*

For financial impact by node:



Step 1. Using the left-hand menu, open the S&T Validation menu. Scroll down to Node Financial Impact or computer users can right-click the node for the same selection



Step 2. Predictions of impact are difficult to define with precision. Enter the values for financial impact from this node for the overall organization, using an estimate for Low, Likely, and High.

Step 3. Click Add Year to show the additional impact from subsequent years

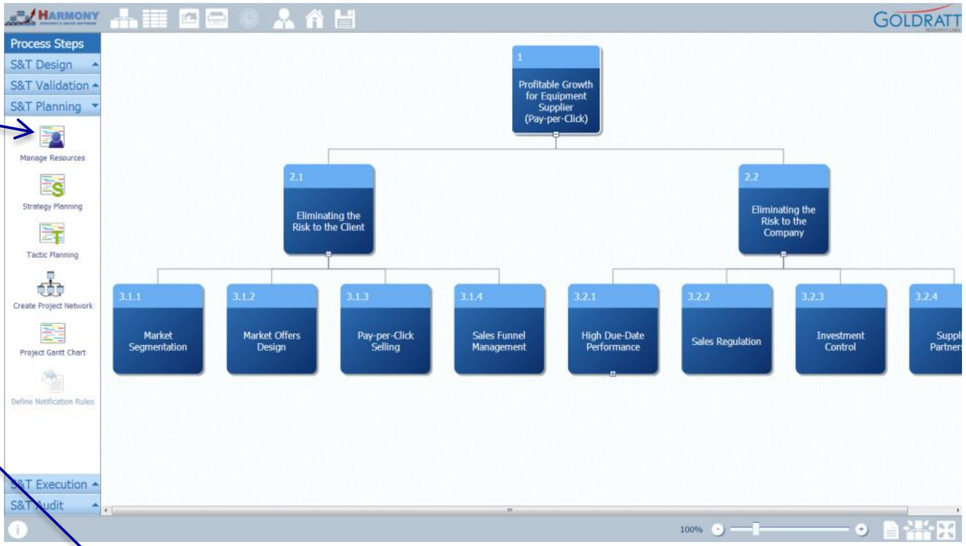
The financial impact entered for each node will be inherited by its Parent node if you click on the "Estimate" link for any node with children where financial impact where entered.

4. STRATEGY & TACTIC PLANNING

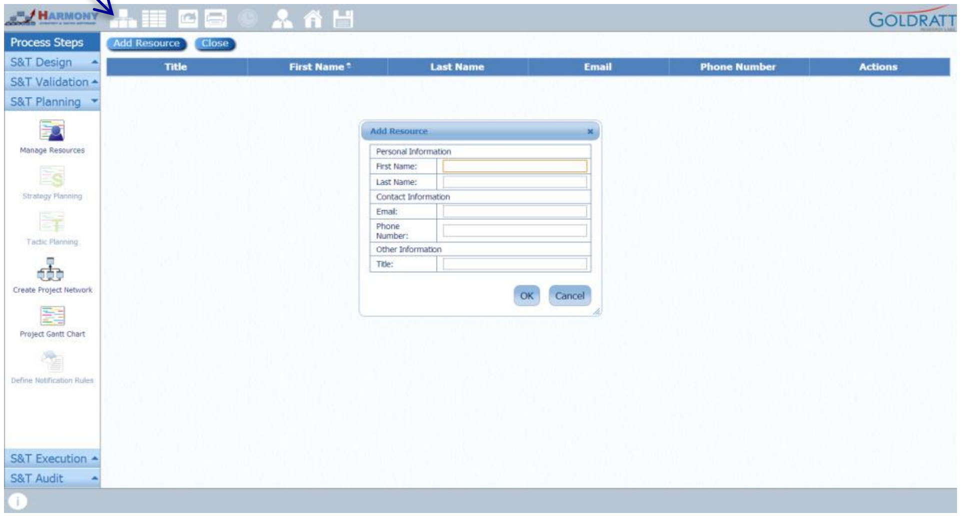
4.1 How to define resources to implement the proposed changes on S&T?

You are now ready to start Planning the implementation of your S&T. The first steps is to define the resources that will be allocated as Strategy Owners, Tactic Managers and Task participants.

Step 1. Using the left-hand menu, open the S&T Planning menu. Click on the first option Manage Resources.



Step 2. Click Add Resource. A pop up window will appear where you will enter the Personal and Contact information for this resource. Click OK when complete.



Step 3. Continue using Add Resource to add the details of all resources that will be allocated as either Strategy Owners, Tactic Managers or Task Participants. Click Close when all resources are entered.

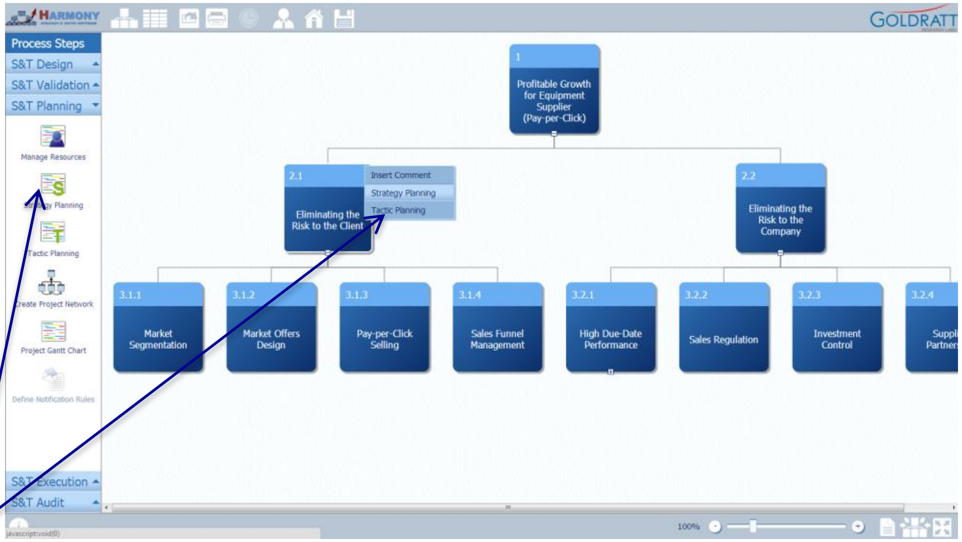
Helpful Hint. You can always return to update/add or delete resources. Remember to also add external resources like consultants or sub-contractors that will be either Tactic Managers or Task Participants

4. STRATEGY & TACTIC PLANNING

4.2 How to allocate resources as Strategy Owners, Tactic Managers and Task Participants?

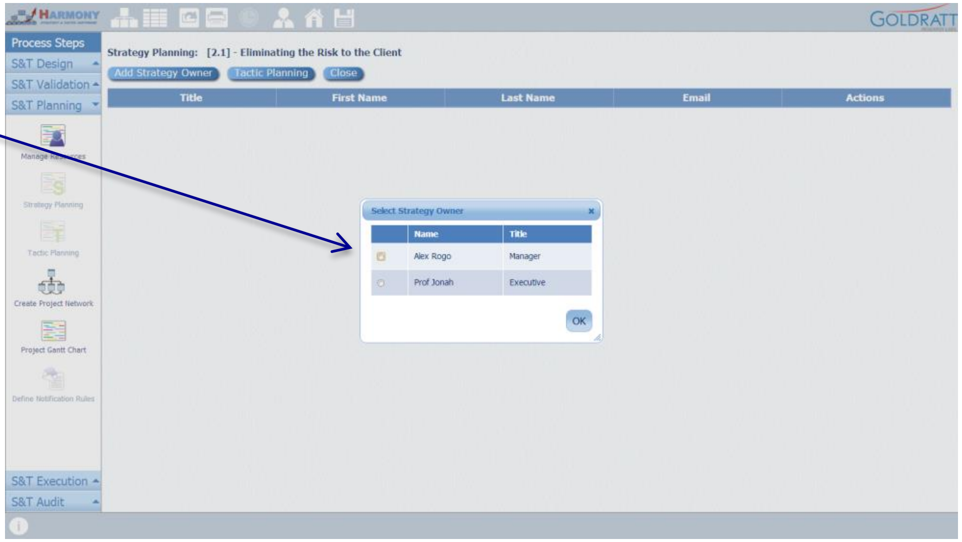
Each node will utilize 3 types of resources:

1. Strategy owner is the person accountable for achieving objective in strategy
2. Tactic manager is the person responsible for implementing the tactic. (Note: this follows organizational hierarchy. Strategy manager is typically the boss of the Tactic manager.)
3. Task participants are resources that will work with tactic manager on implementing the change



Step 1. Select the node to plan. Using the left-hand Planning menu (or on computer, right-click node) to select Strategy Planning.

Step 2. Now click Add Strategy Owner. A pop-up will appear with all resources. Select person to assign them. You can only assign one.



Step 3. Then click Tactic Planning button. A pop-up will appear with all resources. Select the person to assign them. You can only assign one

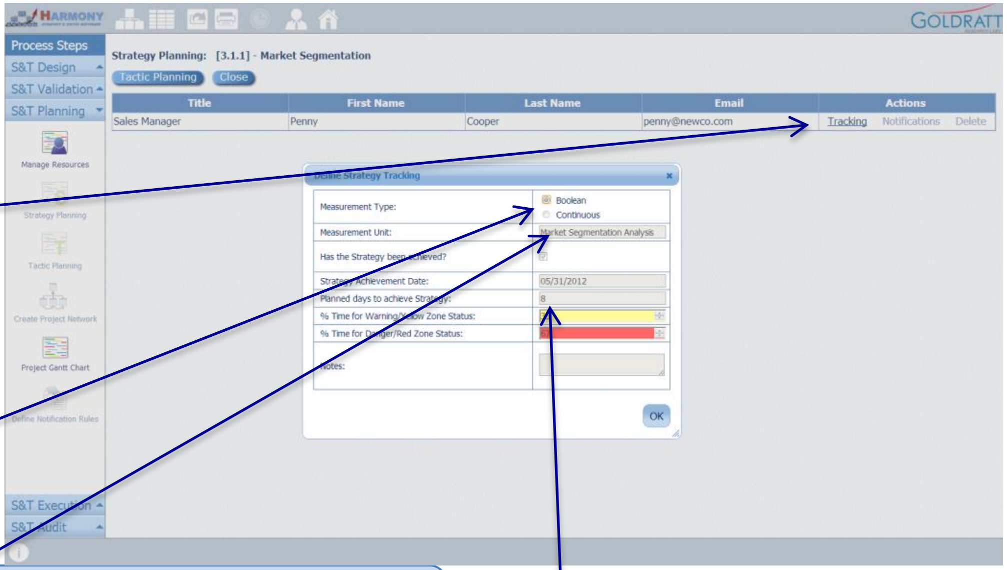
Step 4. Task Participants can be assigned using the "Actions" tab in Tactic Planning

Step 5. Continue assigning participants for all node in your tree

4. STRATEGY & TACTIC PLANNING

4.3 How to add Strategy and Tactic Planning Details?

We start by entering the "Strategy Details" needed to define the "milestones" of the project plan to implement the S&T.



Step 1. Open Strategy Planning. Under the Action column, click Tracking. A pop-up will appear.

Step 2. Determine the Measurement Type for this Strategy. Boolean means this objective is a 'yes or no'. Continuous means this objective is a value or percentage.

Step 3. Define the Measurement Unit for how you will measure if the Strategy is achieved. E.g. Throughput in units/time or Due Date Performance %.

Step 4. Now estimate the Planned Days to Achieve Strategy. This is typically the responsibility of the Strategy Owner and Tactic Manager. Note that the time to achieve a Strategy is typically the same or longer than the time to implement its Tactic.

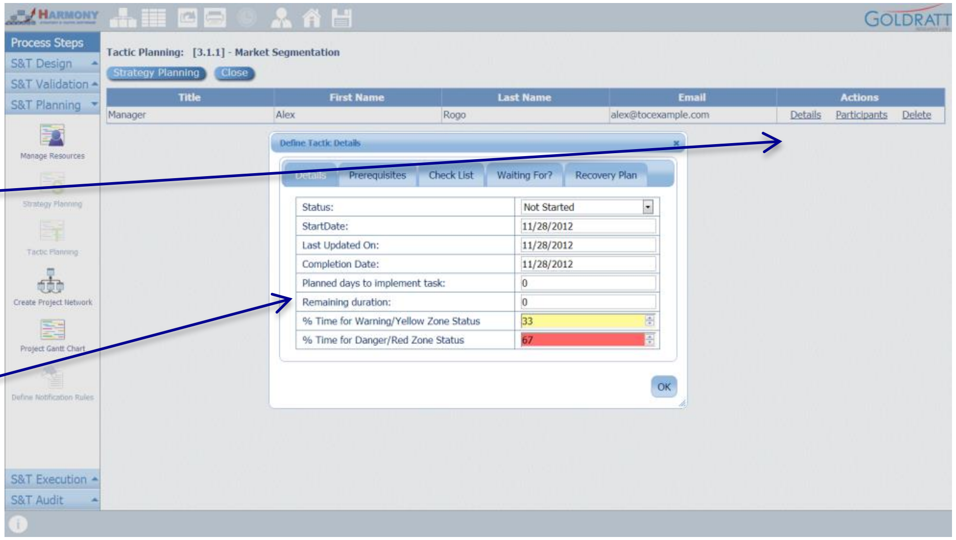
Step 5. Set the percentages for Yellow and Red Zone Warnings to identify if the strategy is falling behind. The default setting is 33% (1/3) and 67% (2/3).

Helpful Hint. By setting the Yellow warning at 33% of the planned days to achieve the Strategy, it means if after 33% of the planned days, the Strategy has not yet been achieved, the status will change from green to yellow. After 67% of the planned days, it will change to red and over 100% it will be black to show it is overdue.

4. STRATEGY & TACTIC PLANNING

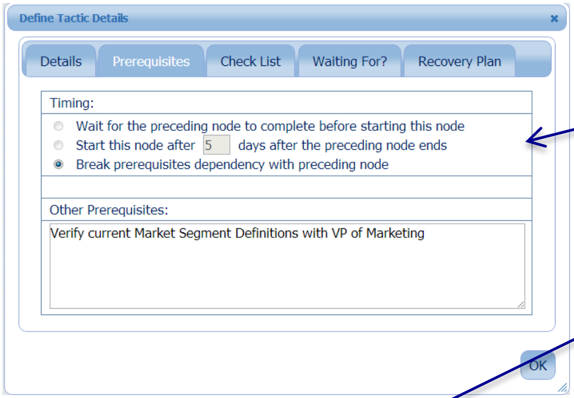
4.3 How to add Strategy and Tactic Planning Details?

Now you are ready to add the Tactic Planning details that will be used to create the Project network and Gantt chart to implement the S&T.

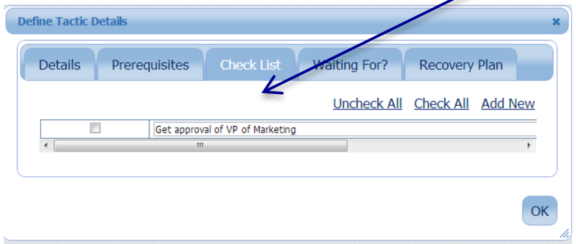


Step 1. Open Tactic Planning. Under the Action column, click Details. A pop-up will appear.

Step 2. On the Details tab, enter the “Planned days to implement task” . Warning zones work similar to those in Strategy Planning. If after 33% of planned days to implement tactic, the tactic is not yet complete, it will go from green to yellow.



Step 3. On the Prerequisites tab, determine the dependency from preceding nodes. You can also list other prerequisite tasks that are required before this node can be started. (An example is shown.)



Step 4. On the Check List tab, you can add a list of required actions – a “to-do” list that can be used as a reminder and to track progress for this Tactic Manager. Click Add New to add additional.

Helpful Hint. The “Waiting for?” and “Recovery Plan” are tabs that are used in execution by the Tactic Manager to capture why their tactic implementation is being delayed i.e. What they are Waiting for? and to add a “RecoveryPlan”

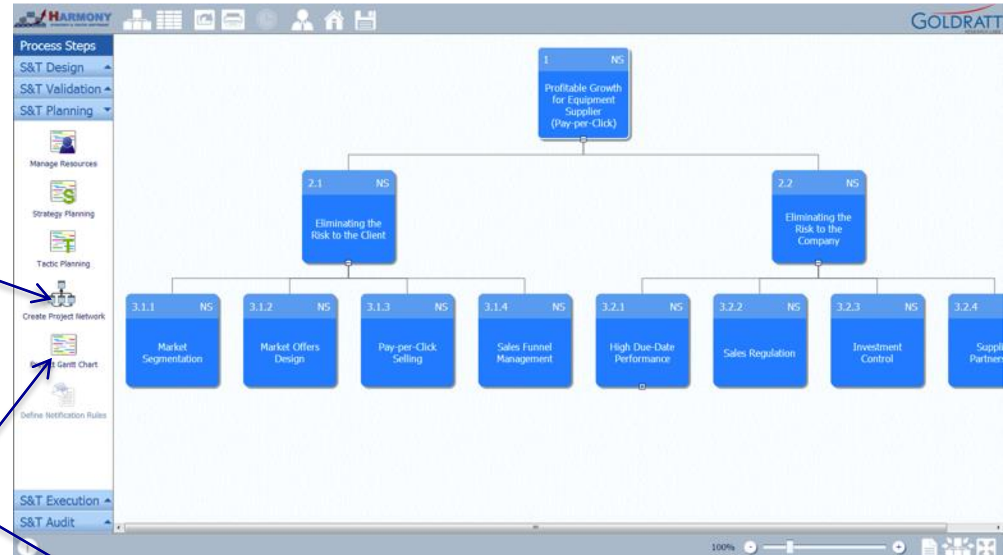
4. STRATEGY & TACTIC PLANNING

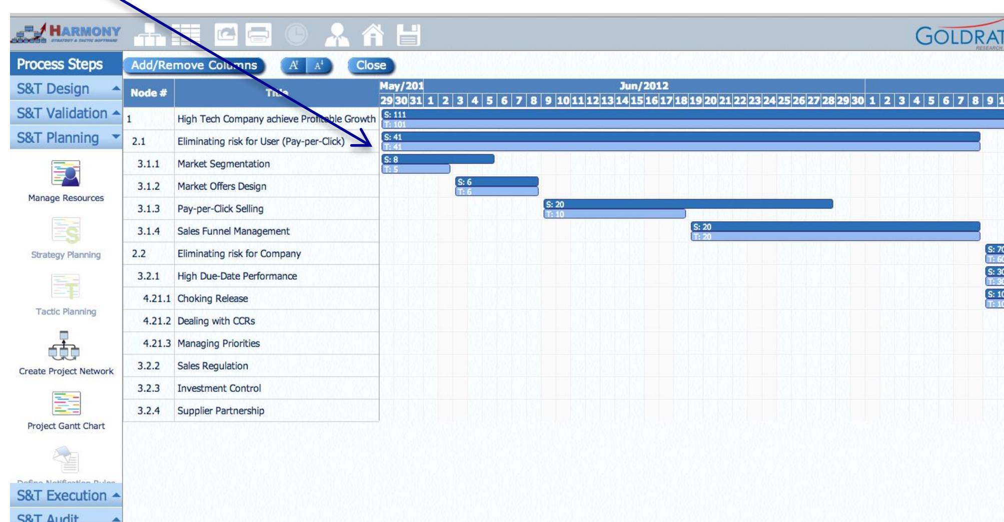
4.4 How to convert a S&T into Project Network and view it as Gantt chart?

Once the Planning details for all the lowest level nodes are completed, you can convert your S&T to a Project Network and view it as a Gantt Chart.

Step 1. Using the left-hand Planning menu, click on Create Project Network. This will connect all the lowest level nodes with "End-start" relationships to create a simple project network

Step 2. Using the left-hand Planning menu, click on Project Gantt Chart.





Your S&T Project Gantt Chart in Harmony is different from a traditional Gantt because it will show the time estimate for both the Strategy achievement and Tactic implementation time estimates for each level, which are often not the same.

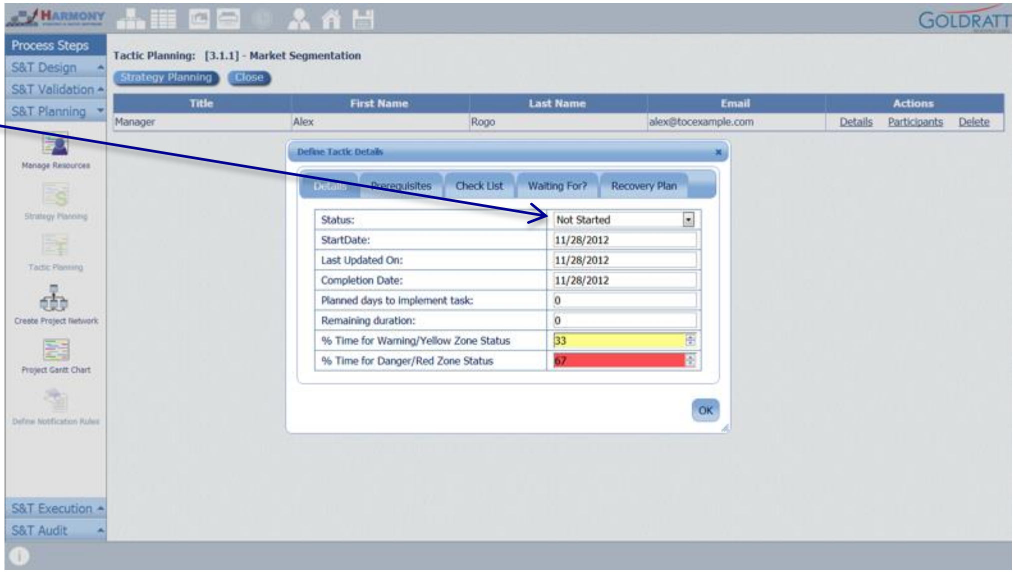
Example:

A Strategy 'Reduce WIP by 20%' have a Tactic 'Implement Dynamic Buffer Management'. In this case, the Tactic may only take a 20 days to implement, but the time to realize the full effect for the strategy might take a full inventory cycle of say 60 days.

5. STRATEGY & TACTIC EXECUTION

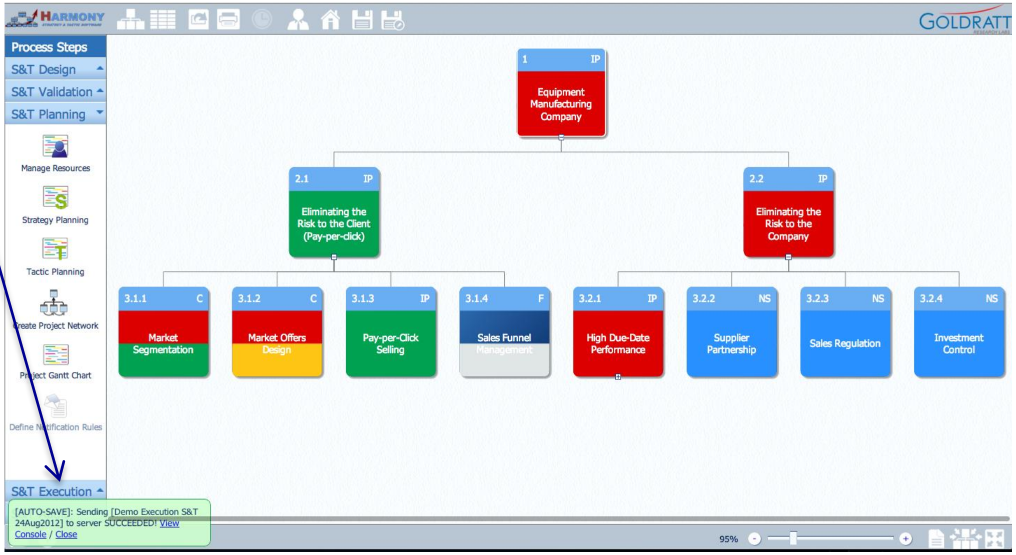
5.1 How to update Strategy achievement and Tactic implementation status?

Step 1. When you begin to execute your S&T, go back to Tactic Planning and update the Status for each node tactic. Status can be Not Started (NS), In Progress (IP), Freeze (F) or Complete (C).



Step 2. Go back to Strategy Planning and update the Metric (if continuous) or Completion for each node strategy.

Step 3. On the left-hand menu, open S&T Execution and click S&T Execution Status.



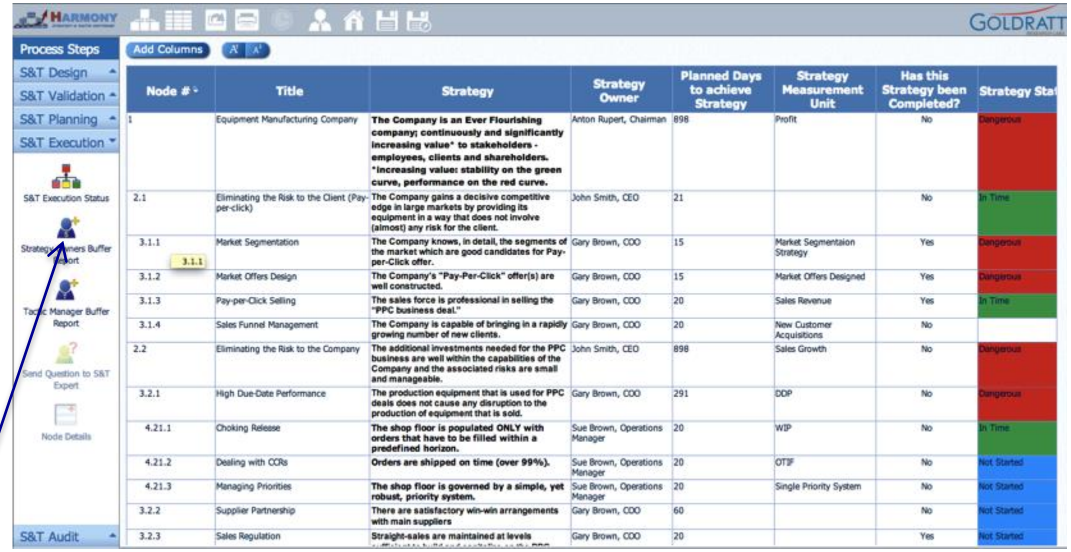
Your S&T tree now becomes a Dashboard showing the “buffer status” as a color code for the status of each Strategy and Tactic. The letter in the upper right corner denotes the status (C= Complete, IP = In Progress, F= Freeze and NS= Not Started)
The colors indicate if the node is being achieved in the planned timeframe (green) or is in a warning zone (Red or Yellow) or overdue (Grey). “Freeze” (Dark Blue) is a change is frozen to stop bad multi-tasking

5. STRATEGY & TACTIC EXECUTION

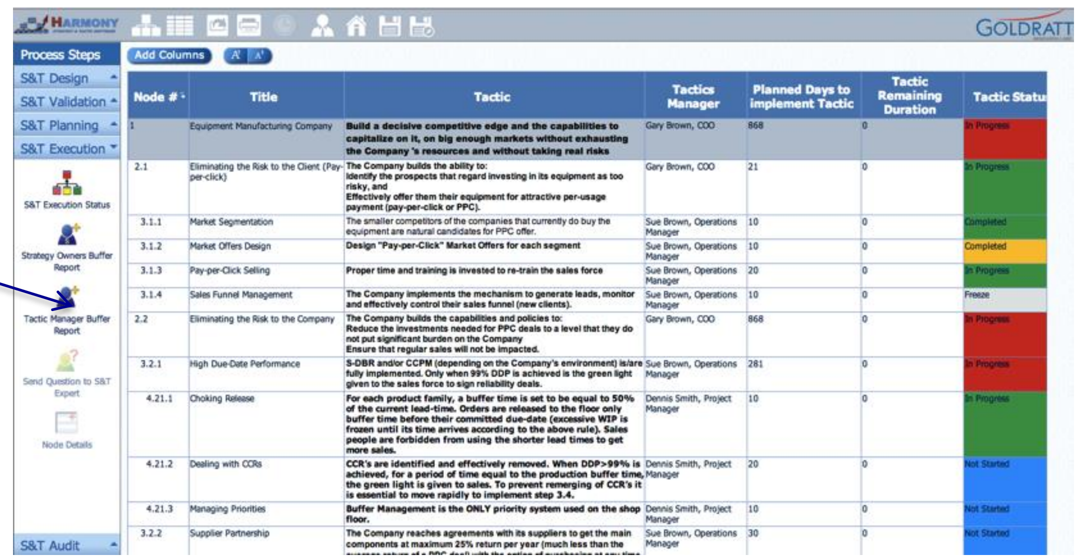
5.2 How to view Strategy achievement & Tactic implementation status in S&T or Grid View ?

On the previous page, we showed that by using "S&T Execution Status" you can use the S&T to view the execution status of all Strategies and Tactics.

You can also view more details related to execution status using the "Strategy Owner and Tactic Manager Buffer Status Reports" icons



Step 1. To view the Execution status of Strategy Achievement for each node in a Grid or WBS view, click on "Strategy Owners Buffer Report" icon.



Step 2. To view the Execution status of Tactic Implementation for each node in a Grid or WBS view, click on "Tactic Managers Buffer Report" icon.

6. S&T Audit (Web App only)

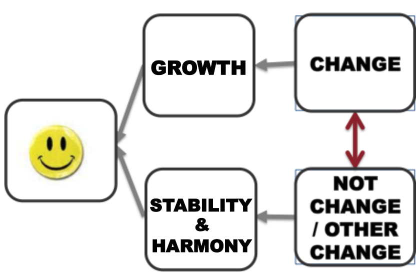
6.0 Introduction to Auditing the Theory of Constraints Way…

An important part of implementation a Strategy & Tactic Tree, is the need for frequent audits to ensure the implementation stays on track, and in case of delays or unexpected problems, that these are identified and corrected as soon as possible. With Harmony's S&T Execution functionality, managers can use the S&T as a dashboard to enable early-detection of situations where tactics are not implemented and/or strategies are not achieved within the planned time estimates (inconsistencies or performance gaps). Since we explicitly listed all the assumptions related to each change within the S&T, we can and should have a practical mechanism to review which starting assumptions turned out to be invalid and what is needed to correct for these.

Dr. Eli Goldratt, the creator of Theory of Constraints (TOC), developed two simple yet powerful mechanisms to analyze such "inconsistencies" or "performance gaps" and their related unresolved conflicts and to communicate the required changes to stakeholders in a way that will not trigger resistance to change. These are called "*The Conflict Cloud*" and "*The Change Matrix*". However, despite the benefits of each method, both had limitations. The Cloud was a practical way to identify erroneous assumptions but it ignored the negative impacts of change vs. not change. The Change Matrix was a practical way to understand both the positive and negatives impacts of change vs. not change to overcome resistance to change, but without a way to resolve the inherent conflict.

By combining these two methods into one – "*The Change Matrix Cloud*" - Dr. Alan Barnard, CEO of Goldratt Research Labs, have developed a practical mechanism that can be used not only for auditing S&T execution, but also to analyze and resolve any performance or expectation gap and their related Planning and Execution conflicts and to convert the into new planning and execution best practice.

Conflict Cloud



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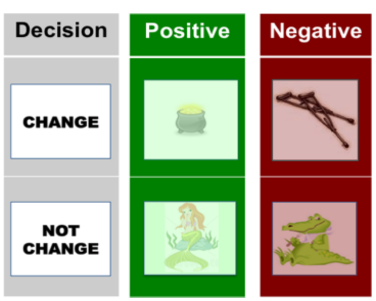
Change Matrix



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Change Matrix Cloud

The next page shows another new innovation – defining any problem as both an unresolved Planning and unresolved Execution Conflict

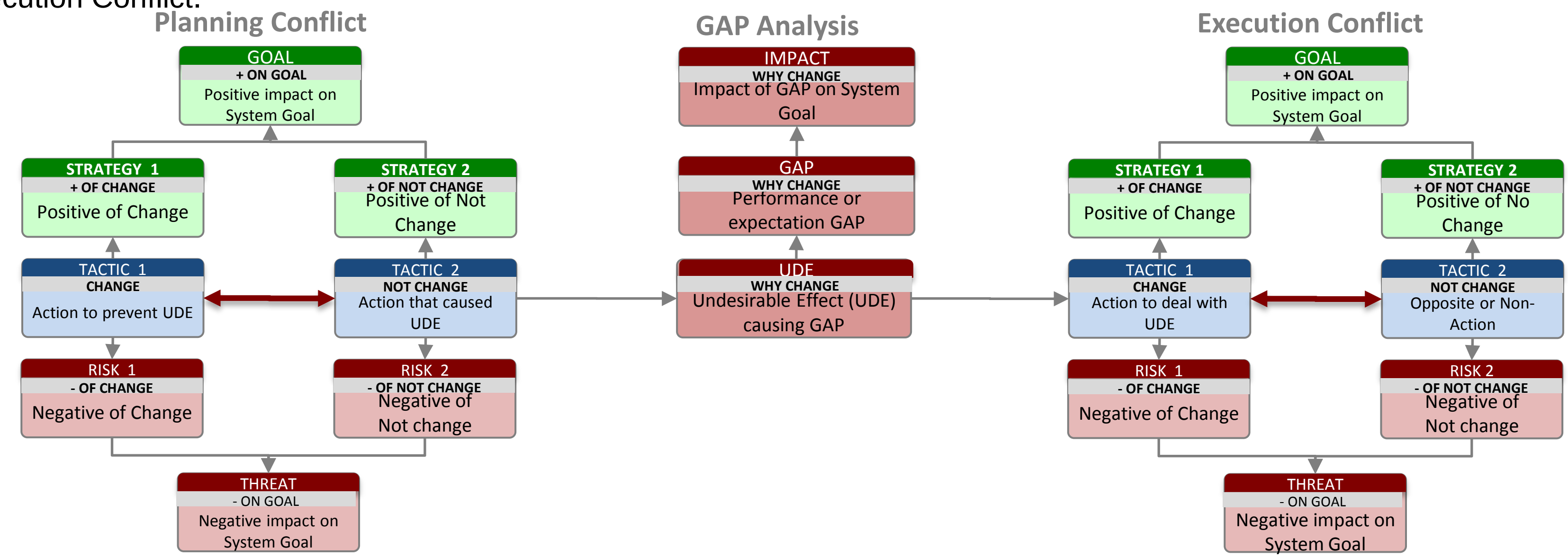
6. S&T Audit (Web App only)

6.0 Introduction to Auditing the Theory of Constraints Way…

Many times the stakeholder/person that has to deal with a problem is not the same as the one being blamed for causing the problem in the first place. When stakeholders or people within an organization starts blaming each other, it can result in disharmony and silo thinking. In such a case, it behoves us to not only define the conflict we are facing in dealing with the problem or symptoms – the Execution or Symptomatic Conflict - but also to understand the conflict the one we are blaming for causing the problem in the first place are facing – the Planning or Systemic Conflict.

Identifying both the Planning and Execution conflicts will help us, not only to understand the "real" problem from both side's perspectives – something required to overcome distrust and restore harmony - but, if we can find a way to break these, will provide us with better planning and execution rules for the future to help remove the problem completely.

To define the Problem or Undesirable Effect (UDE) as both an unresolved Planning Conflict and Execution conflict, we simply need to fill in the boxes in the diagram below. Please note that for the Planning conflict, we start with Tactic 2 – the action/decision that was taken by the Stakeholder/person we are blaming which we believe caused the Problem/Undesirable Effect in the first place. Then complete the four impacts of change in the same way as with the Execution Conflict.



Now that we have clearly defined our problem as two unresolved conflicts, we are ready for the next step – How to resolve Planning and Execution conflicts in a systemic way that can minimize or even eliminate the biases that block us from finding and challenging potentially limiting assumptions

6. S&T Audit (Web App only)

6.0 Introduction to Auditing the Theory of Constraints Way…

In Step 2 we said that "Define a problem precisely and you are halfway to a solution…". We did this by identifying the specific PLANNING and EXECUTION conflicts related to the specific "problem" (performance or expectation GAP) we started with.

Although we can therefore claim that we have now *"defined the real problem much more precisely than before*" (to answer "What to Change?"), for many of you who live with these Undesirable Effects, Gaps and conflicts everyday, it might not feel at this stage as if we are halfway to anywhere …

Finding the "Breakthrough" Solution

In the TOC Thinking Processes, the key to finding the breakthrough solution(s) is to find a way to CHALLENGE one or more of the "erroneous" assumptions/rules (e.g. the sooner we start, the sooner we finish) that block us from resolving the conflict with a better win:win:win…

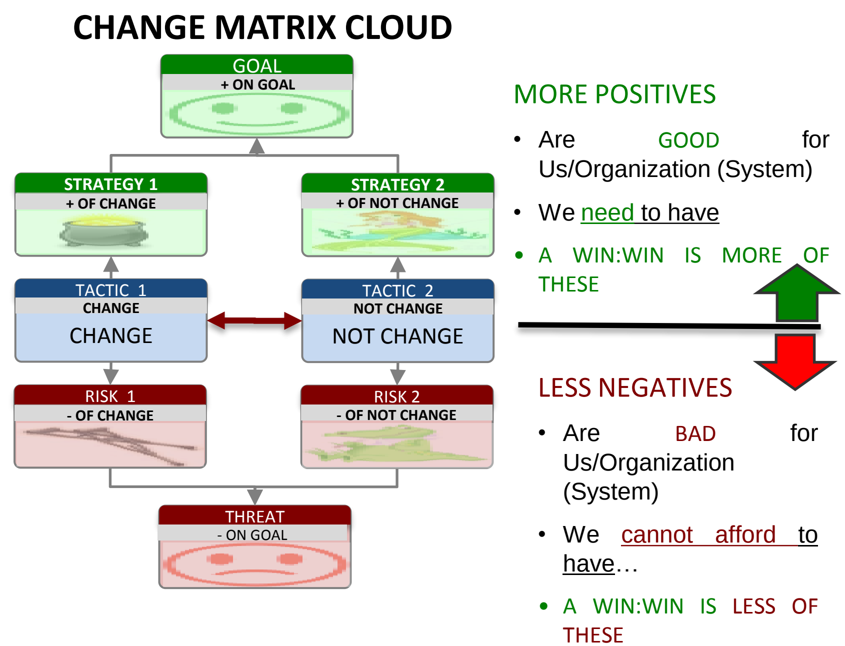
The "breakthrough" we are looking for is simply a solution that will resolve the Planning and Execution conflicts giving us more of the positives we want, and none or at least much fewer of the negatives.

The process of identifying these potentially "limiting or erroneous assumptions and finding win:win injections to overcome these is relatively simple. It is based on a simple insight that there are only four ways to break any conflict.

The next page shows four methods that we can use to identify four different ways to break the core conflict(s) and then we can decide which is best to implement…

4 Methods to resolve any conflict

- Method 1: Change ++
- Method 2: Not Change ++
- Method 3: Change + Not Change
- Method 4: Another Change



6. S&T Audit (Web App only)

6.0 Introduction to Auditing the Theory of Constraints Way...

The table below shows 4 methods that can be used to find a win:win solution to break any conflict.

METHOD 1
CHANGE + +

LOGICAL CHECK

1. Why will CHANGE jeopardize MERMAID?
2. Why will CHANGE unavoidably result in CRUTCHES?

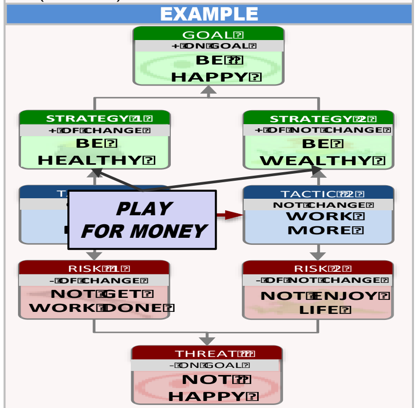
ASSUMPTION

1. CHANGE jeopardize the MERMAIDS because…
2. CHANGE (unavoidably) cause CRUTCHES because…

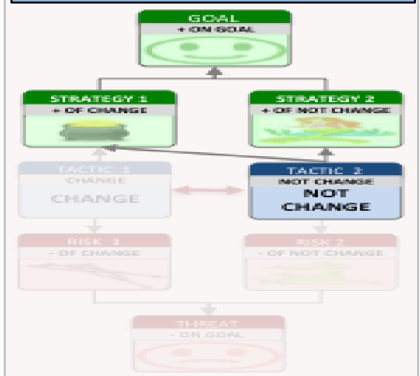
INJECTION

1. CHANGE will not jeopardize MERMAIDS when/if… (1st PLUS)
2. CHANGE will not cause CRUTCHES when/if… . (2nd PLUS)

EXAMPLE



METHOD 2
NOT CHANGE + +



LOGICAL CHECK

1. Why will NOT CHANGE jeopardize POT OF GOLD?
2. Why can NOT CHANGE not remove CROCODILES?

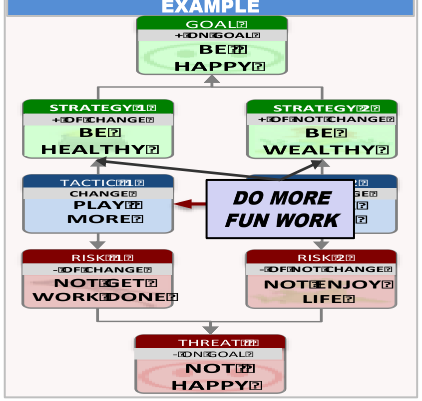
ASSUMPTION

1. NOT CHANGE jeopardize POT OF GOLD because…
2. NOT CHANGE can't remove CROCODILES because…

INJECTION

1. NOT CHANGE won't jeopardize POT OF GOLD when/if …. (1st PLUS)
2. NOT CHANGE will remove CROCODILES when / if …. (2nd PLUS)

EXAMPLE



METHOD 3
WHEN & WHEN NOT

LOGICAL CHECK

Why or Under what conditions is CHANGE vs. NOT CHANGE in conflict?

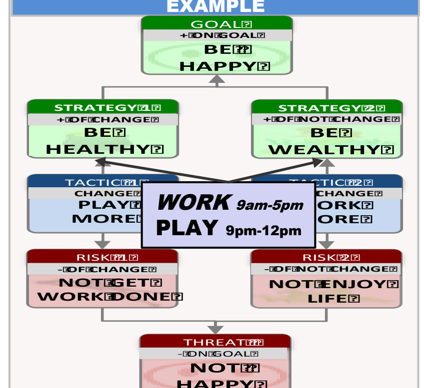
ASSUMPTION

CHANGE vs. NOT CHANGE is in conflict because …. OR when…?

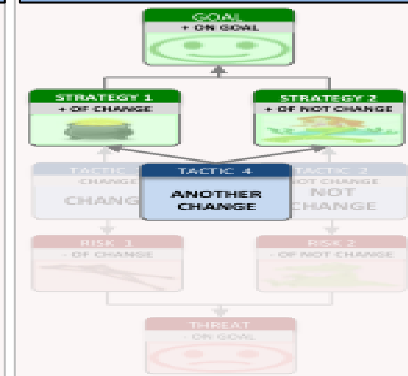
INJECTION

1. When [condition=true] then CHANGE Else…NOT CHANGE or
2. As long as [condition 1] then NOT CHANGE …but As soon as [condition 2] then CHANGE

EXAMPLE



METHOD 4
ANOTHER CHANGE



LOGICAL CHECK

Why is there no other way to get both POT of GOLD and MERMAIDS without major CRUTCHES or CROCODILES?

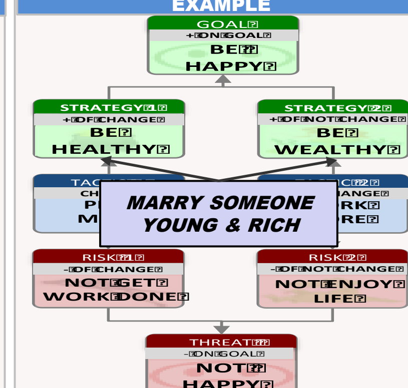
ASSUMPTION

There is no other way because…?

INJECTION

There is ANOTHER WAY to get MORE POSITIVE without MAJOR NEGATIVES by…?

EXAMPLE



6. S&T Audit (Web App only)

6.0 Auditing the Theory of Constraints Way – a Simple Analysis Roadmap

STEP 1 – WHY CHANGE

Define an Undesirable Effect and check its importance through its Local & System Impact

Is this an important Undesirable Effect for the whole SYSTEM?
- SYSTEM IMPACT – WHY CHANGE – Global Impact of Local Gaps on Organization

Is this an important Undesirable Effect for YOU to solve?
- LOCAL PERF GAPS – WHY CHANGE – Local / Dept impact of Undesirables Effect

What problem or Undesirable Effect are you facing?
- UDE – WHAT TO CHANGE – Summary of Problem or Undesirable Effect

STEP 2 – WHAT TO CHANGE

Defining Planning and Execution Conflicts that block resolution of problem

- GOAL – + ON GOAL – Achieving GOAL
- STRATEGY 1 – + OF CHANGE – Positives of CHANGE
- STRATEGY 2 – + OF NOT CHANGE – Positives of NOT CHANGE
- TACTIC 1 – CHANGE – Action/Decision to solve problem
- CONFLICT
- TACTIC 2 – NOT CHANGE – Opposite Action/Decision
- RISK 1 – - OF CHANGE – Negatives of CHANGE
- RISK 2 – - OF NOT CHANGE – Negatives of NOT CHANGE
- THREAT – - ON GOAL – Not achieving GOAL

STEP 3 – TO WHAT TO CHANGE

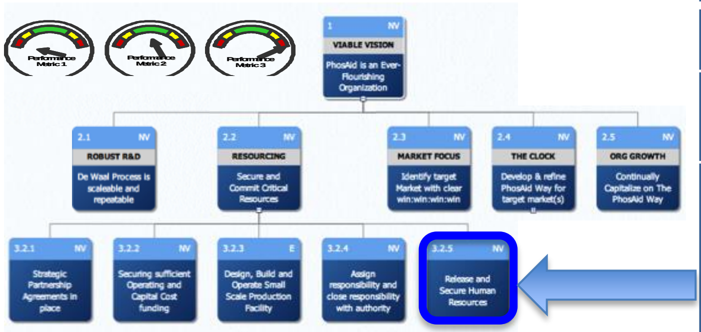
Using 4 WIN:WIN methods to resolve Planning & Execution decision conflicts

- GOAL – + ON GOAL – Achieving GOAL
- STRATEGY 1 – + OF CHANGE – Positive of CHANGE
- STRATEGY 2 – + OF NOT CHANGE – Positive of NOT CHANGE
- NEW TACTIC – T1, T2, T1 + T2 or T3 – Decision on HOW to resolve conflicts to achieve MORE Positives WITHOUT risk of Negatives using 4 methods

Final Audit Review
Are the Issues going away?

STEP 5 – ADDING BEST PRACTICE TO S&T

Add this Best Practice (together with others) to customize/create your organizational S&T



STEP 4 – HOW TO CAUSE THE CHANGE

Everyone contribute by raising YES, BUTS… to improve New solution and turning it into new "Best Practice" S&T node

	Title of Best Practice (S&T Node)
Necessary Assumption **WHEN?**	Why Change – The Undesirable Effects, related local and Global impacts of these
Strategy **WHAT FOR?**	The objective you want to achieve = More of the positives (Strategy 1 + 2) and none or fewer of of negatives (Risks 1 + 2)
Parallel Assumptions WHY?	The assumptions challenged in resolving the conflict which includes: • Conditions under which it is possible to achieve all the positives without risk of Negatives • "Yes, buts" raised by stakeholders and how these can be prevented/overcome that assisted in deciding on best Tactic
Tactic **HOW?**	New Tactic to Resolve conflict & address all "yes,buts.."

Stakeholder	Change Insufficiency...	How to achieve sufficiency?
Stakeholder	Predicted Negative of Successful Change...	How to prevent Negative?
Stakeholder	Implementation Obstacle	How to overcome Obstacle?

6. S&T Audit

6.1 How to define Planning and Execution conflicts related to a GAP analysis or Problem?

The first step in the process is to do the "GAP Analysis" related to a Problem (Performance GAP and related Undesirable Effect or UDE) experienced in S&T execution or simply in managing an organization

Step 1. From the left-hand menu, open the S&T Audit menu.

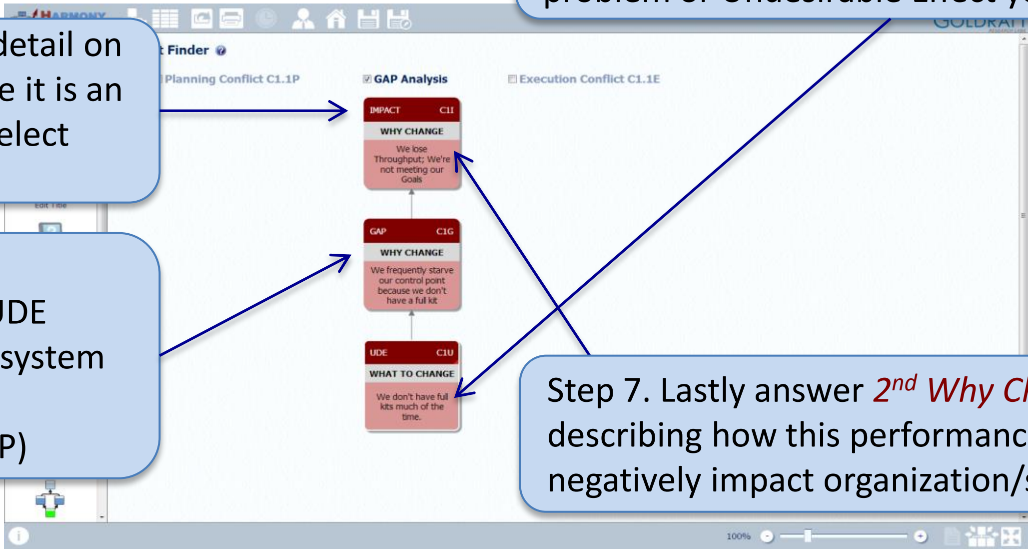
Step 2. Click on Conflict Finder Library.

Step 3 . Click on New and enter a Conflict title.

Step 4. Click on the bottom box (Problem) to define *What to Change*. Describe the problem or Undesirable Effect you are facing.

Step 5 (Optional). To add more detail on "*Why Change*" (to ensure it is an "important" problem), select GAP Analysis checkbox.

Step 6. Answer *1st Why Change*, describing how this problem / UDE negatively impact YOUR or Sub-system performance (resulting in a Performance or Expectation GAP)

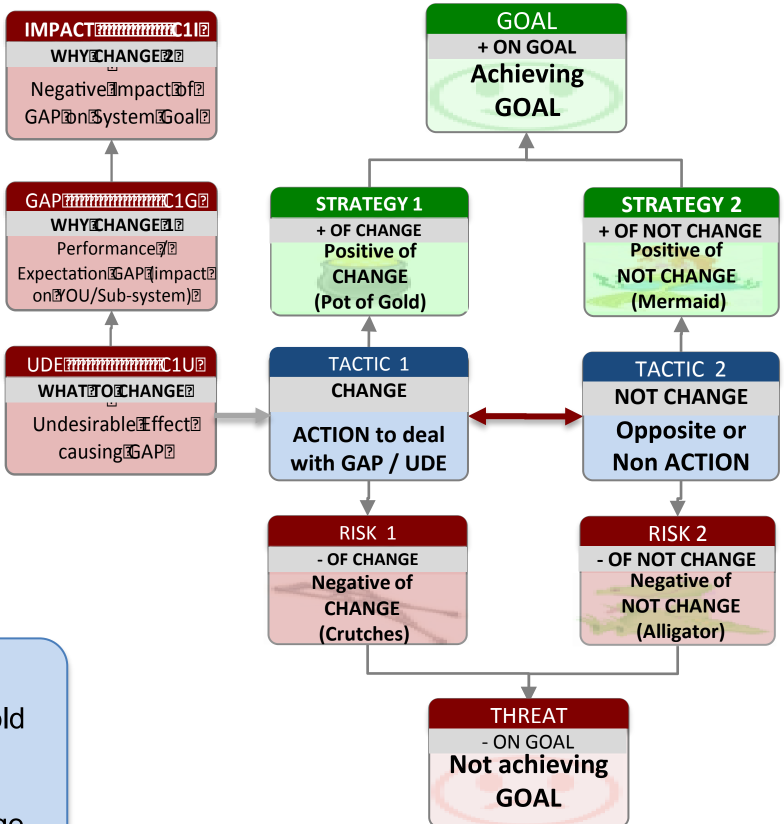


Step 7. Lastly answer *2nd Why Change* by describing how this performance GAP negatively impact organization/system goal

6. S&T Audit

6.1 How to define Planning & Execution conflicts related to a GAP analysis?

The next step in the process is to define the Execution Conflict related to the Undesirable Effect or Problem. This is the conflict that block those responsible for dealing with the Undesirable Effect / Problem to act. If we can find a way to break an Execution Conflict, we will be able to identify a new Execution "Best Practice" Rule



Step 1. Use the GAP Analysis to identify the CHANGE needed to remove or reduce the Undesirable Effect(s) that will help to This CHANGE (Tactic 1) is typically defined as an Action or Decision such as "Pressure to Do …/Don't Do …" that will help to deal with the UDE.

Step 2. Identify the NOT CHANGE - the Opposite or Non- Action/ Decision (Tactic 2) which is in direct conflict with the Action/Decision in the CHANGE box (either because they are direct opposites or because they require the same scarce resource at the same time)

Step 3. identify the 4 impacts related to this conflict by defining the:

1. Future Positive(s) of the Change or Strategy 1 represented by a Pot of Gold we want but don't have and believe can only be achieved by the Change.
2. Current Positive(s) of Not Changing or Strategy 2 represented by a Mermaid we have and want to keep but fear having to give up if we Change.
3. Future Negative(s) or Risk(s) of the Change represented by Crutches we don't have and don't want but fear are unavoidable if we make the change.
4. Current Negative(s) or Risks of Not Changing represented by a Alligator that we have but don't want and believe won't go away unless we make Change.

To find out more about how the 4 impacts of change can be used to understand and overcome the common resistance to change, look at: http://www.youtube.com/watch?v=hcz1aZ60k7w

Step 4. Now check the verbalization by reading the Change Matrix Cloud as you would describe your dilemma. In order to achieve [GOAL] we must [Strategy 1] which means I/we feel pressure to [Tactic 1] which could result in [Risk 1]. At the same time, In order to achieve [GOAL], we must [Strategy 2], which means I/we feel pressure to [Tactic 2] which could result in [Risk 2] not going away.

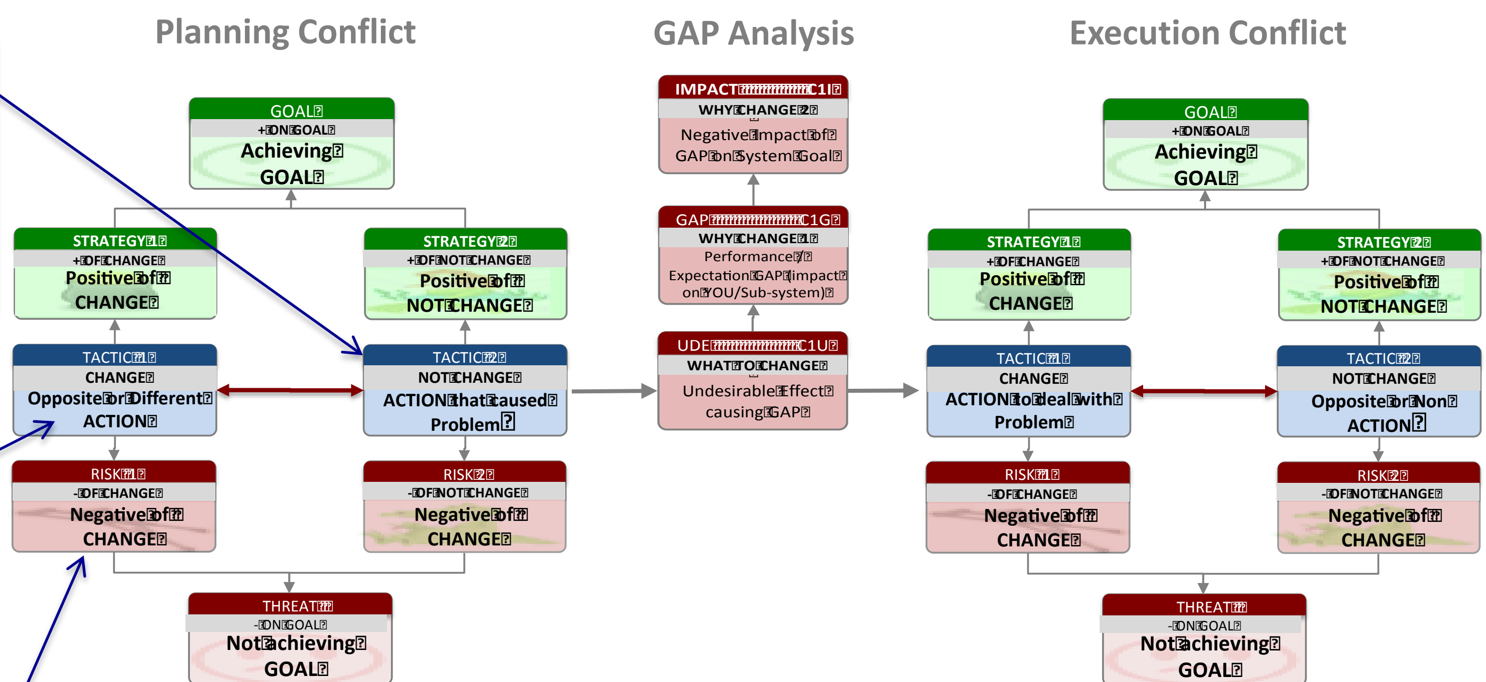
6. S&T Audit

6.1 How to define Planning & Execution conflicts related to a GAP analysis?

The next step in the process is to define the Planning Conflict related to the Undesirable Effect or Problem. This is the conflict of the person or stakeholder whose actions/non-actions we believe CAUSED the Undesirable Effect (UDE). Note that if the person or stakeholder causing the UDE / Problem is the same as the same person or stakeholder having to deal with the UDE / Problem, then the Planning and Execution Conflicts will be the same. As with the Execution Conflict, if we can resolve a Planning Conflict, we will be have new Planning “Best Practice” rule

Step 1. Use the GAP Analysis to determine what action / non-action most likely CAUSED the UDE and enter this in Tactic 2 of the Planning Conflict

Step 2. Write the Opposite or Different Action (to Tactic 2) that you believe would not have resulted in the UDE / Problem



Step 3. Now complete the rest of the Planning Conflict by identifying the four impacts of Change vs. Not Change:

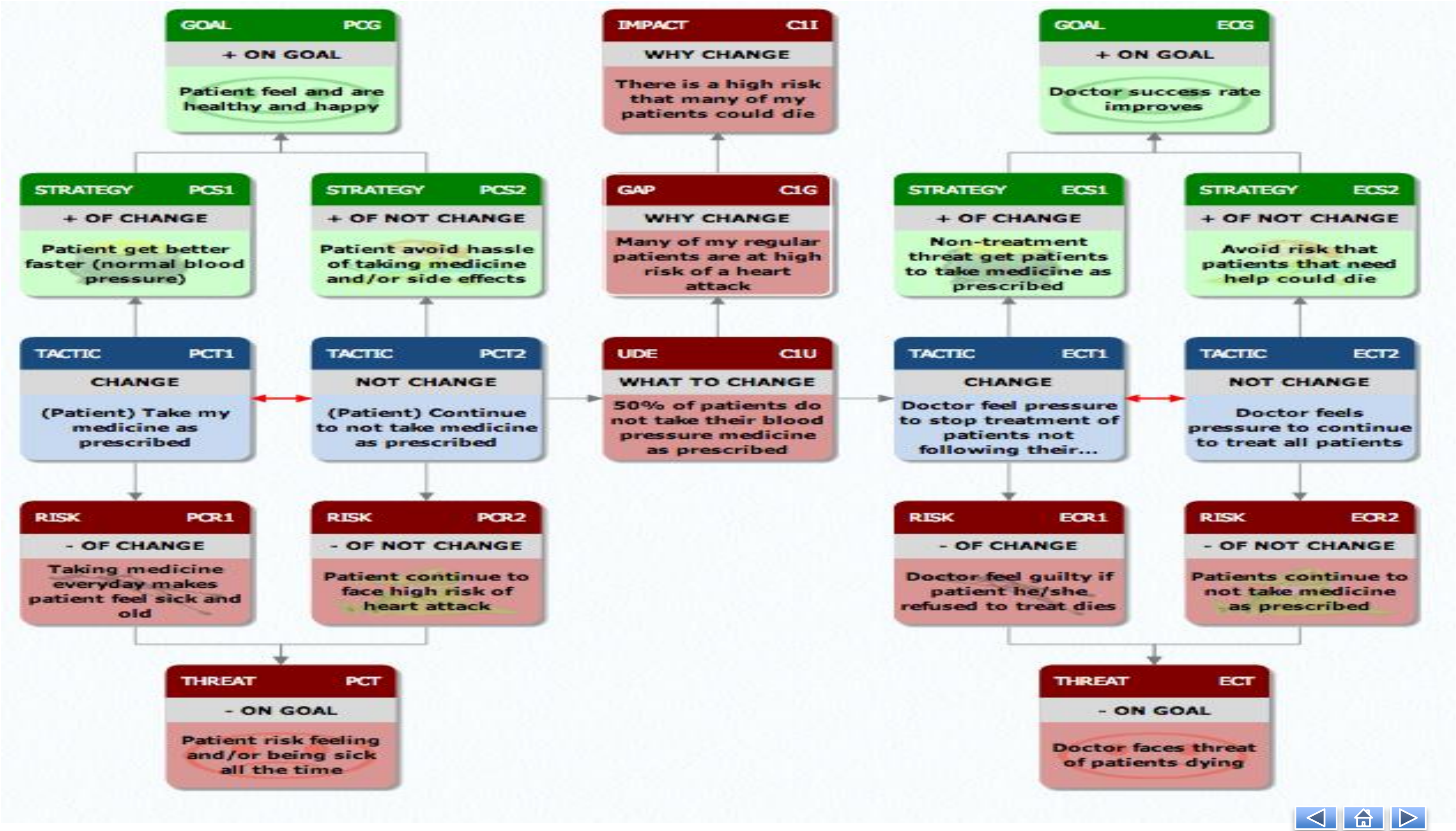
1. Positive of Change - Strategy 1 or the Pot of Gold that you don’t have but want.
2. Negative of Change - Risk 1 or the Crutches that you don’t have and don’t want.
3. Positive of Not Change – Strategy 2 or Mermaid that you have and want to keep.
4. Negative of Not Change – Risk 2 or Alligator that you have and don’t want.

6. S&T Audit

6.1 How to define Planning & Execution conflicts related to a GAP analysis?

Below there is an example of full analysis by a medical doctor on an Undesirable Effect they experience (50% of patients not taking their blood pressure medicine as prescribed), its consequence on the doctor and his patients (why the UDE is bad) and the related Planning Conflict (the conflict of the Patient who is causing the UDE) and Execution Conflict (the conflict faced by the Doctor in dealing with the UDE).

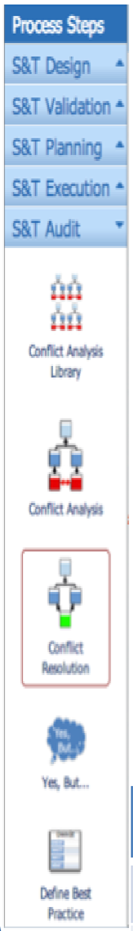
Planning Conflict GAP Analysis Execution Conflict

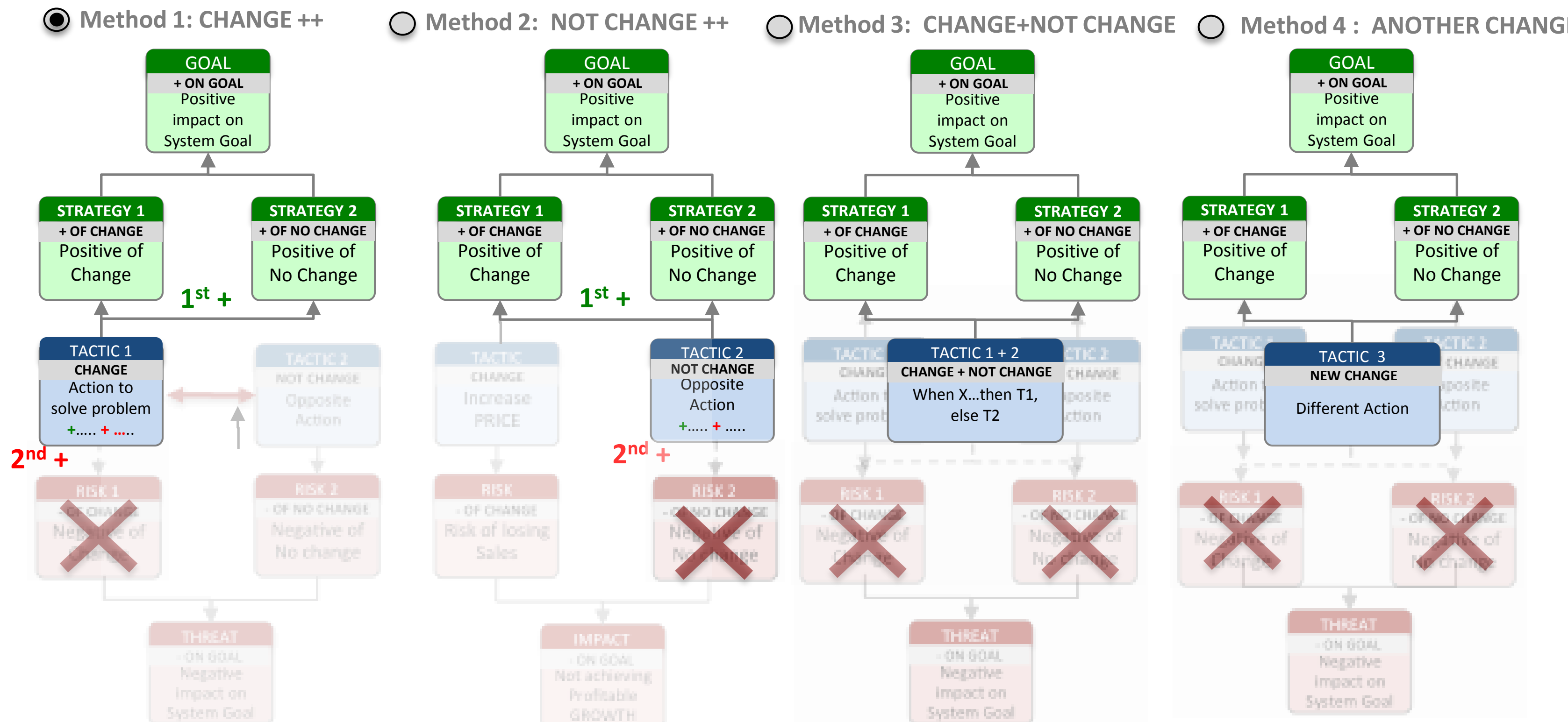


6. S&T Audit

6.2 How to resolve Planning and Execution conflicts with the 4 methods?

Once we've defined the unresolved Planning or Execution Conflict that prevent a resolution to our "important problem", we are now ready to look for a win:win way to resolve the conflict. A good solution gives all of the positives and none (or at least less of the negatives) than we have currently. Dr. Alan Barnard, CEO of Goldratt Research Labs, has developed four methods to resolve any conflict. These four methods are listed below. We encourage users to try all four methods, completing the table below each method





Assumption	Injection	How to?
Why CHANGE jeopardize S2 (MERMAID)?	What can prevent this?	How to achieve this?
Why CHANGE result in R1 (CRUTCHES)?	What can prevent this?	How to achieve this?

Assumption	Injection	How to?
Why NOT CHANGE jeopardize S1 (POT OF GOLD)?	What can prevent this?	How to achieve this?
Why NOT CHANGE result in R2 (ALLIGATOR)?	What can prevent this?	How to achieve this?

Assumption	Injection	How to?
When is CHANGE in conflict with NOT CHANGE OR under what condition does the conflict exist?	When [condition] then CHANGE, else when [condition] NOT CHANGE...	How to achieve this?

Assumption	Injection	How to?
Why is there no other Change to achieve S1 + S2 without R1 + R2?	What Other Change can achieve this?	How to achieve this?

6. S&T Audit

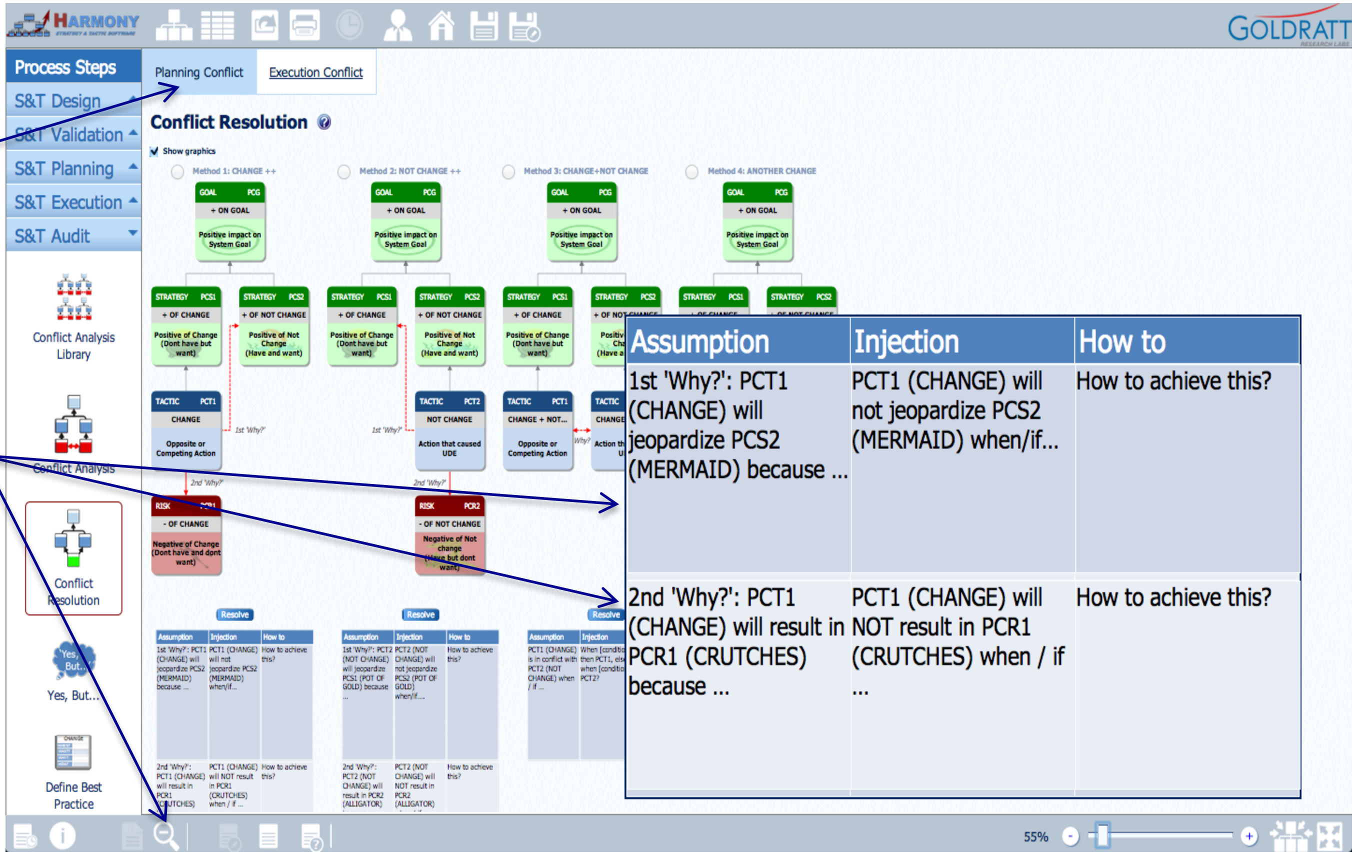
6.2 How to resolve Planning and Execution conflicts with the 4 methods?

The process for using the 4 methods might look complicated, but it is actually quite simple. Simply follow the steps below:

Step 1. After clicking on the Conflict Resolution icon, select whether to resolve the Planning or Execution Conflict by clicking on the relevant tab

Step 2. Starting with method 1, click inside the Table below M1 and then on the magnifying glass to enlarge the Assumptions Table. Method 1 is called “Change ++” which means treating the “Change” as a half-baked solution to which we need to add how we can keep our Mermaid (1st +) and what to add to ensure we don’t have the risk of the crutches (2nd +)

Step 3. Now click inside the 1st Why’s Assumption box and type the your answer over the guideline question.



Step 4. Then click inside the 1st Why’s Injection box and type the your answer over the guideline question. Typically the “injection” is simply the opposite of the Assumption. Then think of “best” way to achieve or implement this injection and type this in the “How to” box.

6. S&T Audit

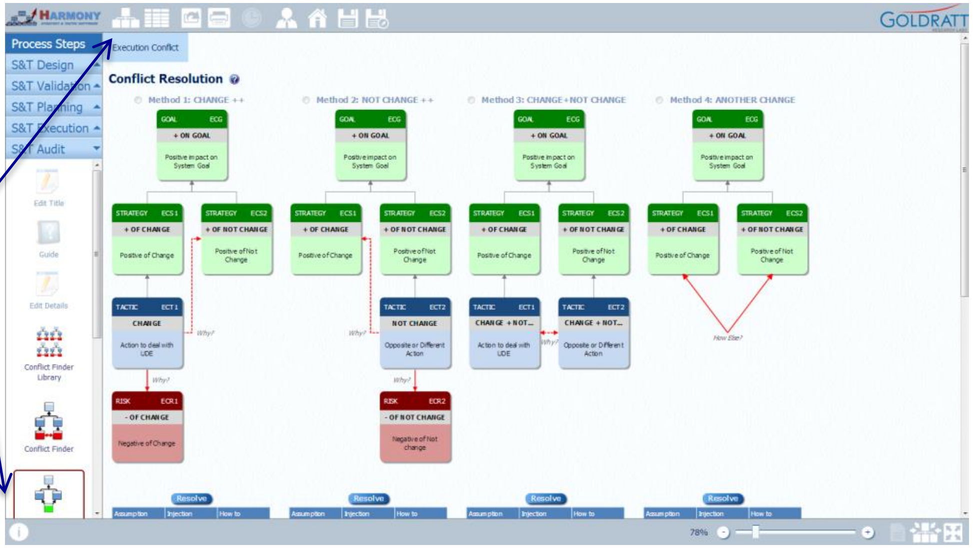
6.2 How to resolve Planning and Execution conflicts with the 4 methods?

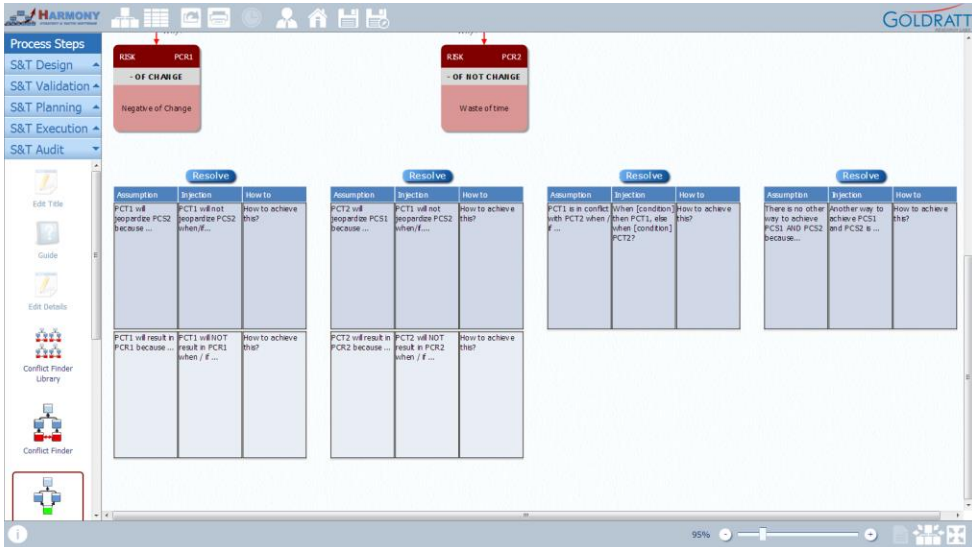
Step 1 . On the left-hand S&T Audit menu, select *Conflict Resolution*.

Step 2 . At the top, be sure you have selected the conflict you wish to resolve, either *Planning or Execution*

In this process we will examine the Assumptions that cause us to believe we have a conflict.

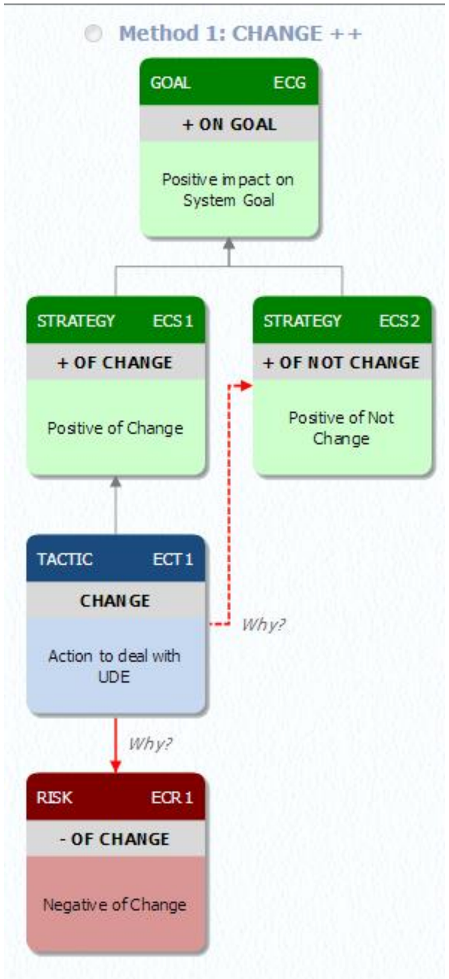
Using 4 methods ensures that we uncover and challenge all assumptions and find the best solution.





6. S&T Audit

6.2 How to resolve Planning and Execution conflicts with the 4 methods?



Method 1: CHANGE ++ examines why we believe the CHANGE will not give us the benefits of NOT CHANGE and why CHANGE will result in the RISKS [- of Change]

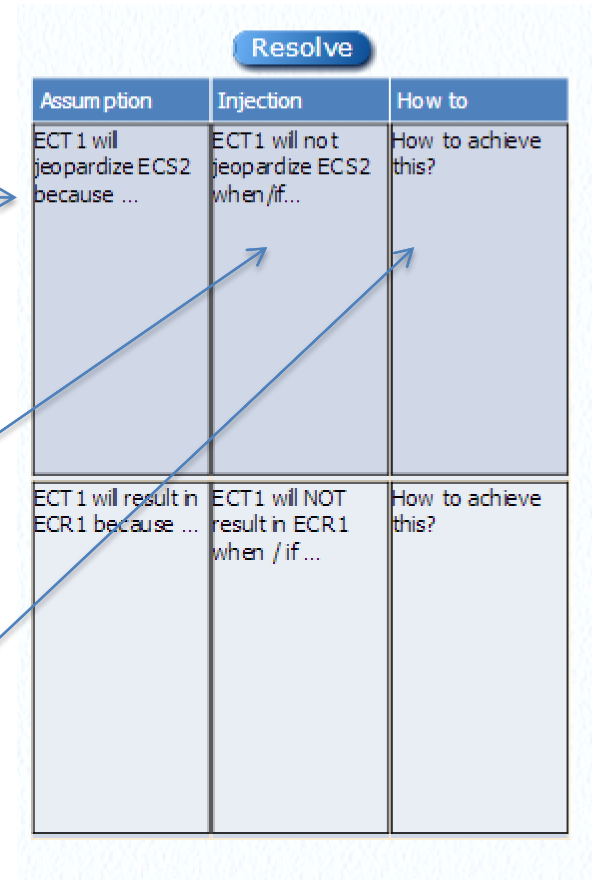
Step 1. Scroll down to view the resolution matrix.

Step 2. In the top Assumption box, describe the reasons that CHANGE will not give the same benefits of NOT CHANGE.

Step 3. In the top Injection box, describe the conditions when the CHANGE would not jeopardize the benefits from NOT CHANGE.

Step 4. In the top How to box, describe HOW you could make the conditions in the injection box true.

Step 5. Repeat this process for the bottom row by analyzing why CHANGE will result in the negatives.



6. S&T Audit

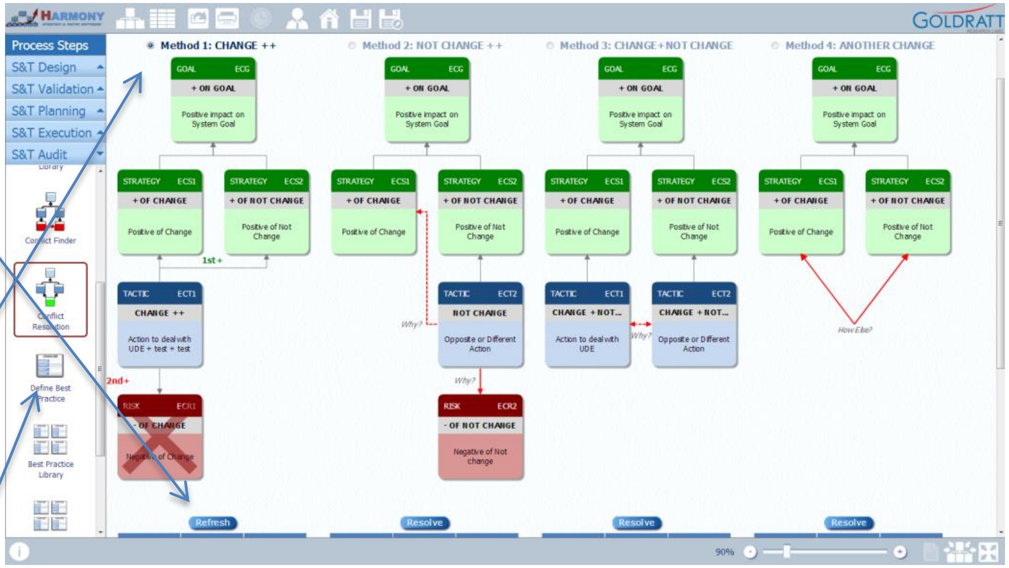
6.2 How to resolve Planning and Execution conflicts with the 4 methods?

Once you have completed the Conflict Resolution, review all 4 methods to determine which you think will work best. Soliciting input from other stakeholders will help.

Step 1. Click the Resolve button under the method you want to use. This will add parse the text of your CHANGE box with the additional elements of your resolution, and break the conflict arrows.

Step 2. Click the radial (check box) next to the Method you wish to use as your “Best Practice”

Step 3. On the left-hand S&T Audit menu, select Define Best Practice

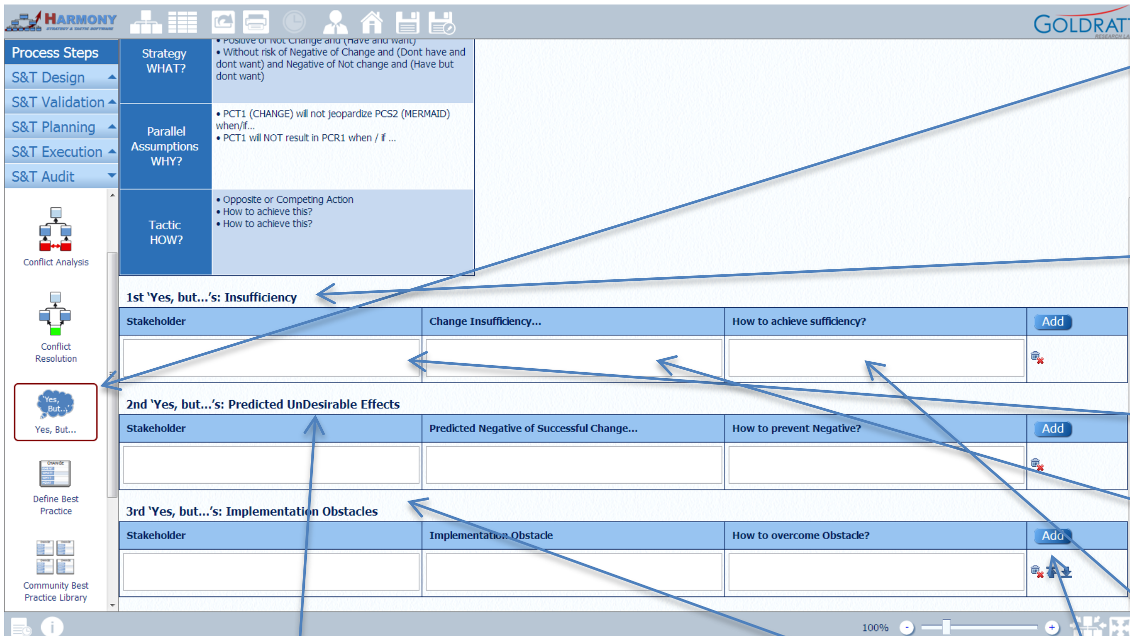


Now you are ready to refine your resolution into a Best Practice, which can then be added to your S&T tree.

6. S&T Audit

6.3 How to improve on resolution by listing "*3 types of yes, buts*.." and how to overcome these?

Many breakthrough ideas can be classified under the banner of "necessary but not sufficient". When presenting a breakthrough tactic to other stakeholders, they will frequently respond with "**YES** that's great, **BUT**…" These reservations can provide important additional details needed to ensure your breakthrough tactic is sufficient to create more of what you want and less of what you don't.



Step 1: Click Yes, But… from the S&T Audit Menu

Step 2: Check with all stakeholders for Insufficiency ["Yes, that's a great solution, but I don't think it's sufficient to meet all key stakeholder needs…"].

Step 3: Enter Stakeholder name.

Step 4: Enter explanation of why the change is insufficient.

Step 5: Enter additional details for How to achieve sufficiency.

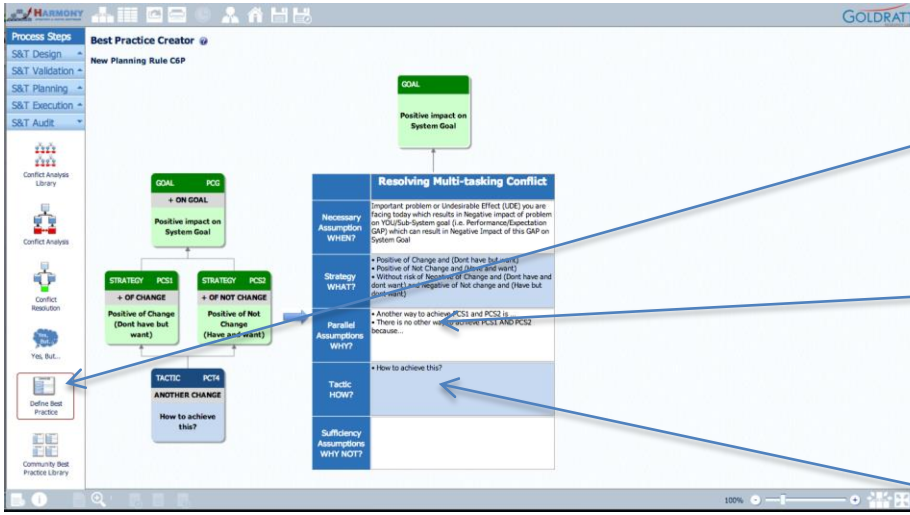
Step 6: Repeat for the 2nd type of 'Yes, but…' Predicted UnDesirable Effects ["Yes, that's a great solution, but I predict that it will also create some undesirable effects…"]

Step 7: Repeat for the 3rd type of 'Yes, but…' Implementation Obstacles "Yes, that's a great solution, but I see the following obstacles in implementing it…"]

Helpful Hint: There are often many stakeholders for a suggested change. You can add additional lines for each of the 3 "Yes, But's" to include everyone.

6. S&T Audit

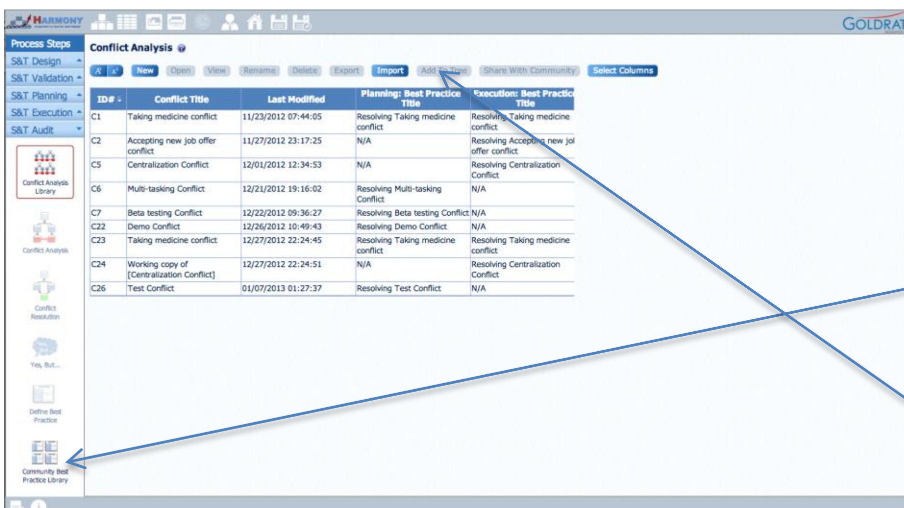
6.4 How to convert Conflict resolution into Best Practice S&T node that can be added to S&T?



Step 1. Click on "Define Best Practice"

Step 2. Harmony will copy all content into the S&T node format

Step 3: You can review the content copied over and improve on the sentence structure to ensure it reads properly and/or add missing details and/or remove redundant text

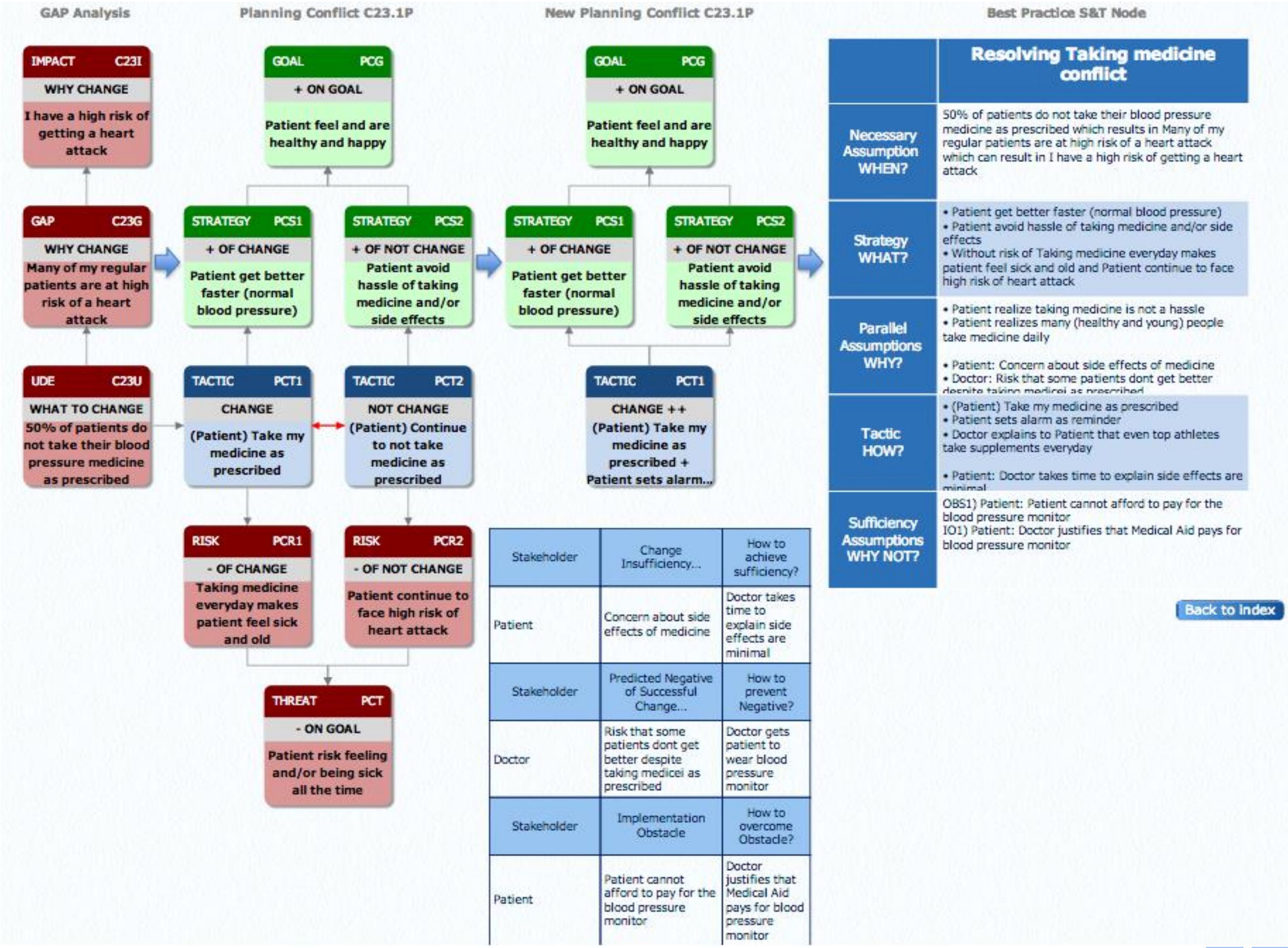


On the left-hand S&T Audit menu, you can also select Community Best Practice Library to view nodes that others have shared with you.

These nodes can now be directly added to an S&T by selecting the Best Practice from the Conflict Analysis Library and selecting "Add to Tree"

6. S&T Audit

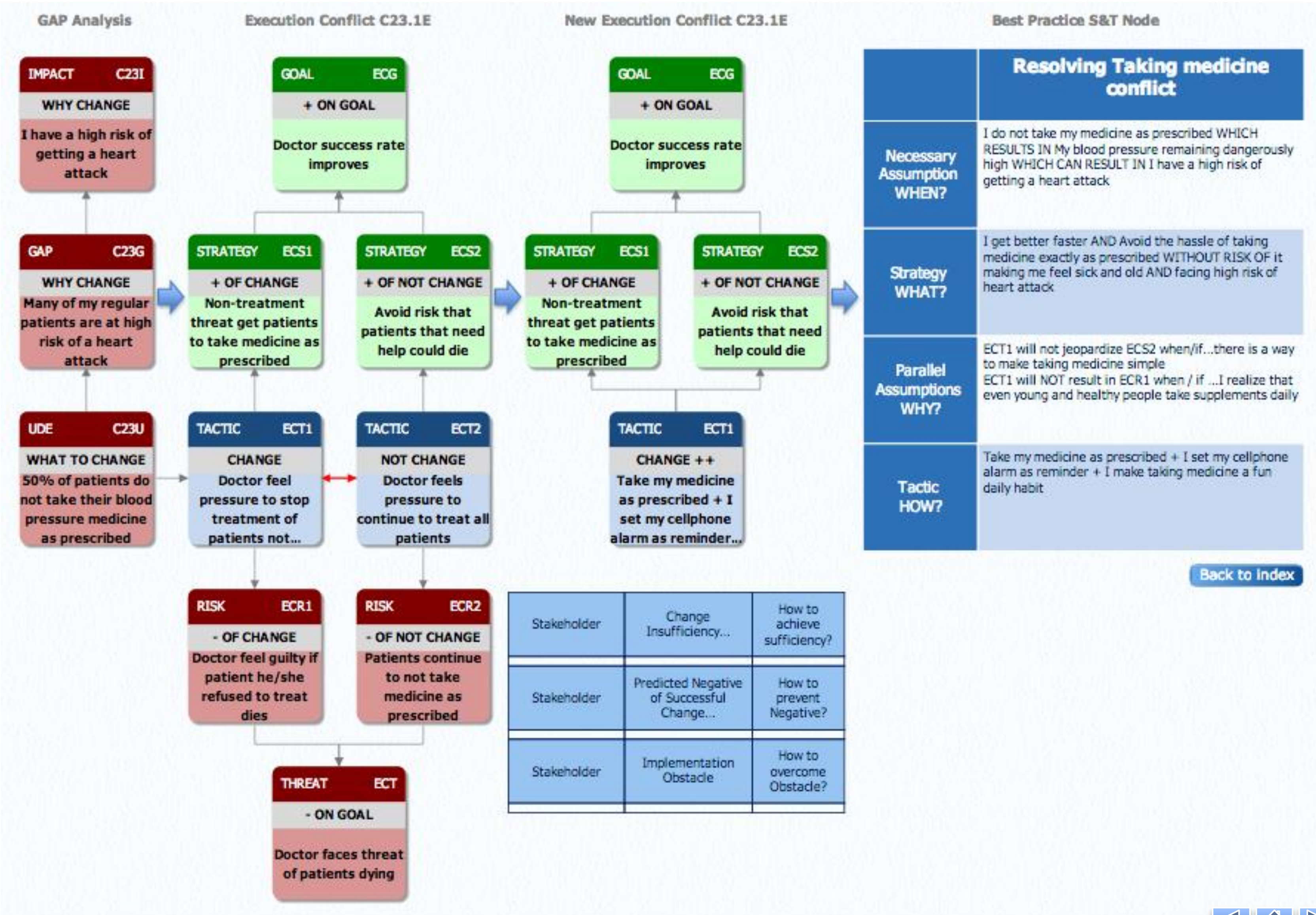
6.5 Example of using S&T audit functionality to create new Planning Rule



Stakeholder	Change Insufficiency...	How to achieve sufficiency?
Patient	Concern about side effects of medicine	Doctor takes time to explain side effects are minimal
Stakeholder	**Predicted Negative of Successful Change...**	**How to prevent Negative?**
Doctor	Risk that some patients dont get better despite taking medicei as prescribed	Doctor gets patient to wear blood pressure monitor
Stakeholder	**Implementation Obstacle**	**How to overcome Obstacle?**
Patient	Patient cannot afford to pay for the blood pressure monitor	Doctor justifies that Medical Aid pays for blood pressure monitor

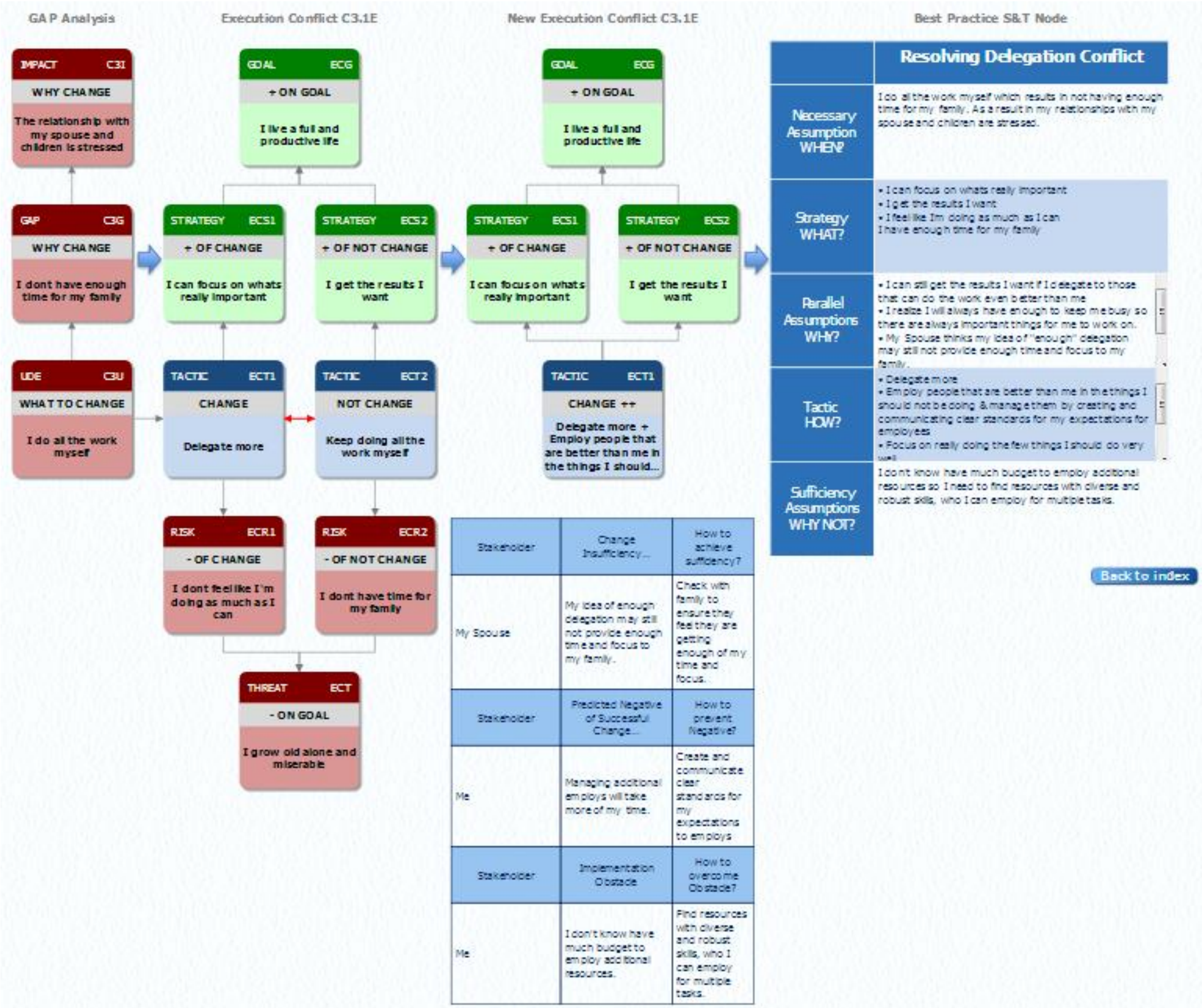
6. S&T Audit

6.5 Example of using S&T audit functionality to create new Execution Rule



6. S&T Audit

6.5 Another Example



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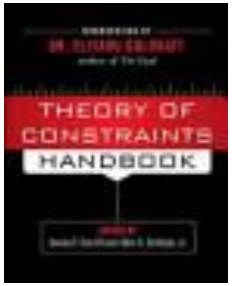

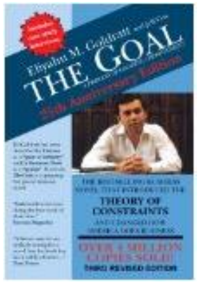

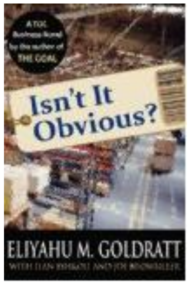

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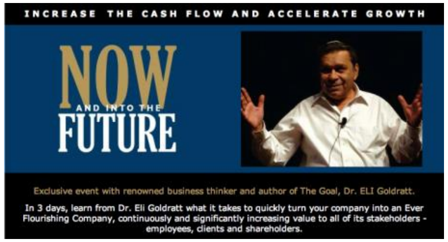

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