

# Critical Chain Project Management



**INTERNATIONAL**  
THEORY OF CONSTRAINTS

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## **Featuring:**

- **New strategy and tactics with the critical steps to get quick results**
- **How to reduce project durations by 25%**
- **The definitive way to permanently eliminate multi-project resource conflicts**
- **How to increase project flow in the multi-project environment**
- **Hands-on practice in every aspect of the Critical Chain methodology**
- **New knowledge on how to use trends in buffer management**
- **How to turn Critical Chain into a process of ongoing improvement in project management practices**
- **An approach to gain executive support**
- **How to blend earned value and Critical Chain metrics**
- **Implementation tips**

## TWO DAY WORKSHOP

### *Introduction*

A few years ago, many organizations would have been thrilled if most projects were delivered on time, on budget and within scope. Today, the competitive challenge, economic conditions and increasing demands from customers are driving organizations to look for more. More projects must be completed, with drastic reductions in cycle time using the same resources.

Experts in the field of Project Management, in the most recent surveys, estimate that as many as 80% of all projects either finish late, over budget or outside of original specifications. Clearly, organizations encounter significant difficulties as they attempt to balance

the often conflicting goals set by budgets, schedules, scope and resources.

To address the problem, Critical Chain provides a complete approach, including new measurements for teams, project and resource managers, new planning tools, a method to stagger projects and unique reporting with meaningful early warnings. In fact, many project managers using Critical Chain claim that its reporting and measurements cut project review times in half.

In this workshop, participants have extensive hands on practice. Participants create and execute single and multi-project project schedules using the traditional approach and the Critical Chain methodology. By hav-

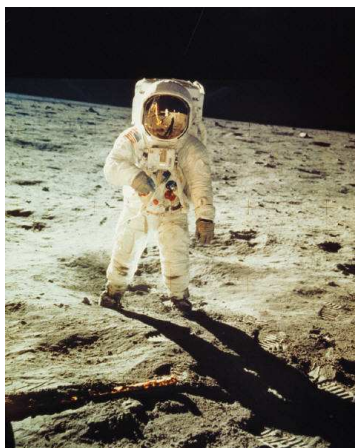


ing the point of comparison between the two approaches, participants can clearly see the difference.

In the multi-project environment, participants see the effect of pushing too many projects into a system. Students learn the differ-



## INTRODUCTION (CONTINUED)



Critical Chain is suitable for any type of project

ence between good and bad multitasking. They discover how to significantly reduce bad multitasking, through staggering projects correctly. Finally, participants learn the use of the Drum and Strategic Resource buffers.

During the program, participants learn how to keep projects under control using buffer management.

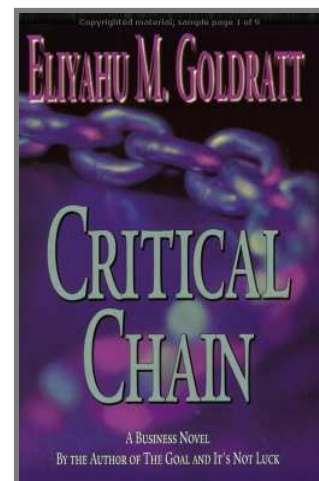
The use of Dr. Edwards Deming's philosophy of predictability and trends is introduced, using Critical Chain metrics. The use of project and feeding buffers for both project and resource managers is discussed.

The program also covers implementation considerations. You will have a Critical Chain implementation plan designed to overcome many generic obstacles to implementing successfully.

This workshop is filled with exercises that build each participant's knowledge and confidence in planning a Critical Chain project successfully. The workshop has been designed

by Project Management Professionals (Certified PMPs) with the real-life knowledge and experience to cause an immediate impact and success for any organization that implements this enhanced method of project planning and execution.

Based on Dr. Eli Goldratt's bestseller



## WORKSHOP CONTENT

This workshop provides a comprehensive understanding of how to plan and manage a project according to Critical Chain methodology. Issues related to single and multi-project environments are addressed, and the solutions are explained through simulations and scheduling exercises.

### Topics include:

- The single and multi-project environments
- Profile of a typical task estimate
- Student syndrome
- Parkinson's Law
- Good and bad multitasking
- Measuring people according to their estimates
- The five focusing steps

of TOC, with the A & B example

- Applying the five focusing steps - The Single Project solution
- Reducing estimates to eliminate Student syndrome and Parkinson's Law
- Relay runner work ethic
- Scheduling tasks to start as late as possible
- Project buffers, feeding buffers and resource buffers
- Multi-project problems and solution
- Good and Bad multitasking
- Drum concepts
- How to stagger projects according to a drum
- Implementing in a single vs. a multi-project environment



Finally—a long term cure for chronic project lateness and resource conflicts

**YOU WILL MASTER THE FOLLOWING:**

- ⇒ **How to deliver on time, greater than 95% of the time!**
- ⇒ **Reduce project durations by 25% or more!**
- ⇒ **Master the multi-project environment, with senior management support for a much smaller number of active projects.**
- ⇒ **Use Critical Chain buffer management and reporting methods to focus the efforts of every project and resource manager, automatically.**
- ⇒ **Complete project reviews in less time, with better results.**
- ⇒ **Drive relay runner work ethic on the most important tasks within every project.**
- ⇒ **Use the Five Focusing Steps to create any Critical Chain Schedule.**
- ⇒ **Change measurements to reduce estimates and the waste of Student Syndrome and Parkinson's Law.**
- ⇒ **Identify the Critical Chain, manually or using software, in any project network.**
- ⇒ **Determine how and where to use project buffers, feeding buffers, drum buffers and strategic resource buffers in any project plan.**
- ⇒ **Integrate the Critical Chain approach into the Project Management Body of Knowledge (PMBOK®) and your life cycle methodology.**
- ⇒ **Blend Critical Chain and Earned Value reporting.**

Critical Chain reveals new assumptions about human behavior and overloaded project environments, and offers a breakthrough



Learn how to involve executives in enthusiastically supporting a new paradigm for increased project flow

**WHO SHOULD ATTEND**

Anyone responsible for managing or influencing the project portfolio in their organization will benefit immensely from this workshop. Members of Project Management Offices (PMOs) will find the concepts presented here particularly useful for increasing the likelihood of the PMO having a positive impact in

the short term. Executives involved in program management or those who have functional or top executive responsibility will also find that this program helps them to deliver their responsibilities much more effectively. The program also provides useful knowledge to senior project managers or program man-

agers with an interest in accelerating project durations. Those persons tasked with how to better manage the multi-project environment will also gain a deeper understanding of why the constant resource and priority conflicts exist and what to do about it.



Anyone who influences their organization's project portfolio should attend

## AGENDA

### 1. Introduction to Critical Chain Project Management

- Participant and instructor introduction and expectations
- Workshop objectives
- Workshop structure – modules and approach
- The Paradigm Shift in Project Management – Challenging some fundamental beliefs
- How Critical Chain is positioned relative to the PMBOK®
- Why is it so hard to deliver on time, on budget and within scope?
- How come some projects are successful?

### 2. Single Projects - The Current Paradigm

- Profile of a task estimate
- Factors that influence estimates
- Is there padding or not? – the \$64,000 question
- Two ways of estimating – due date or level of effort
- Distortions of student syndrome and Parkinson's law
- Conflicts of team members and project managers

### 3. Single Project Planning and Execution - Simulation

- Creating elapsed time estimates from aggressive level of effort estimates
- Resource leveling
- Simulating Student Syndrome and Parkinson's law – the non-existent slack time
- Initial promise date and budget
- Management cutbacks and revising the plan
- Executing the plan according to current reality – 80% failure rate
- Review of the problem

### 4. Building the Critical Chain solution

- The new frame of reference – Throughput, Investment, Operating Expense
- The Five Focusing Steps – A&B example
- The Physical Constraint of any Project
- Identifying the Constraint – The Critical Chain
- Exploiting the Constraint – Project Buffer, Resource Buffers and Relay Runner Work Ethic
- Subordinating to the Constraint – Feeding Buffers
- Elevating the Constraint – When more resources are needed
- The Process of On-going Improvement



## AGENDA (CONTINUED)

### 5. Single Projects the Critical Chain Way - Simulation

- Building the Critical Chain plan – aggressive time estimates, feeding and project buffers
- Comparing promise dates and budgets – Critical Chain vs. traditional approach
- Executing the Critical Chain plan
- Comparing predictability using strategic buffers vs. task padding
- Buffer management and reporting – team members, project managers, resource managers, senior management
- Graphing trends
- Critical Chain software

### 6. Multi-Project Environments – The Current Paradigm

- Current executive practices and their impact on project times
- The multitasking compromise
- Simulating the current paradigm
- Impact of multitasking on task and project durations
- Reducing bad multitasking, using good multitasking

### 7. The Critical Chain Multi-Project Solution

- Identifying the Constraint – the strategic resource
- Exploiting the Constraint – staggering projects according to the system's capacity
- Exploiting the Constraint – Drum and Strategic Resource Buffers
- Subordinating to the Constraint – Executive practices
- Exercise – Scheduling multiple projects using Critical Chain

### 8. Implementing Critical Chain

- Negative Branches
- Obstacles in the Single Project environment
- Obstacles in the Multi Project environment
- Gaining necessary executive involvement, support and active governance
- Case studies

### 9. Strategy and Tactics (3 Day Program Only)

- Sequence of Implementation
- Reducing Bad Multitasking First Actions
- Full Kit
- Active Task Management



## *Facilitator Profiles*



**Gerald I. Kendall, PMP**

Gerry is a world expert in the Theory of Constraints. He is a Project Management Professional (PMP) with extensive senior management and consulting experience. Gerald has worked with clients across the U.S., Canada, Mexico and Asia dealing with issues of change management and organizational strategies. His experience includes extensive work in the supply chain, project management, labor relations, production logistics, marketing, sales, operations and human resource development. He has worked in strategic planning with the senior executives of a wide range of industries including medical products and services, shipbuilding, aluminum and steel production, high technology, food production and electric and water utilities.

Gerry is a graduate and silver medal winner of McGill University, and author of the books *Viable Vision*, *Advanced Project Portfolio Management* and *the PMO and Securing the Future, Strategies for Exponential Growth Using the Theory of Constraints*. He is certified in all six TOC Applications by the Theory of Constraints International Certification Organization.



**Jacquelyn K. Kendall, PMP**

Jacquelyn Kendall is an expert in the areas of Theory of Constraints, supply chain improvement, strategic planning, production logistics, organization and training, management skills, union relationships, finance and measurements and market development. Jacquelyn has facilitated public training programs with York University in Toronto, Canada, as well as public and on-site executive and management training programs with thousands of individuals and dozens of groups over the past 10 years.

Jacquelyn's clients include aluminum and steel companies, food service and cigarette multinationals, judicial systems, leading health insurance companies and a wide variety of manufacturers and distributors. She has worked with union presidents, CEOs and senior management teams of many organizations, helping them find the common ground across functional areas to implement successful improvement strategies. She is certified in all six TOC Applications by the Theory of Constraints International Certification Organization.

### ***For More Information or to set up a program on your site:***

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