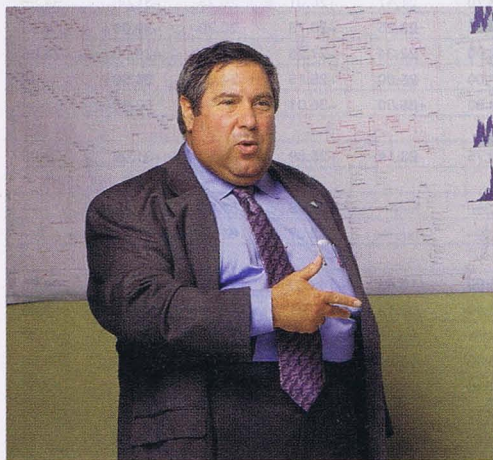


Critics Can't Find the Logic in Many of Today's CPM Schedules

Users want software with flexibility, but is it true CPM?

Four scheduling experts, all deeply experienced in the critical path method (CPM) that uses math to draw network diagrams of a project schedule, met recently in a restaurant just outside Philadelphia. The purpose was to discuss a new unit at the Project Management Institute, in Newtown Square, Pa. The College of Scheduling they have launched would promote "the fundamentals of project management" and encourage "a free exchange of ideas."

One of the reasons for starting the college is disconcerting. What is described as a CPM schedule these days sometimes isn't one at all, the four experts claim. If that claim is true, it says a lot about how personal computers have transformed scheduling and what could be in store as technology reshapes other phases of the construction process.



ALARMED Wickwire (left, above), Ockman and Plotnick see a scheduling crisis.

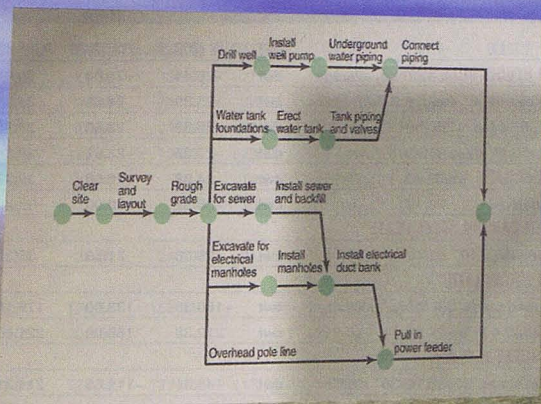
At the meeting, the four experts lamented the state of scheduling. They say they see widespread abuses of powerful software to produce badly flawed or deliberately deceptive schedules that look good but lack mathematical coherence or common sense about the way the industry works. The result is confusion, delayed projects and lawsuits.

How did this happen? PCs have popularized and democratized CPM schedule writing, which first took hold in construction in the early 1960s, but it has also put scheduling in the hands of many inexperienced and poorly trained practitioners. When they do the work, critics say the basic principals of CPM are sometimes neglected or watered down.

The four men, three of whom are directors of PMI's College of Scheduling, reserved some of their most pointed comments for Primavera Systems Inc., the Bala Cynwyd, Pa.-based company that is the dominant supplier of construction project management and scheduling software. The four men say Primavera puts features in its popular scheduling programs that provide flexibility but are open to abuse.

Primavera's headquarters is about 10 miles from where the meeting took place and its president, Richard K. Faris, is active in industry affairs and is a board member of the new College of Scheduling. Significantly, he had not been invited to the

NEW WAY OVERSHADOWS OLD



Arrow Diagramming Method (ADM)

A once-popular but disappearing method of representing project activities with arrows, with a node shown as a circle, representing events at the ends of the arrows. The tail of the arrow is the beginning and the head represents the completion. While it is less flexible than PDM, it has the advantage of defining the logical relationships between activities entirely by the activity numbers.

PHOTOS BY MICHAEL GOODMAN FOR ENR; GRAPHIC CENTER BY GUY LAWRENCE AND NANCY SOULLIARD FOR ENR