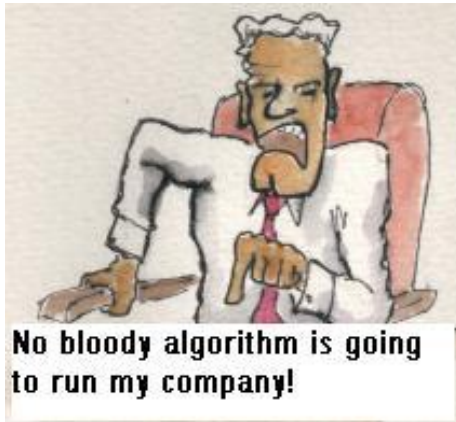


## No Bloody Algorithm is Going to Run My Business



....so sayeth an inspired managing director under pressure to accept his planner's request to defer an order from a major customer in response to an over-capacity system warning.

"How the f\*\*\*k do you guys know *what* the capacity of this company *really* is?" says the man who avoided all the APICS training that his planning staff dutifully attended. It turned out that the MD had closed a deal to merge with the company's main competitor which would effectively double

the company's capacity, but it had not yet been approved by ASIC!

This experience springs to mind whenever the talk of "Advanced Planning Systems" (APS)...or "APOs", or "Finite Planning Systems"...or whatever latest label has been applied to the software product that simply doesn't cut it in the real world. "Replaces MRP" is a grab phrase that is bound to get the attention of any lonely MD who is faced with system frustrations brought about by inexperienced planners, who are probably using a completely compliant ERP system that works like a treat in a company up the road.

"Advanced Planning Systems" are designed to assume that your stated capacity in each period is absolutely finite and that the only solution could be to defer a customer order, possibly an order from a very important customer! If this is offered as a "recommendation" an inexperienced planner may well take it up. If the software does so "automatically" nobody will know until the disaffected customer calls. This is a helluva scenario, one that is blithely overlooked in the accompanying sales brochure, and one that should be looked at more closely.....

### **What is "maximum capacity"?**

That is the figure provided by the user as the absolute limit at which your process, critical work centre or entire plant can produce in any given period. No questions, no beg pardons, that's it! One minute of load above this magical figure and the order will be scheduled for delivery in the next period. Who is going to come up with that figure (for each and every product) and who is going to maintain it as it changes from day to day, as it surely does?

### **What is "Load"**

This is the amount of work to be done, usually expressed in hours or minutes. Load consumes capacity in a computer planning system and the outcome is

subject to the same “illusion of precision” that capacity is subject to, for each and every product!

The claim is that advanced planning software considers all possible scenarios before suggesting, or enacting, any conclusion, provided of course that “all possible scenarios” have been anticipated by the user when setting the system up! (and maintaining them). The likely cost, or even the possibility, of this is another thing that does not seem to get a mention in the sales literature.

### **What is the alternative?**

All ERP systems have a Master Scheduling module that contains a function known as “Rough Cut Capacity Planning”. Its output is simply a graph showing Load against Capacity in each planning period. It does this only for “critical” processes which are nominated as such by the user, hence the term “Rough Cut”. The planner makes a decision, usually preceded by a call or two, as to the solution for any worrisome situation. Education on optimising Master Schedules and training on the use of the software is an essential, but commonly overlooked prerequisite.

Too many companies have not (yet) recognised the need for a formal approach to high-level planning. These companies are typically suffering perpetual inventory and scheduling troubles. Their decision makers are ready to embrace anything that sounds like a “solution”. Software companies have claimed outright ownership of the word “solution”. The qualification of practitioners and the development of policies and procedures sounds way too complicated, and the “series of least-worst-choices” phrase compares badly with the word “solution” in most board rooms!