**Total Matrix Management Workshop Using Lean and TOC Concepts**

Projects are the life blood of many organizations. The timely completion of successful projects directly impacts a company's ability to function and grow in today's extremely competitive global economy.

A new management technology, Total Matrix Management ($TM^2$) has emerged which has proven to create a step increase in project quality and throughput. The technology uses key concepts from the Lean manufacturing and Theory of Constraint (TOC) methodologies. The resulting enterprise project management system has a track record of increasing project Agility Speed and Accuracy using the existing staff:

**Agility** – the ability to complete projects in shorter time. Average *project durations are typically halved.*
**Speed** – the number of successfully completed projects per year. Typical improvements have been *2 times as many projects per year or more.*
**Accuracy** – projects meet the original commitment dates. Full scope projects have *90% or greater on-time completion.*

The business impact of this potential improvement depends upon the individual company. In some businesses, the ability to move quickly allows one to constantly out pace the competition. Doing this in a sustainable manner can result in complete market domination.

Sometimes, "better" projects rather than more of them are needed. The goal is to deliver the same number of projects in the same amount of time, but with a significant increase in complexity and deliverables. Projects can be completed with high confidence and routine on-time completion.

For companies in commoditized markets which are strongly price driven, the dream is to move into a new growing market. The investment is always huge. Using a management technology which ensures the fastest most robust creation of the new products can be the difference between outrageous success and economic failure.

$TM^2$ is a universal solution for the world of projects. It has its largest impact in environments where there is extensive sharing of resources (staff and equipment) across projects. The solution is to manage the project/resource matrix as a whole, and to change one management policy, one operational measure, and one performance measure.

Deciding how you spend the additional capacity is your job. Giving you the opportunity to learn how this all works is ours. Over the last decade our team has led the world in implementing this technology and has developed a 1-Day Introductory Workshop which uses a business simulation to show the stark contrast between business as usual and business using $TM^2$.

**Title:** Total Matrix Management Workshop Using Lean and TOC Concepts
**Location:** Currently no public courses. Call for in-house arrangements.

18 Whitekirk Drive Wilmington, DE 19808 (302) 351-8305 FAX (309) 273-0920 info@velocitypointe.com

# Workshop Syllabus:
# Enterprise Project Management Using Lean and TOC Concepts

## Introduction and Overview

The role of projects in business is briefly discussed. The attendees are given a chance to describe the project environments at their companies. Key similarities and differences are noted.

## Examining Current Business

A generic organization chart is used to discuss the typical operation of projects in the classic business environment. Examination is made of the explicit and implicit policies and measures found in most businesses today.

## Business Simulation - Part I

The parameters of the simulation are defined, and roles are assigned to the attendees. The classic business policies and measures are established. The simulation runs for 20 weeks and leads to overall disastrous results. All projects are delayed, and nothing has been completed on time.

## Interaction Centric Business Model

The Additive business model, used by most businesses today, is defined and discussed. The Interaction Centric model is introduced and shown to be the appropriate model for today's businesses.

## Understanding the Matrix

Originally development occurred using a "skunk works" approach where every project had 100% ownership of its needed resources. The Matrix was introduced to deal with costly resources. Today businesses are organized around the Project/Resource Matrix. When any resource is shared across projects, they fundamentally interact through that resource. Share two or more resources and the interaction complexity increases. No longer can the projects run independent of each other.

## TOC Management of the Resources

In any environment there is at least one shared resource which is the rate limiting part of most projects. Using TOC concepts we use this critical resource as the drum for all the projects that use it. Also the resource is elevated by eliminating all unnecessary non-task work.

## Business Simulation - Part II

The new policy is to eliminate multitasking. The critical resource is identified, and the projects in the enterprise are scheduled for optimum throughput. The business recovers, and the new commitment dates are met with ease.

## Strategic Operation - Prioritization and Sequencing

The new/improved product birth to delivery cycle is examined. The strategic and tactical processes are clearly identified, and the owners of the processes are determined.

## Robust Lean Project Planning

The ability to manage the projects in the enterprise hinges on the ability to create robust project plans. The planning process starts with the deliverables and identifies the last action taken to produce the output. Five key questions are used to define the task and to determine the required inputs. These inputs are then used as kanbans (requests for the required deliverables) to identify the preceding tasks required to create them.

## The New Operational Measure

The new operational measurement is the project protection ratio. This is created by measuring the remaining project tolerance and comparing it to the tolerance of the "as planned project".

## The New Performance Measure

The Boyd Project Completion Rate is used as a key metric in determining the health of the enterprise project management system.

## Tactical Operation - The Pull Process

The 7-step weekly process is described and simulated. A virtual flow-valve releases new projects from the queue only when resources are available.

## Implementation

Implementation consists of 15 specific interacting tasks. Once up and running, Enterprise Project Management is easy to manage. The challenge is the transition.