

Too Much Planning Hurts Your Business

Great Planning... So Why the High Overtime and Missed Deliveries?

In this paper Martin Roberts discusses a common issue faced by many companies that believe they plan their manufacturing operations well but still find that they incur lots of overtime and miss customer deliveries.

Do you believe that you plan production in your business very well, but find you are still suffering from too much unplanned overtime, and to some degree, planned overtime?

This may indicate that too many people are, unwittingly, planning production in your business.

Many businesses employ a master production scheduler and this person is responsible for creating the plan that should lead to cost effective utilisation of manufacturing resources taking into account machine availability, standard production rates, historical production rates, manning, set up times and the best sequencing options.

Often, despite all the effort and knowledge applied by the Master Production Scheduler, the plan is rarely achieved, or is only achieved by using overtime (which is really just a variance to the plan).

However, in many businesses there are multiple planning points that can impact and alter the master plan which can lead to the master plan being compromised and deadlines not being met. To mitigate the danger of late deliveries there is a resort to unplanned overtime.

Too Many Cooks...

As business process consultants we frequently observe the following...

- The master production scheduler spends a great deal of time defining the plan and releases production orders. Often the plan is detailed far beyond the necessary planning horizon.
- The production orders reach the shop floor supervisors who then reschedule them to ensure that they meet the needs of their objectives which may be related to production efficiency.
- Further the orders are then re-planned to the preference of the machine operators – they will do the easiest jobs first and leave the more difficult ones for the later shifts (particularly if they are awarded a production bonus).
- The production is then undertaken but without reference to the original master schedule which means materials may either be in shortage (because it wasn't planned to be made until later) or the shop floor gets cluttered with unnecessary inventory waiting for production.

- There is a regular amount of overtime worked to try and get the plan back on track. In some cases weekend overtime is worked (at premium rates) to allow the clearing of the decks for the following weeks plan.

Having so many “planners” can make a profitable order at best marginal, or at worst, unprofitable.

Bad Promises...

Other impacts on the planning process that cause excessive overtime can also, bizarrely it may be thought, be a result of too much flexibility in satisfying customer demand. This may seem an anomaly in relation to what we want to achieve in maintaining good customer relationships. However, if you have sales people or account managers interrupting the planned business process whilst you are running an excess of overtime already, the chances are that you will simply end up with one satisfied customer as the expense of a newly dissatisfied one, or worse, several.

The aim should be that overtime is only utilised to do rush jobs that command a premium – not simply to keep a customer happy that you have previously upset, or one that you have made unrealistic commitments too.

Overtime is a tool that should be used to give you flexibility in response to volatile demand it should allow you to take additional work over your existing capacity, but profitably. It should rarely be an ‘emergency exit’ to help you out of sticky situations.

So, How to Plan?

Firstly, make sure your systems are capable of planning!

Find a good planning tool that is easy to manage and assists your planner to make the right decisions. Ideally it should be integrated with the rest of your business system – this will allow visibility of new demand, say from sales orders, and also a real-time view of inventory. Ideally ‘drag and drop’ functionality should be available for finite scheduling. The system should highlight orders with issues in terms of material shortages and, in real-time again, show whether an order is being produced at the anticipated speed (the standard). This can be achieved with real-time feedback of production data and contributes to effective planning.

Next, remove the opportunity for ‘later’ planning. Only release enough work to the shop floor, preferably in a ‘paperless’ environment, to get the jobs done over the next shift. This removes the temptation for “planning” by supervisors and operators. It ensures that there is only one plan; and this is the one you’ll all be focused on achieving.

Finally, make sure that your incentive structures, if you use them, are all focused on meeting the same objective – delivering to the plan, on time!

Close the Loop

Let's return to the planning tool for a moment. No matter how 'whizzy' the tool is the key elements for good planning remain - correct base data, in terms of routing and bills of material and real-time – or as near-as-you can-real-time – production feedback as possible – this is assuming production cycle times are relatively short. If you are hand-crafting products that take weeks to produce then this may not be required.

If you are in the manufacture of product that has relatively short cycle times then real-time feed back from production utilising PLC controllers or touch screen data input terminals will give you considerable insight to the status of your business at any time. It will close the loop in the plan, execute, measure and adjust cycle.

You will recognise very quickly if your routing data is valid and which products genuinely are profitable to make. It will allow you to capitalise on capacity realised because of more efficient production – by taking extra work at short notice and at a premium, or help you recognise much earlier in the process if you are going to miss an order delivery date.

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About the Author: Martin has worked as an IT consultant for Deloitte and Touche and also as the European IT Director for Mondi Packaging, a division of the FTSE listed company, Anglo American. He has overseen both growth and downsizing of large IT departments and managed IT outsourcing arrangements.

About Neustro: Neustro are the business systems experts - design, implement, manage and support IT for business – from e-mail to ERP. From one-off projects to a complete outsourced service. Neustro are specialists in Microsoft Dynamics AX and Infor Baan.