



**REAL SOLUTIONS
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Hanging Fire Expanded Workshop **3-Day Workshop**

Planning, Scheduling, and Management Control for Project-, Production-, and Inventory-based Workflows

The similarities between managing projects and managing production or logistics far exceed the differences. The **Hanging Fire Expanded Workshop** adds a third day to the *two-day Hanging Fire Workshop* to show how to apply the same fundamental ideas underlying TOC Critical Chain Portfolio Management (CCPM) to workflows that are managed more like production or inventory management.

The objective of the **Hanging Fire Expanded Workshop** is to help leaders understand how almost subtle changes in their thinking and approach to production and inventory management can result in a transformation in results.

It has been designed for individuals and leadership teams that, in addition to desiring to learn about CCPM, also want to gain a better understanding of TOC Drum Buffer Rope (DBR) and Replenishment, and how they work together to deliver products faster, more reliably, on-time, and with lower costs and fewer constraints.

The workshop is a mixture of lecture, discussion, and simulation. On the third day, production and inventory management as operational strategies designed and executed to achieve an overall business strategy will be examined.

Managing workflows as “production” is an alternative to managing workflows as “projects.” We will discuss these differences as well as the differences between TOC DBR and Replenishment and other production and inventory management approaches. We will look into the process of formulating, deploying, and maintaining control of production and replenishment schedules within both production and supply chain environments, aimed at delivering products on-time, with faster and more reliable lead times, lower costs, and with fewer constraints.

Production and supply chain simulations will be utilized to help attendees better understand and internalize the concepts of using either a Resource or product Demand as the “Drum” to schedule and synchronize workflow across multiple products with level loads on shared resources. How to gate the start or release of new work orders, using Aggressive But Possible and Highly Probable queue time estimates to make workflow variability visible, and the behaviors required (“Road Runner”) to ensure that protective capacity is not wasted will be taught. Attendees will see how repositioning aggregated queue time estimates into appropriately positioned and sized Drum and Shipping Buffers will allow for forward projecting expected Buffer consumption. An understanding of how this process enables the proper prioritization of work orders and proactive initiation of corrective actions in order to meet due dates will be achieved.

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Who Should Attend

Senior leaders and leaders from all business functions whose primary business is production-managed and/or inventory-managed, such as:

- Production, Manufacturing, Repair or Logistics (whether Make-to-Order or Make-to-Stock)
- Wholesale, Retail, or Supply Chain

Senior leaders and leaders whose functional area of responsibility supports or enables production-managed and/or inventory-managed business, such as:

- Finance, Sales, Marketing, Product Design (Engineering), Maintenance, Procurement (Purchasing), Process Improvement, or IT/IS

Anyone working in Finance or IT/IS whose responsibilities include Decision Support Requirements definition and/or programming oversight

Required Reading

Hanging Fire: Achieving Predictable Results in an Uncertain World

The Goal: A Process of Ongoing Improvement

Price

US\$2,400 per seat

2017 Open Dates in Milford, CT USA

March 6-8

May 8-10

July 17-19

September 18-20

November 13-15

2017 Open Dates in Penang MALAYSIA

March 20-22

May 22-24

July 24-26

September 25-27

November 20-22

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Please Note: The **Hanging Fire Expanded Workshop** can also be held in a dedicated format at a client location or ours. Please contact us at agi@goldratt.com for more information.

Cancellation Policy

Our workshops are designed to cater to a limited number of participants. If you must cancel a workshop registration, you will be given a full refund up to two weeks before the workshop. A cancellation occurring within two weeks of the workshop will be subjected to a US\$350 cancellation fee, unless participant reschedules at that time into another workshop. Attendee substitutions may be made at any time prior to the start of the workshop. To cancel a workshop registration, please call AGI at 203.624.9026. 20160412

Hanging Fire Extended Workshop Computer Simulations

Production and supply chain simulations will be utilized to help attendees better understand and internalize the concepts of using either a Resource or product Demand as the “Drum” to schedule and synchronize workflow across multiple products with level loads on shared resources.

Production simulated experiences include:

- A production-managed workflow in which to apply the Five Focusing Steps and further internalize the process of using a system constraint as a regulating device to synchronize everything that’s going on throughout the system.
- Deriving a Scheduling process that accounts for work and resource dependency, and concentrates safety where it will provide the most protection from variability by:
 - Identifying Capacity Constraint Resources (CCRs) and Demand constraints as scheduling Drums
 - Exploiting Identified constraints – establishing guidelines for Drum scheduling and maximizing Throughput per Constraint Unit
 - Subordinating/Synchronizing to align production and material release schedules to be in accordance with exploiting the identified Drums and releasing material only as early as necessary
 - Positioning and sizing time buffers to ensure queue times do not adversely affect on-time delivery performance
 - Understanding Productive and Protective Resource Utilization requirements are defined by the interaction of workflow dependencies and variability
- Understanding Alignment of resource Actions to those of a “Road Runner”
- Using Time Buffer Management to provide “Product Visibility & Management Control”

Inventory Management/Replenishment simulated experience includes:

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- An inventory-managed workflow in which to apply TOC Replenishment to synchronize Supply and Demand using Reliable Replenishment Times with effectively positioned, sized, and managed inventory buffers to improve product availability and inventory turns
- An inventory-managed workflow that connects a Supplier to Wholesale to Retail to End User demand in which to apply TOC Replenishment to synchronize Supply and Demand throughout an entire Supply Chain
- Utilizing VATI flow configuration insights to provide for faster, more effective applications of the TOC Five Focusing Steps to configure “system” specific applications of the TOC Production (DBR) and Inventory Management (Replenishment) solutions
- Alignment of Actions throughout the organization, from senior leadership to production managers and resource supervisors to support proper “Road Runner” resource actions

Workshop Take-Aways

Understand:

- The key elements of production/logistics complexity and uncertainty; namely process dependency, process variability, shared resources and the interaction between them
- The importance and means by which to make visible the cumulative effects of the interaction of dependency and variability at the process and resource level
- How DBR/Replenishment is applied to any production/inventory-managed workflow, where work is viewed and managed in the context of processing rates, regardless of whether the workflow is that of production, manufacturing, repair, or logistics
- That the effects of identified variability are much easier to manage and contain through the use of properly positioned and sized time or inventory buffers
- That the cumulative effects of variability, if made visible, enable workflow outcomes to be proactively controlled, via scheduling with time, inventory, and budget buffer management
- The Rules of Engagement for production-managed and inventory-managed workflows, starting from an Operational Understanding and the corresponding Operational Strategy, which in turn forms the basis of specific types of Planning, Scheduling, and Resource Management Actions, ultimately resulting in Performance Outcomes

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Learn:

- About the causal relationships between some of the most common problems in production-managed and inventory-managed operations and the types of actions causing them
- How to better identify and address queuing variability associated with work completion, and thereby order completion

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