

FUSION WHITE PAPER

Group: M&SC Fusion Focus Group

Document history

Version	Date	Notes
1.0	08/02/06	Initial version of document.
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3.0	25/08/06	Customisation detail added

Distribution

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1 Background

This position paper has been prepared as part of the UKOUG Fusion project, which exists to support Oracle's Project Fusion – the journey to the next generation of Oracle applications and architecture.

The new Fusion applications will evolve from the existing Oracle product range: The Oracle e-Business suite, Peoplesoft Enterprise, JDEdwards Enterprise One and JDEdwards World products; taking the best from each product and enhancing it.

The UKOUG, through the UKOUG Fusion Council, are responsible for facilitating the research and collating the feedback on the existing Oracle product range identifying which products have the best functionality and where enhancements are really needed.

To do this, five "Fusion Focus Groups" were established:

- HR and payroll focus group.
- Finance and projects focus group.
- CRM focus group.
- Technical focus group
- Manufacturing and supply chain (M&SC) focus group.

Each Focus Group then conducted its own research to identify how the applications are being used.

2 Objectives

The objectives of the M&SC Focus Group:

- To define the business processes that comprises "Manufacturing & Supply Chain".
- Collect representative user feedback from users of the complete range of Oracle, Peoplesoft and JDEdwards applications.
- Provide feedback to Oracle via the UKOUG that will add real value to the specification of the Fusion Application Set.

3 Scope

3.1 Included in scope

Considered within the scope of the M&SC Focus Group were the following business processes:

- Sales Order process.
- Planning process.
- Inventory process.
- Shop Floor Control process.
- ~~Procurement process~~
- Shipping process
- Enterprise Asset Management process.

3.2 Out of scope

Considered to be out of the scope of the M&SC Focus Group:

- Invoicing – considered part of the financial group.
- Accounts Receivable – considered part of the financial group.
- Accounts payable – considered part of the financial group.
- User interface (includes “look and feel”, menus structure and navigation) – considered part of the technical group.
- User security – considered part of the technical group.

4 Approach

The approach adopted:

- Having defined the scope and processes, construct an online survey to identify what applications are being used, how they are being used and what could be better.
- Invite survey responses from the user community.
- Analyse the survey responses.
- Conduct follow-up interviews to establish in more detail the reasons for customisation or the use of other applications.
- Collate all of the information collected into this document.

5 Assumptions made

The following assumptions were made:

- That, in line with Oracle’s current statements on Fusion, core functionality will be provided at least equal to existing releases of the e-business suite, Peoplesoft and JDEdwards applications.

6 Results obtained

For each of the processes defined as being within the scope of the M&SC focus group, the system functionality was divided into four areas:

- Current functionality we do not want to lose and works well
- Current functionality we do not want to lose but could work better.
- Current functionality that has been customised to work for us.
- Functionality performed outside of the system that we would like to include.

In each case, an indication of the level of usage among the survey respondents of that functionality was included.

In the case of customisations, we have included the actual details from the participants who took part in our follow up interviews and the responses from our Oracle representative.

In total, 45 responses to the survey were received, which the M&SC Focus Group felt was a little disappointing. Of these responses, the majority were Oracle application users, with a low representation of Peoplesoft and JDEdwards application users.

6.1 Sales to Cash

6.1.1 Current Functionality we do not want to lose and works well

- Sales Orders (Order Management) – High Usage
- Spares – High Usage
- Configurator tool – low usage
- Configure to Order (Part Driven) – low usage
- Engineer to Order (Project Based) – low usage
- Drop Ship (Sales order and Purchase order at the same time) – high usage
- Call off – low usage
- Internal Orders – high usage
- Pricing – high usage
- Sales Returns – high usage

6.1.2 Current Functionality we do not want to lose but could work better

- Non-Commercial Data (specifications etc) – High Usage
- Repairs – Low usage
- Quotations – low usage

6.1.3 Current functionality which has been customised

- Product configuration
- Non-commercial data – specifications
- Quotations – too restrictive, need more free form creation
- Support for matrix order entry – e.g.: style, colour, size

6.1.3.1 Details of Related Customisations and Oracle Responses

'Additional bolt on to Pick Release ensure picked lines are for stock where the lot number is the same as the sales order number. Identical stock can be packed differently for similar customers so we need to pick stock made and packed for that customer.'

Oracle Response - STANDARD - Can be achieved using Oracle WMS rules engine

'Custom EDI transaction - this runs Update Shipping, the invoicing processing and various extracts - needed to provide invoicing output and shipping documentation as fast as possible after Ship Confirm. (This was actually provided for Cummins by Oracle)

'Various OE forms changed to show customer part - not generally supported in 10.7 but very important to our business'

Oracle Response - STANDARD - OM offers folders and user defined action button configuration

'Demand net change report to compare before and after OE demand whilst updating with demand from Caras (Oracle Automotive). The net change report in

Caras is not adequate. We have created a large number of views, extracts and reports.'

Oracle Response – Release Management may cover this requirement

*'E-Business Centre/ Order Management (NOTE - Standard OM tables retained)
- Complete sales front-end customisation (collates inventory, costing, pricing modifier data etc for quotes & order processing)
- Complete customised Vendor Returns Form (allows capture of additional DFF data for subsequent processing/ reporting)
- Complete customised RMA Generation & Customer Enquiry Form (allows capture of additional DFF data for subsequent processing/ reporting)'*

Oracle Response – Not currently available

'Function: Order Entry Form; added Order Entry Matrix Form Lacking:

The ability to see stock situation for a type of goods in different sizes, colours and in the different warehouses (needed when accepting orders on the phone, so when one colour/size is not on stock, CS is able to recommend replacement that is on stock)

The ability to enter order lines in Matrix format, so enter one type of good and then enter the requested qty's for different sizes and colours. (This speeds up data entry, rather than entering line after line.)

See Figure 1 below - The Warehouse is included in the Colour column (information in front of / is Warehouse short name) and is colour coded (Blue is KL and red is TE) CS sees the available qty's and can then enter the ordered qty's in the field next to it. Then Perform ATP, which will bring up the ATP dates, also for goods not on stock. Then the Create Lines button will put all information in the so_header_interface and so_line_interface (mind we are still on 11.03, so table names could be different in n 11i) and Order Import will create the order lines.

Sales Orders (FOTL Spain SA) - SP Imprint PKMS, 53209

Warehouse: KL | Calculate ATP? | Request Date: 08-JUN-2006 00:00:00

Brand-Garment-Pack/Logo: 6 1026 0 | Imprint - Baseball Tee Short Sleeve - Non Logo/Flat Pack

Print Design-Color-Size: | | |

Ship Set: | | | Disc: | | % Total Price: 2217.4992

Cartons: 56.00 | Total QTY: 2016

Buttons: Hide Matrix | Perform ATP | Create Lines | New Selection | Schedule Results

Color	Disc. %	S			M			L			XL		
		Ord	ATP	ATP Date	Ord	ATP	ATP Date	Ord	ATP	ATP Date	Ord	ATP	ATP Date
KL/TH : Wh		4464			4751			-74			12600		
KL/WE : Wr		5400			14759			19366			18576		
KL/WF : Wh		6048			24984			15478			432		
KL/WM : Wl		6984			5111			21092			16056		
TE/TH : Wh		1656			2808			792			216		
TE/WE : Wr		792			1152			216			2952		
TE/WF : Wh		864			576			0			0		
TE/WM : Wl		1800			1224			4464			9720		

Net Price: 1.95 | Gross Price: 1.95 | Qty per Picking Unit: 72

Figure.1

This is important to our business because we enter orders whilst the customer is on the phone. CS has to have a one-screen overview of multiple sizes and colours for one item whilst entering the order. Also they have to be able to quickly enter the order qty's during the phone conversation with the customer.'

Oracle Response – Not currently available

'Summarised requirement – an automated way of making internal warehouse house items available via I-Proc including mark-up plus auto-charge back to GL.

Cheshire CC runs an internal supplies division, CBS Supplies. This is a warehouse facility that supplies office consumables, cleaning & maintenance materials, art & craft, catering disposables and a variety of lines to schools and county offices. It produces an annual catalogue with the warehouse holding some 3,000 plus lines.

We use I-Procurement to raise requisitions, which following approval create external Purchase Orders. We also raise Purchase Requisitions to supply goods from our internal inventory warehouse. They are turned into internal requisitions, and using OM order import are brought into Order Management where they then follow the standard picking and shipping routines. The goods are charged by journal, debit requestor from the ledger codes on the requisition, credit CBS Supplies income. The warehouse operates on mark up basis, purchase supply agreements in place to re-stock the warehouse. Selling price is held in the OM Price List and in the List Price field on the Inventory record. Selling Price will be higher than purchase price and

the warehouse stock average price. We run a set of catalogue loader jobs to put the list (selling) price into I-Procurement.

When we went live with Oracle on 11.5.3, this modification was the only way to make the warehouse items available to I-Procurement users, getting the requisition details into OM sales orders whilst running the warehouse on a mark up basis. It was business critical to make this an end-to-end automatic process, avoiding any direct keying of this information into the OM module. The order volumes processed, up to 600 per week made an automatic solution from I-Procurement vital.

Oracle Response - STANDARD - internal orders with transfer pricing - items exposed to catalogue.

6.1.4 Functionality performed outside of core ERP which we would like to include

- Export documentation
- Managing certification documentation from suppliers through to the end customer (CE marking, ATEX, traceability)
- Stage payments.

6.1.5 Other Comments

- Some respondents used Manugistics, but this had in fact been implemented before Oracle had been adopted, and there are plans in place to move towards using Oracle in this area.
- Point-of-Sale systems tend to be legacy-based, but again respondents said that they wanted to move towards Oracle for these applications.

6.2 Planning

6.2.1 Current Functionality we do not want to lose and works well

- Inventory Control (See Inventory Process) – high usage
- Material Requirements Planning (MRP) (Driven by Sales order and or Master Demand Schedule (MDS) – high usage
- Advanced Supply Chain Planning (ASCP)/DRP (Driven by Sales order and or Master Demand Schedule (MDS) – low usage
- Forecasting/demand planning – low usage

6.2.2 Current Functionality we do not want to lose but could work better

- Capacity Planning – low usage

6.2.3 Current functionality which has been customised

6.2.3.1 Details of Related Customisations and Oracle Responses

'Interfaces in and out of planning (MDS) to Rhythm I2 Sequencer - used to create build plan.'

Oracle Response -STANDARD – Open API's

6.2.4 Functionality performed outside of core ERP which we would like to include

- Manugistics is used in some sites
- A low proportion of respondents reported customisation or external systems

6.2.5 Other comments

- A number of respondents used Manugistics for planning, whilst others used bespoke systems (although at least one was currently planning to migrate to standard Oracle).
- Flowserve are using a Rough Cut Capacity Planning tool which tracks product types by date. We plan by allowing only a certain number of orders for a given product in a period.

6.3 Inventory

6.3.1 Current Functionality we do not want to lose and works well

- Min/Max planning – high usage
- Reorder point planning (Re-order level) – high usage
- Cycle Counting – high usage
- Shelf Life – low usage
- Serial Number – high usage
- Lot Number – low usage
- Safety Stock – high usage
- Shelf Life – low usage
- Scrap - high
- Physical Inventories – high usage
- Project Costing – high usage

6.3.2 Current Functionality we do not want to lose but could work better

- Vendor Managed Inventory – low usage
- Customer Managed Inventory (consignment stock) – low usage
- Kanban – low usage
- Locators in project manufacturing are overly restrictive

6.3.3 Current functionality which has been customised

6.3.3.1 Details of Related Customisations and Oracle Responses

'Various programs to support the monitoring of vendor managed inventory'

Oracle Response - STANDARD - VMI processing supported by 11.10 as standard via collaborative planning

'Bulk small parts handling - supplier tops up stock and sends a disk containing his replenishment details - programs loads the receiving interface, creates receipts and auto invoices the supplier.'

Oracle Response - STANDARD – VMI processing

'Calculation of inventory safety stocks based on prior history and of course, a large number of views, extracts and reports.'

Oracle Response - STANDARD – inventory optimisation

*'Complete customisation of RF/ Telnet solution
Complete Customised Multi item solution (to auto create generic warehouse & shadow sales item variants)
Complete customised Carrier Sub System (to control freight accruals/
auto AP (carrier) invoice matching/ GL journal generation)'*

Oracle Response – Not currently available

6.3.4 Functionality performed outside of core ERP which we would like to include

- ❑ Obsolete & slow moving inventory accounting

6.3.5 Other comments

- ❑ Again, a number of respondents used Manugistics for this process, with others using bespoke systems. One particular area of concern was the identification and management of slow-moving and obsolete stock.
- ❑ Bar-coding systems also provide some of the functionality used in this process.
- ❑ Flowserve have developed a data extract bringing together data about an item for use by inventory planners. Columns include: previous usage in last 12,24,36, 48 months; date last moved; safety stock; on-hand; demand orders in last 12 months; supply orders in last 12 months; cost; commodity code. This is used to aid decisions on order quantities and safety stock levels.

6.4 Shop Floor

6.4.1 Current Functionality we do not want to lose and works well

- Make Parts in Work in Process (WIP) (Process and Discrete Manufacturing) – high usage
- Time Booking to WIP – low usage
- Material Booking to WIP – high usage

6.4.2 Current Functionality we do not want to lose but could work better

- Outside Processing (OSP) – low usage
- Quality Control – low usage
- Scrap – high usage

6.4.3 Current functionality which has been customised

- Closing discrete jobs – Oracle allows closing even if material issues are still outstanding.
- We have added a log out tag out (safety systems) module to the Work Order system.
- Work orders to release – all materials are available.

6.4.3.1 Details of Related Customisations and Oracle Responses

'Amendment to the WIP completion form to assign a lot number that is selected from a list of values of sales order numbers'

Oracle Response - STANDARD - Could be configured with a zoom look up – none invasive

'Most of customisations are to integrate into legacy systems, which are still used for order processing and WIP'

'Generation of engine kit requirements based on position of engine on assembly line - linked to Newfield engine line control system.'

Oracle Response - STANDARD – Flow manufacturing

'Kit tracking system to track shipments of parts from the warehouse through to use on assembly line - previously we lost visibility of these parts after issue from the warehouse.'

Oracle Response - STANDARD – achieved by WIP job pick release to a line side subinventory

'Update dates on picking rules so that can always pick today plus x days, automatically'

Oracle Response - STANDARD – 11.5.10

'Flowserve have customised the completion and closure of Discrete Jobs. This is to prevent closure or completion of jobs before all material has been issued. For standard costing environments, the job can be completed without impact on costing. The Close Discrete Jobs SRS uses a custom shell script which launches the Oracle standard process for batches of jobs where all material has been issued. For average costing environments the completion of the job initiates the costing process, updating the average cost using the cost of material issued to date. For this we have implemented a form customisation using custom.pll'

6.4.4 Functionality performed outside of core ERP which we would like to include

- Quality control.

6.4.5 Other Comments

- Within Shop Floor Control, respondents had developed bespoke systems for managing their quality systems.

6.5 Procurement

6.5.1 Current Functionality we do not want to lose and works well

- Self Service Requisitions – low usage
- Professional Buyer Requisitions – high usage
- Professional Buyer Purchase Orders – high usage
- Punch Out – low usage
- Receiving – high usage
- Supplier Management (To AP (Accounts Payable) Invoice) – high usage
- Services – high usage
- Sourcing – high usage
- Purchasing Contracts – low usage
- e-auctioning – low usage

6.5.2 Current Functionality we do not want to lose but could work better

- Returns – high usage
- Amount Based – low usage
- Request for Quote – low usage
- Quotations – low usage

6.5.3 Current functionality which has been customised

- Project PO approval process
- Funds checking to prevent going over budget without using commitment accounting
- Viewing approval history on i-Proc screens
- Making project information mandatory for capital project procurement
- PO print which handles attachments which are other than just plain text

6.5.3.1 Details of Related Customisations and Oracle Responses

'We are looking to modify the approval workflow for Non-catalogue Requisitions, so that it goes to the Buyer first for approval rather than last which is the current standard workflow approval path. Our view is, why get financial approval only to have it rejected by the Buyer for being the incorrect supplier and/or price.'

Oracle Response - *STANDARD - Workflow modifications – none invasive.*

'Programs to extract purchasing data to support Arrivals Intrastat reporting'

Oracle Response - *STANDARD - Intrastat movements are generated automatically in inventory movement statistics as standard.*

'Purchasing set-up automation - creation of approved supplier list and bills of distribution for new PO lines - users seemed incapable of getting the set-ups correct so we automated it.'

Oracle Response - *Not currently available*

'Yearly update of currency exchange rate on long term blanket purchase orders - this has been a problem at many Cummins entities.'

Oracle Response – Not currently available

'Approved Supplier Listing (ASL) Mass Update (extract & upload) - (auto updates pricing/costing entries for sku range based on supplier-driven updates)'

'Averaged Costing Update - (auto calculates averaged SCP for sku's where price/ cost layers fluctuate significantly)'

'Item Spreader - (auto updates multiple item attributes for all item variants)'

'Complete customised PO Book - (effectively replaces vanilla forecasting/enterprise planning solution with customised front end collating demand, inventory & pipeline order data to derive PO recommendations)'

Oracle Response – Not currently available

Flowserve: Vendor expedite report has been redeveloped as the standard one is poor.

6.5.4 Functionality performed outside of core ERP which we would like to include

- Supplier quality assurance

6.5.5 Other Comments

- This is probably the least-customised area of the core applications, with least functionality being performed outside of the system.

6.6 Shipping

6.6.1 Current Functionality we do not want to lose and works well

- Order Management (To AR (Accounts Receivable) Invoice) – high usage
- Pick Release – high usage
- Trip Management – low usage
- Credit Orders – high usage

6.6.2 Current Functionality we do not want to lose but could work better

- Stage Payments – low usage
- Secondary Packaging (e.g. Pallets) – low usage
- Goods Returned (From Customer) – high usage

6.6.3 Current functionality which has been customised

- Minimum shipment value (only ship if value > £xx)

6.6.4 Functionality performed outside of core ERP which we would like to include

- Export documentation

6.6.5 Other Comments

- Export documentation is a common problem across all the applications.

6.7 Enterprise Asset Management

6.7.1 Current Functionality we do not want to lose and works well

- Asset Hierarchies – high usage
- Reactive Maintenance – high usage
- Preventive Maintenance – high usage

6.7.2 Current Functionality we do not want to lose but could work better

- No feedback given.

6.7.3 Current functionality which has been customised

- There was no feedback of any customisation in this process.

6.7.4 Functionality performed outside of core ERP which we would like to include

- Fixed Assets Management

6.7.5 Other Comments

- Bespoke systems had been developed in some cases.

7 Other comments and conclusions

A general comment was that the Oracle user interface is not very user friendly – “a bit clunky” was one phrase that was used.

8 Acknowledgements

The Manufacturing & Supply Chain Focus Group would like to thank everyone who completed the survey, and in particular those people who took part in the follow-up interview process.

End of Document