

Critical Chain Program Management

The Enterprise Development Chain Solution

The discipline of project management has been around for years. Much, however, has changed in the time since PERT and Critical Path were developed and embraced as the way to manage projects.

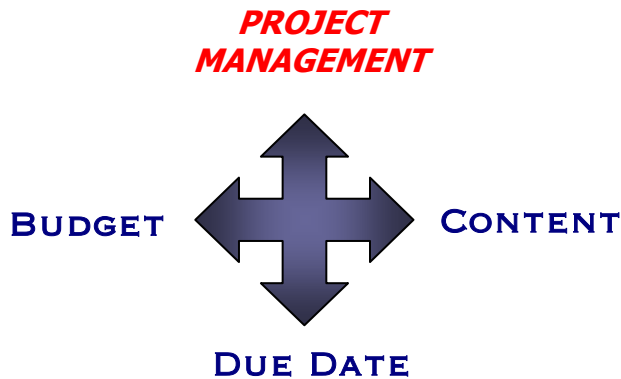
*Have the ways in which you manage
your complex multi-project
environment kept pace?*

Is this a Day in Your Life?

- Existing project work is not complete before new projects require a shifting in priorities
 - Promised lead times are longer than desired
 - Promised lead times are not met
 - There is too much rework and customer change activity
 - Problems in one project cascade into problems in other projects
- There are frequent unpredictable peak loads on resources
 - Priorities within and between projects are not clear
 - Pipeline planning (how many projects *can* we do with current project and resource mix?) is not available.
 - Constant reactive mode
 - Poor Employee Quality of Life (high turnover).

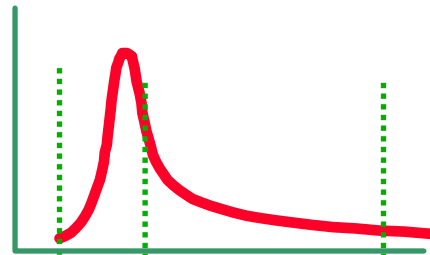
Project Management

Project Management simply means to successfully manage all project work. We want to manage project work "successfully" by ensuring that the organization addresses desirable business opportunities as soon as possible *and* by ensuring that the organization meets the commitments of those projects it has already begun.



Additionally, project management is not successful unless we finish all projects on time, within budget, and without cutting scope.

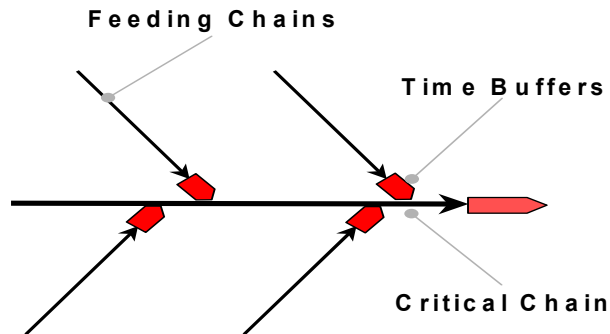
So what is it that makes project management so difficult? Is it the variability inherent in the typical project environment? Or is the way in which we *manage* that variability at the core of our project management dilemmas?



Critical Chain Management Suite

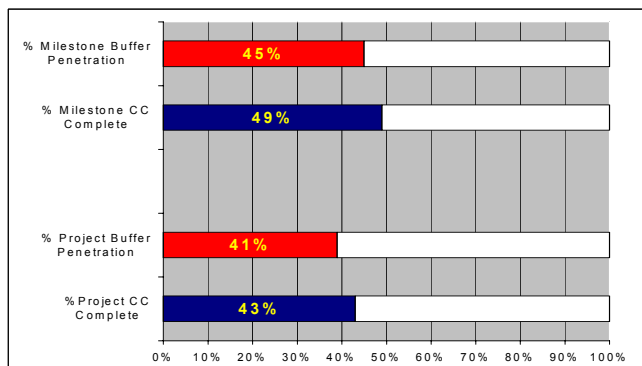
Project Planning

Critical Chain projects are planned with firm dependency structure in place. In this manner, we assure the establishment of as much parallelism as possible in order to shorten the lead time of the project. Safety time is removed from individual tasks and aggregated in strategic *buffers* in order to protect the project as a whole rather than individual tasks.



Execution and Control

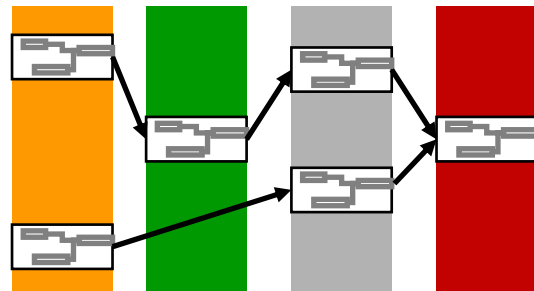
The management of projects under Critical Chain is a Management by Exception system – decisions are made based on the buffer status versus Critical Chain



status of all projects in the system. The status of any project in process is easily seen and compared with all others using simple to read visual tools. Thus, resource allocation decisions are taken out of the realm of emotion and into a system of logic.

Multi-Project Management

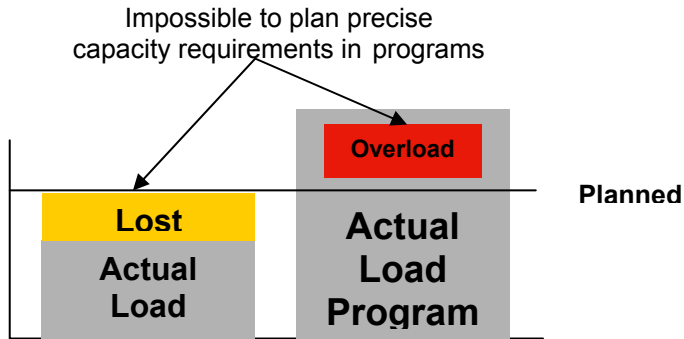
The defining element of the multi-project management environment is the existence of multiple projects in progress at the same time utilizing shared resources. The dilemma always is “who gets the resources and when?”, as well as “how many projects can we have going at the same time?”.



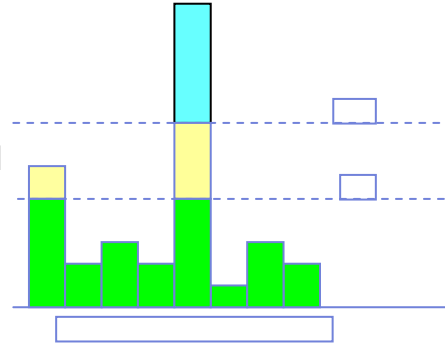
Under Critical Chain, all project work is synchronized with all other project work through the selection of a *Strategic (Synchronizing) Resource*. In this manner, the system as a whole is considered in accepting and planning new project work rather than viewing each project as if it exists in isolation.

Resource Management

Realizing that reality does not execute exactly as planned, it is vital to have a system in place which can assist in the *tactical* allocation of resources to current projects as well as to assist in determining long-term resource needs and “what –if” analysis.

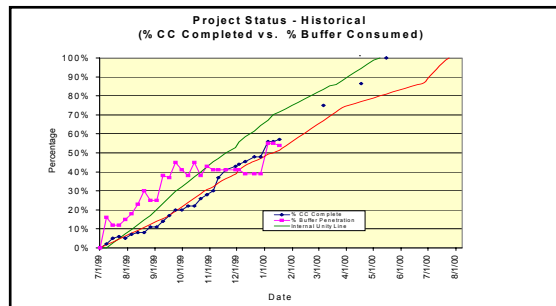


Using dynamic data from project execution and control updating, a Critical Chain system can show the subsequent load over future time horizons, based not on original plans, but on actual execution – in other words, reality.



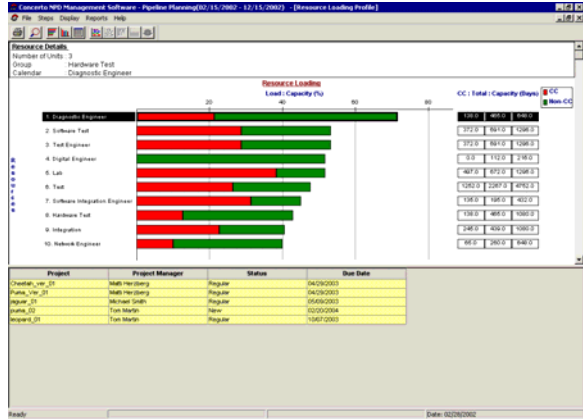
Diagnostics and Historical Analysis

A valuable tool to have is the ability to analyze where and when projects begin to go “out of control” and how we were able to get them back under control. Additionally, patterns may emerge from this type of analysis (buffer burn rate analysis) which might point to places in projects which consistently burn more buffer (lose more ground) than others. The source of this can then be determined and resolved.



Pipeline Planning

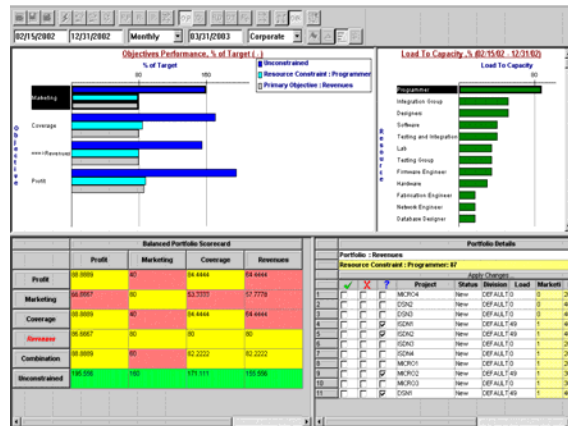
Pipeline Planning is the strategic or longer term resource management and planning used for product development road-maps, long term budgeting and resource planning requirements. Only with effective pipeline planning capabilities, including dynamic load to capacity analysis, peak load analysis, and



what-if capabilities can an organization determine how many projects it can launch within a certain time frame with their resource mix. Also, what impact does focusing on one project over another have on the load of resources? Finally, if resource mix changes are going to be made, where should they be made and what impact will that have on current and planned product launches?

Portfolio Planning

Portfolio Planning is the linkage of project and pipeline management with the financial and strategic objectives of the organization. Assuming that an organization can launch a finite number of programs for a period of time, the question must be answered as to what the appropriate portfolio mix is in order to maximize the throughput dollars generated for the product and resource mix available.



Combining the tactical intelligence gathered from project management execution and the information generated in the pipeline management module, the portfolio planning module provides much needed data to allow management to make informed trade-off and prioritization decisions based upon configurable business parameters (i.e. NPV) to determine a highly profitable product mix for any portfolio.