# **Hanging Fire Expanded Workshop**

3-day workshop

Understanding why "Business" Systems Perform the Way They Do – Planning, Scheduling, and Control for Project-, Production-, and Inventory-based Workflows

The Hanging Fire Expanded Workshop (HFEW) adds a third day to the *two-day* Hanging Fire Workshop. The HFEW is designed for individuals and leadership teams that want to gain a better understanding of TOC Critical Chain Portfolio Management (CCPM), TOC Drum Buffer Rope (DBR), and Inventory Management (Replenishment). The HFEW demonstrates how proper alignment of actions in planning, scheduling, synchronization, and control significantly improve the ability to deliver projects/products on-time, in-scope, and in-budget.

The objective of the **HFEW** is to help leaders understand how Dependency and Variability Interaction defines the Lines of Reasoning connecting Business Function Actions to Business Performance Outcomes (T, I, OE), with application to the Planning and Scheduling and Control aspects of Project, Production and Inventory-based workflows.

Fundamentally, managing workflows as "projects" is an alternative to managing workflows as "production" and vice-versa. These differences, as well as the differences between TOC CCPM, TOC DBR and Replenishment and other project, production and inventory management approaches, are discussed. We will engage in the process of formulating and deploying schedules to better understand the foundation they provide in maintaining the workflow control necessary to deliver on-time, in-scope, and in-budget with shorter, more reliable lead times and provide for increased availability of stocked items.

Using a mixture of lecture, discussion, and simulation, the workshop will:

- Explore the key elements of project complexity and uncertainty; namely task dependency, shared resources, task variability, and the interaction between them;
- Explore the key elements of production complexity and uncertainty;
   namely work (task) dependency, shared resources, queue variability, and
   the interaction between them;
- Discuss the importance and means of making visible the cumulative effects of the interaction of dependency and variability at the work (task) and resource level;
- Examine how repositioning aggregated safety time estimates into appropriately positioned and sized buffers will allow for forward projecting expected buffer consumption and provide for clear project/order status and proper prioritization of work (tasks) in order to better meet due dates: and
- Identify the changes in Performance Measures, Operational Understanding, and Decision Support that are required to align and enable the necessary Actions to ensure predictable delivery of the desired Outcomes – on-time, in-scope, and in-budget completion.

The Hanging Fire

Expanded Workshop is designed for senior leaders and leadership teams from all business functions/functional areas of responsibility whose primary business is project-, production-, or inventory-based who want a better understanding of constraint-based decision making and its impact on business performance.

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### **Benefits**

Attendees will learn how to:

## Days 1 & 2

- Apply CCPM to any project-based workflow, where workflow is viewed and managed in the context of task time, and regardless of whether the workflow is that of product development, IT support, fabrication, construction, maintenance, repair, overhaul, new facilities, etc.
- Use finish-to-start task dependency networks and Critical Chain schedules to provide for much better connectivity between task level actions taken and performance outcomes achieved
- More effectively identify task completion variability and to reposition task level safety to the project level where it will better protect project performance
- Synchronize multiple projects to level loads on shared resources across projects and how to gate the start of new project work
- Use properly positioned and sized time and budget buffers to manage and contain the effects of task related variability
- Use task updates of work remaining to forward project and make visible time buffer consumption and resource overloads in windows of time for proper workflow prioritization and proactive planning or corrective actions
- Use "Relay Runner" resource behaviors to make more effective use of resources and to increase speed of workflow
- Identify which types of Planning, Scheduling, and Control actions will positively or negatively affect the performance outcomes of project-managed workflows

## Day 3

- Use the Five Focusing Steps and DBR/Replenishment to better manage any
  production/inventory-managed workflow, where work is viewed and managed in the
  context of processing rates and queue times, regardless of whether the workflow is that
  of production, manufacturing, repair, or logistics
- More effectively identify queuing variability and to reposition work level safety to the order level where it will better protect delivery performance

- Synchronize workflow across multiple products with level loads on shared resources and how to gate the start of new production work
- Use properly positioned and sized time buffers to manage and contain the effects of queue (i.e. non-instant availability of resources) related variability
- Use work order updates of work completed to make visible time buffer consumption for proper workflow prioritization and proactive planning or corrective actions
- Use "Road Runner" resource behaviors to make more effective use of resources and to increase speed of workflow
- Use VATI Flow Characteristics to more easily identify key flow control points in any workflow
- Use TOC Replenishment to better manage any inventory-managed workflow, where inventory is viewed and managed in the context of availability and turns, regardless of whether the workflow is that of procurement, production, logistics, or wholesale-retail operations
- Use properly positioned and sized time and inventory buffers to manage and contain the effects of supply and demand variability
- Identify which types of Planning, Scheduling, and Control actions will positively or negatively affect the performance outcomes of production/inventory-managed workflows

## **Required Reading**

Hanging Fire: Achieving Predictable Results in an Uncertain World The Goal

## **Suggested Reading**

Critical Chain

## **Other Requirements**

Attendees should bring a laptop on which they have admin rights and can load PDF workshop material and a Java-based Simulator app.

## **Price**

US\$2,400 per seat

#### **Cancellation & Rescheduling Policy**

AGI understands that occasionally circumstances require a change in schedule that results in a registrant not being able to attend a program as planned.

If you wish to CANCEL your registration and receive a full refund, you must submit your request via email to agi@goldratt.com at least 30 days prior to the program start date. If you submit your request 15 to 29 days before the program start date, you will receive a refund equal to 50% of the full program fee. If you submit your request within 14 days of the program start date, you are not eligible to receive a refund.

If you wish to RESCHEDULE your registration to a LATER date at no charge, you must submit your request via email to agi@goldratt.com at least 30 days prior to the program start date. If you submit your request 15 to 29 days before the start of the program, you will be charged a change fee of 10% of the full program fee. If you submit your request within 14 days of the program start date, you will be charged a change fee of 25% of the full program fee.

For those who have RESCHEDULED to a later date, and then wish to CANCEL, no refund will be given.

You may RESCHEDULE your registration to an EARLIER date at any time if space is available. There is no fee for this change.

You may REPLACE yourself with another attendee at any time at no charge.