

## The Client

The Client is a world's leading printer and copier manufacturer.

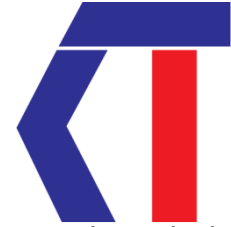
## Business Situation

The client implemented Oracle 11i Order Management (OM) module along with Oracle Inventory, Shipping Execution, Pricing, BOM, WIP etc. The client is in the business of manufacturing and selling both low end and high end digital printers and copiers. To ship the copiers/printers, accessories, and spare parts client first selects the orders that are ready to ship. Client prefers to ship the whole order to a customer rather than partial shipment. The shipping transaction screen provided by Oracle Shipping Execution screen provides lots of great options and user can pick several business rules on the screen to select the delivery lines. However the screen cannot make sure that all line items in an order are ready to be shipped or reserved. It can only prove it by back ordering if there is no reservation or not available. If some line items in an order is not ready for shipping it may not appear on the shipping screen. Also to decide on optimum way to fill the truck/vehicle is to create the trip/delivery iteratively. Because only after selecting all the orders it calculates fill percentage with respect vehicle volume. Other issue is not all users are trained or skilled enough to select all right business rules every time.

## The Challenges

Create a simple screen that display:

1. Orders with all the line items that are shippable are reserved.
2. Orders and one or more lines items are not on hold.
3. Calculate the cumulative volume for the assemblies based on the items used to configure in Assemble-To-Order (ATO) Orders.
4. Orders that are assigned to specific carriers.
5. Calculate the order fill percentage with respect vehicle volume as user selects the orders.

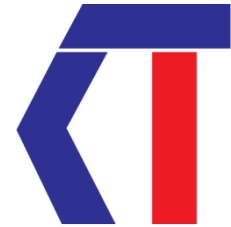


6. Calculate the running total of fill percentage with respect to the vehicle selected for all the orders that are selected to ship. This helps optimally fill the vehicle without iterative way of cubing the vehicle.
7. Create trips and deliveries using standard Oracle API.
8. Pick release the deliveries using standard Oracle API.

## The Solution

Helped the client by addressing the challenges by developing:

1. Created view that collects only orders with all shippable lines are reserved and not on hold.
2. View collects all the shippable items in the ATO.
3. View collects only those orders whose delivery lines got created.
4. Created simple screen where user can enter shipping carrier code and vehicle that ships the item.
5. The screen that queries the orders, from the above view, that are attached to shipping carrier selected by the user.
6. User can then select each order by clicking the empty check box against orders on the screen. The screen calculates and displays the fill percentage as each order selected in the screen with respect to vehicle volume.
7. The screen also calculates and displays the running total of fill percentage for the selected orders in the screen with respect to vehicle volume.
8. Once the vehicle is optimally filled (the running total of fill percentage is 100% or less than 100%) user can click on create trip button on the screen to create trips and deliveries using standard Oracle API. Once trip got created the trip number is displayed on the screen.
9. User can then click on the pick release button on the screen to pick release the all the orders that selected for the trip using standard Oracle API.



## Business Impact

The major benefits were:

1. Client's organization rule that whole order is shipped is satisfied easily.
2. All the business rules are forced internally and users are free from verifying the same.
3. Simple screen reduces the complexity and training need.
4. Reduces the process time by at least 30% by enforcing the above business rules automatically and reducing the iterative calculations of optimum truck/vehicle volume and creating trip/delivery and pick release at the push of a button.

## Value Adds

1. Business rules implementation for creating trips/delivery, picking, and shipping.
2. Less error prone as business rules are implemented automatically and simple screen to select the orders for shipment.
3. Optimum utilization shipping resources (vehicle).
4. Reduced process time.

## The Technology

- Oracle 11i Applications
- Oracle 9i
- SQL, PL/SQL
- Developer 6i
- Unix/Windows