



Oracle Supply Chain – From Start to Finish

By Neal Lynch, iTrain Education Ltd

So what is Oracle Supply Chain?

According to the main Oracle website:

‘The Oracle E-Business Suite Supply Chain Management family of applications integrates and automates all key supply chain activities, from design, planning and procurement to manufacturing and fulfilment.

A unified data model provides a single, accurate view of your entire supply chain, so you can enforce lean principles across increasingly complex, global supply chains.

And when Oracle Supply Chain Management runs on Oracle technology, you speed up implementation, optimise performance, streamline support – and maximise ROI.’

Plain English?

In plain English: Getting product through the goods-in door, into the stock rooms, onto the production lines and sending finished goods out the door to the customer.



Add to this the use of Oracle Financials and you have a nice, rounded solution.

All these Acronyms – what do they mean?

Any application has the tendency to bury us under a sea of acronyms and Supply Chain is no different. We have all been

confronted with, and baffled by, terms such as OM, INV, WIP, BOM, PO, LPN – and the list goes on...

Let’s start by breaking these barriers down:

OM – Order Management

INV – Inventory

WIP – Work In Progress

BOM – Bill of Materials

PO – Purchase Orders

LPN – Pallets or Containers

In order for you to have a complete supply chain, somewhere along the line you need to either purchase the raw materials to manufacture or the components to assemble. This will require some form of Purchasing (PO).

You may well be using a Just In Time (JIT) process, but you will still need some working stock (INV).

Customer requests will then initiate the need to produce the goods, and this will involve some Order Management (OM).

Once all these parts are in place you will begin to assemble or manufacture your product (WIP).

This assembly or manufacturing process may be made up of many parts (BOM).

Bar coding of pallets and containers (LPN) may well take place.

So is this going to work for you?

iTrain Education has worked closely with a large fresh food company on the implementation and delivery of an Oracle

Supply Chain project. This involved a phased approach across a number of depots in the UK.

Due to the nature of the business there were numerous issues to overcome; not least that the product had a very short shelf life!

It is therefore important for you to firstly consider all of your processes: Do you hold stock? What is the lead time for delivery of raw materials? Have you reviewed your BOMs? – and this is by no means a finite list (unfortunately!).

If Oracle Supply Chain is going to work for you, it is essential for the client, the vendor and the training and implementation teams to be VERY clear on the goal and how to achieve it.

How do my raw materials arrive?

In today’s market raw materials are increasingly sourced from outside the UK. iTrain Education’s fresh food client had a number of different routes via which materials arrived, the most difficult being by boat from abroad.



With this client, the workforce on the docks were not direct employees. They had been used to unloading a boat and moving pallets and containers to a given location; that had been the extent of their role. We then introduced them to a new system using Oracle Supply Chain and they suddenly had bar codes, scanners and computer screens to deal with. Needless to say, this presented us with an interesting problem to overcome, and it took some time but we were successful in the end!

In other areas of the business goods were delivered directly to manufacturing units within the UK, often by local suppliers. This presented its own problems when goods were received by weight and the supplier had soaked the pallets in water first to increase the gross weight of the delivery!

These considerations are all taken into account when adding to the Inventory, as well as allowing for Quality Control to come along and reject goods or impound them awaiting inspection.

Factor in a shelf life and you can see that the whole process of Inventory can present its own set of problems.

Order Management

In this example, the client was used to an Order Management system, so the implementation of Oracle OM was a smooth process. They received orders manually and via EDI. However, due to the tight lead times and the shelf life of the product, the business had to start the manufacturing process on the best assumption of what the customer would order. This was a very skilled manual process and one that would have been difficult for Oracle to predict.

The Works Orders were then created. The client needed to provide full traceability of its goods, and various customisations were made to the system to allow this to take place with the use of flexfields and custom forms.

Bill of Materials

This all sounds very grand, but the BOM quite simply serves as a list of everything that is required to create the finished product.

For want of a better phrase, it is *the recipe for your product*.



For example, if we were to sell a packet of fresh spaghetti bolognese, the BOM would probably include: spaghetti, mince, onions, tomatoes, garlic and bay leaves. For the accomplished chefs/cooks amongst you there may be more, but you get the idea.

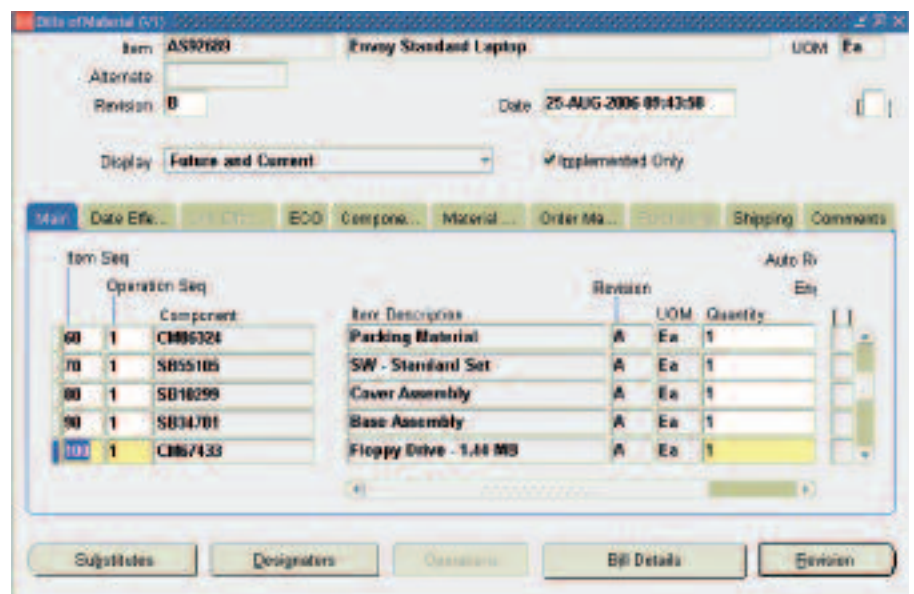
You can see the example below is for a boring laptop – much better if it were for bolognese! But the idea holds strong for all products that you may manufacture: don't forget the packaging and those tiny little screws that always fall out of the box.

Work in Progress

Once we have our Sales Orders and our BOM we can look at making the goods... or can we? What about our Inventory? WIP needs to know where the raw materials are coming from.

In our example, the client had further customisations so that they could know exactly where the raw materials were coming from and how many of each were available for production.

At each stage the pallet was scanned and the job entered into Oracle, along with the quantity and lot details. As the product progressed, each stage was monitored, and the accounting for materials, labour and any wastage was noted on the system.



This is not all, however, because we also need to know the *exact* quantities for each component, as well as knowing about the packaging, the labels and the labour content; these should all form part of the BOM. So what does a BOM screen in Oracle look like?

Now What?

Having reached the point of 'finished goods', the client needed to create a delivery. The finished goods were no longer available in the main inventory and in this case were moved to a sub-inventory. A haulier was used to

collect the goods and deliver to the final destination; the goods were scanned using the bar-code and released from the loading bay.



They were now finally on their way, and the integration between Oracle Supply Chain and Oracle Financials quickly ensued, in order to invoice the customer.

Conclusion

As I am sure everyone will appreciate, any component from the Oracle E-Business Suite is not as simple as it seems.

The key to the work that took place with this particular client was to understand their complete existing business processes and work with them to use Oracle as an effective business tool to enable them to realise a meaningful ROI.

So, was it worth it? I suppose the initial reaction would be 'I'm not sure!' There was an awful lot of heartache that went into this project from all sides. The Supply Chain as a product is good, but was not up to dealing with short life/perishable goods. This meant a lot of customisation.

Now, having come out the other side, I feel the answer must be 'Yes'. The transparency the system provides in

showing where you are at any given time, together with the financial information, is indeed very helpful in managing the end-to-end supply chain process.

About the Author

Neal Lynch is Project Development Manager for iTrain Education Ltd. He has over 25 years of experience in management and the use of software applications in business, resulting in a valuable combination of business strategy, business process and technical understanding. Neal specialises in Oracle Financials, Supply Chain & Oracle LG45 CRM. The author can be reached at: nlynch@itraineducation.co.uk



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