



IS VENDOR SCHEDULING IN HORSE RACING FORM TERMS SFSF (Started, Farted, Slipped and Fell)?

The concept of Vendor Scheduling was developed alongside MRPII (ERP) principals and Lean/JIT thinking back in the 1980's/90's. The basic premise is to provide the Vendor/Supplier with stable and reasonable long term visibility for them to use within their planning process. The benefits of this approach are win-win on both sides.

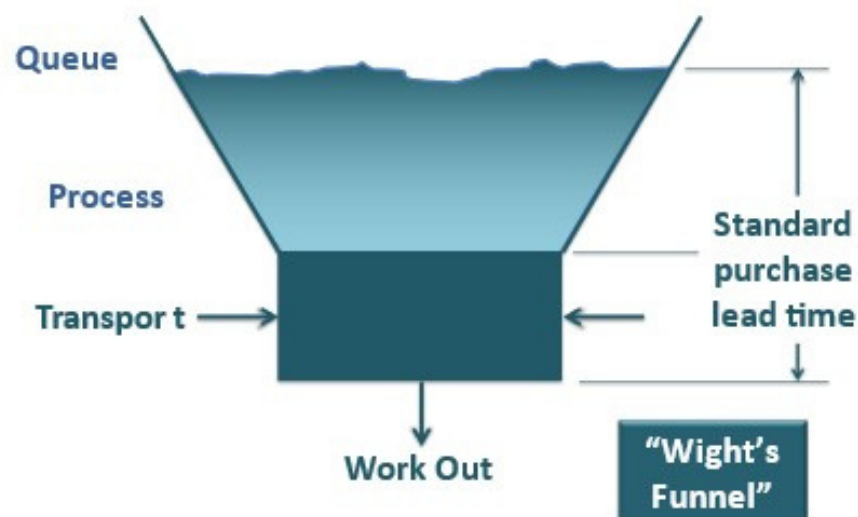
- Improved planning capability at the planner that helps them reduce cost which can be shared with the customer
- Effectively shorter lead times and greater flexibility for the customer
- Higher levels of OTIF customer service
- Support for the development of genuine supplier partnerships
- A stronger position on both sides for improved terms and conditions and long term contract,

In my view these opportunities have significant benefits on both sides but vendor scheduling appears to be a process that has great potential but has rarely delivered its potential and one could argue has never really got started, hence the SFSF reference in the title.

One of the biggest benefits of vendor scheduling is to break the lead time syndrome or as it is often referred to as 'Wights Funnel' in memory of the late, great Oliver Wight.



The Lead Time Syndrome



Any lead time is made up of 3 elements and this is clearly illustrated in purchase lead times:-

Q time is the time it takes to plan the material and in many cases acquire the materials

P time is the time it takes to process that material

T time is the transport/logistics time from Supplier to customer

The standard purchase lead time is typically a combination of all these elements. The issue of standard purchase order lead times is that they provide very little visibility for suppliers to use for planning because when they receive the P.O. from the customer they have to immediately 'kick into' their Q and materials planning time. The issue for the customer is that because the purchase lead time includes Q time then the purchase lead time is typically longer than necessary and therefore reduces flexibility, increases cost in terms of safety stock and ultimately reduces customer responsiveness in the market to respond to changing market expectations.

Some companies have tried to take a step in the right direction by providing suppliers with a long term volume forecast or blanket orders. These are positive steps but they don't provide the supplier with sufficient granular detail for effective planning within their own supply chain although they may support the suppliers IBP process.

What most suppliers crave is visibility and stability, that is what vendor scheduling can provide.



Vendor Schedule

Part No.	1/7	8/7	15/7	22/7	29/7	5/8	12/8	19/8	26/8	Sept	Oct	12 mth Total
23467	20		20		20		20		20	80	80	960
24566		10		10				30		60	60	1,040
35467	35		70		70		35	35		140	140	1,680
14376		20		20		40		40		160	180	1,920
25436	10				10			10		40	80	620

Zone 1	Zone 2	Zone 3
Weeks 1-2	Weeks 3-6	Full horizon Typically 12 months+

The vendor schedule is created from data within the ERP system and the horizon is significantly beyond the cumulative lead time of the supplier (purchase lead time). It is typically at part number level and in weekly buckets (the buckets can be adjusted to align with agreed delivery schedules especially for imported items).

The vendor schedule is updated automatically every time MRP is run and action messages responded to be planning. This means that an updated vendor schedule could be sent to the supplier every day (not recommended) but it could be weekly (typical) or at least monthly. The vendor schedule horizon is broken into three phases:-

- **Fixed** – the data in this phase is a firm commitment to the supplier in other words an order equivalent to the T&Cs of a purchase order. However this period is based upon the supplier's process and transport time not their Q time or purchase lead time
- **Firm** – the horizon of this phase is based upon the suppliers cumulative lead time. The data in this phase is not a firm order but may include in the supplier partnership agreement that the customer will be responsible for and unusable material cost even if this was on a shared basis.
- **Planned** – This horizon goes out beyond the suppliers CLT and could be up to a rolling 12 months or even beyond. This data is for the supplier to use in their own ERP planning process (a forecast), however the customer reserves the ability to update this data every time their own ERP process runs with no penalty.

What this does for the customer is to provide an 'effective' purchase lead time of only the suppliers process and logistics time which is certain to be less than the typical purchase lead times. In other words shorter lead times, greater flexibility and less safety stock. For the supplier it provides much better and long term visibility for them to improve their own planning process and reduce their own costs. This is of course a **win – win** situation.

However, there is of course a prerequisite to this win- win situation, there always is! And that is that the data in all phases of the vendor schedule must be 'reasonable' not accurate and stable especially within the material firm period. If information in this area and the planned period is consistently changing up/down, in/out then the supplier will quickly learn to ignore it and the opportunity will be lost resulting in a return to the old 'extended' purchase lead times. For this to happen the customer must have effective IBP and ERP processes in place with all that implies.

As well as the benefits mentioned above vendor scheduling enables us to avoid what is often referred to as the lead time syndrome. The lead time syndrome is the situation that creates extended purchase lead times when the supplier is busy and has lots of demand then purchase lead times and often prices will increase. It is not the process time that is increasing it is the Q time that is increasing. With vendor scheduling in place the supplier has visibility of demand far beyond their Q time, even if that is increasing, for planning and so why should the customer firm order time (Zone 1 of the vendor schedule) increase?

Of course here is where the prerequisite comes into play again. That is that the data in the vendor schedule must be reasonable and stable and most importantly a genuine supplier partnership agreement is in place including a supplier development programme.

It is also important to recognise that vendor scheduling does not only apply to individual demand at part number level, it can easily be adapted to schedule capacity at a 'make to order' supplier or sub-contractor.

As we continue to move towards a business environment where customers expect, even demand, shorter lead times and responsiveness planning for flexibility is even more important. Companies should not strive to be reactive they should plan to be flexible. Vendor scheduling can definitely support planning for flexibility which will create a real market competitive edge.

Back to the horse racing form theme at the beginning of this article. I believe that vendor scheduling can help to change companies form from SFSF to SFSF that stands for **S**tart, **F**lourish, **S**ucceed and **F**lexible.

I believe that a bit like how the Sales and Operations Planning of the 1980s evolved into Integrated Business Planning (IBP) in the 2000s then vendor scheduling can have its second coming and take its place in the business excellence process of the 2020s.



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LEADERSHIP through **INTEGRATION**