

# Smart Customer Relationship Management System

## CONTEXT

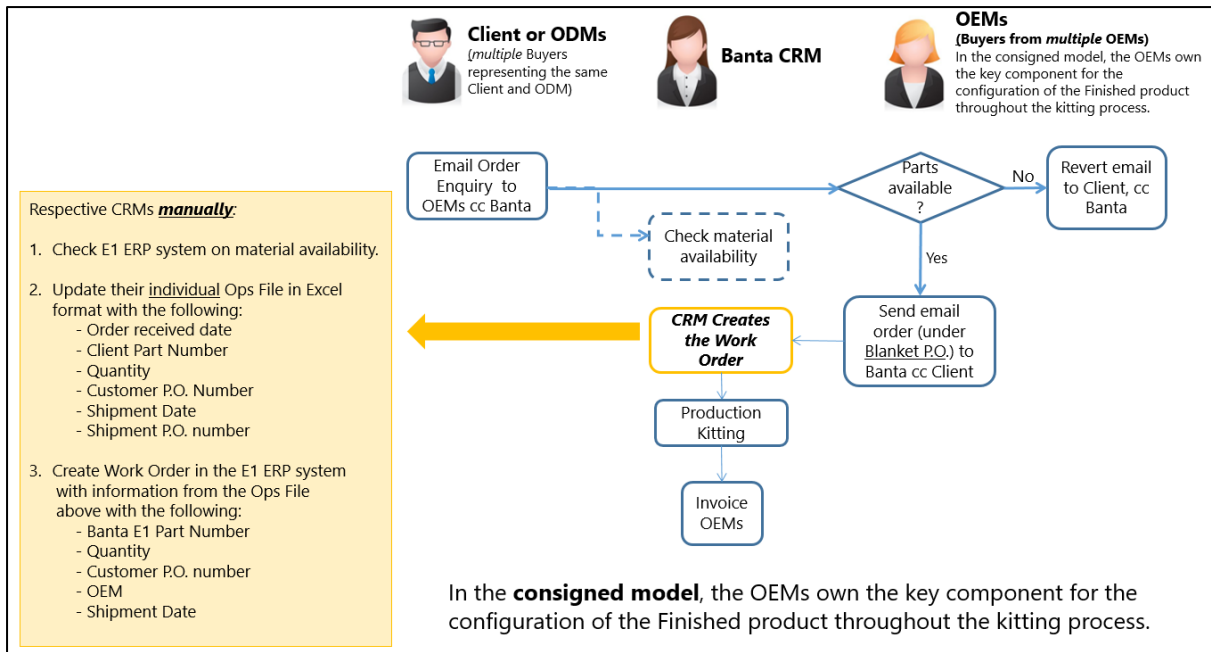
Banta Global Turnkey Singapore (Banta) is a supply chain management company based in Singapore, a subsidiary of RR Donnelley and Sons, an American Fortune 500 company providing integrated communication solutions and services.

Banta provides kitting and packaging services for clients in the advanced electronics and healthcare sectors. Banta uses a combination of consigned components and purchased components to configure and assemble them into branded products for its customers.

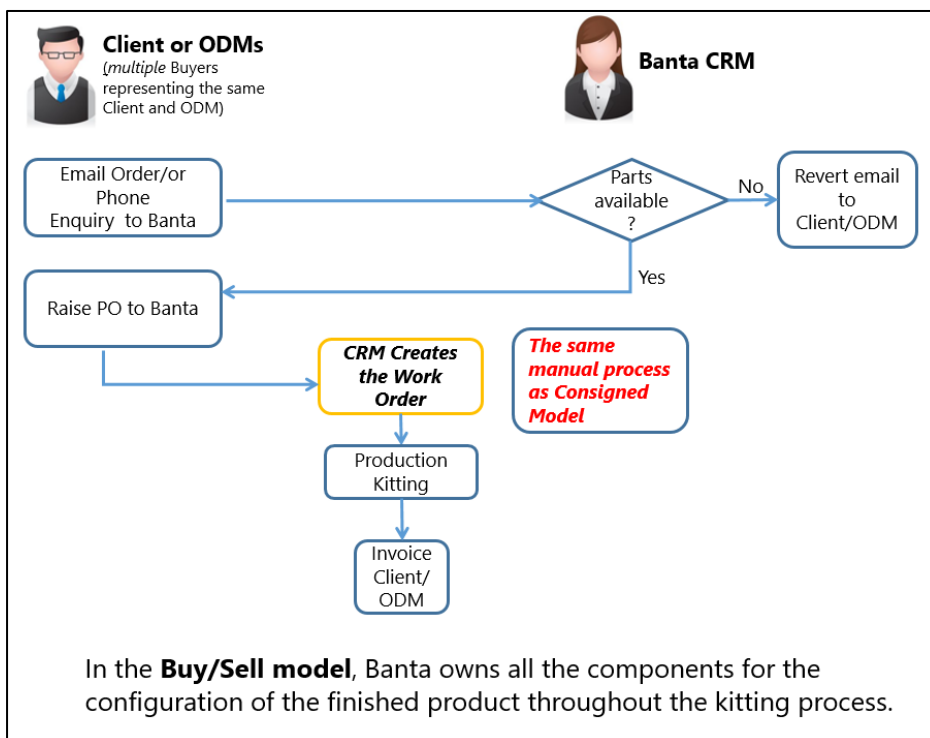
The current ordering process is complex and largely manual, which gives rise to many possibilities of errors that affect customer experience and efficiency. Table 1 summarises the stakeholders involved in this ordering process with Diagrams 2 and 3 showing the end-to-end process flow for two ordering models.

<b>Client</b>	<b>Buyers representing the master contract owner.</b>
<b>OEM</b>	Buyers representing the Original Equipment Manufacturer that supplies key components for Banta to configure and assemble for the Client (consigned model).
<b>ODM</b>	Buyers representing the Original Design Manufacturer. The ODMs are also sub-contractors of the Client.
<b>Customers</b>	All Banta's customers who are buyers representing the Client, OEMs or ODMs.
<b>CRM</b>	Banta's Customer Relations Managers that interface with all the Buyers.
<b>E1</b>	Banta's ERP system - JDE Enterprise 1

**Table 1: Definitions of the Stakeholders involved in the Ordering Process**



**Diagram 2: Current Ordering Process (Consigned Model)**



**Diagram 3: Current Ordering Process (Buy/Sell Model)**

The current ordering process is highly manual and labour-intensive, and demands that:

- 1) All the required data to fulfil the customers' orders are correctly filled by the CRM
- 2) Due diligence is required of the CRM to keep track of the repeated changes of orders from the customers and ensure that the final order is taken correctly

Banta is looking to leverage technology to automate and reduce errors in the ordering process, so as to provide a superior customer experience and reduce the cost of errors.

## **PROBLEM STATEMENT**

How might we automate the ordering process to be more efficient and effective, and achieve a better customer experience?

## **WHAT ARE WE LOOKING FOR**

- A prototype solution that will be able to broker:
  - The ordering relationships and interdependencies between the parties across the various business models
  - Integration with the in-house ERP (E1) system for product specification and information
- The system should largely automate the ordering process via multiple ordering channels (for example, phone, email or other channels) and from multiple customers
- The solution should include a query function for *specific* customers to further parse the inventory status in cases where alternate components are available for selection
- For a certain period of time, until the customer confirms the order, they should be able to review and change the order as needed
- The system should be able to accurately transcribe the order from the customers, consult the cross reference table in E1 for product integrity, and check the inventory status to determine the availability of the relevant components to commit to the orders
- The system will also trigger an email to the respective customer on the estimated delivery date for the order
- The system should be scalable to facilitate the invoicing and shipping process, if that is required in the next phase

There are no restrictions on the geographic location of the problem solvers who may choose to apply to this challenge. However, the prototype needs to be demonstrated in Singapore.

## **POSSIBLE USE CASE**

The Customer logs in and queries the Smart Customer Relationship Management (SCRM) system for an intended order of a finished product a certain quantity. They can easily self-check the system with part numbers and quantity without the need to send

multiple calls or emails to Banta's CRM to check for the fulfilment of the order. Some customers have the further feature to query the system for availability with specific product component preference.

Once the system determines that the finished product can be fulfilled, the customer easily places the order through the SCRM System. Once the order is confirmed, the SCRM automatically integrates with E1 and triggers the execution of the order to the Banta kitting process.

## **WHAT'S IN IT FOR YOU**

- SGD 35,000 of prize money for each winner of this challenge (see Award Model)
- Potential to co-develop solution with an experienced supply chain management company with established networks and domain expertise
- If successful, further opportunity to scale the solution across at least seven similar supply chain entities under RR Donnelley and Sons in Europe and the Americas
- Winner will be publicised by Banta by the end of the challenge

## **EVALUATION CRITERIA**

The applicants shall be evaluated in accordance with the evaluation criteria set out below.

### **Solution Fit**

- To what extent does the proposed solution address the problem statement effectively?

### **Solution Readiness**

- How ready is the proposed solution to go to the market?
- Is there any evidence to suggest capacity to scale?

### **Solution Advantage**

- Is the solution truly innovative, does it make use of new technologies in the market, and can it potentially generate new IP?

### **Company Profile**

- Does the product have user and revenue traction?
- Do the team members possess strong scientific/technical background?

## **AWARD MODEL**

30% of the prize money will be awarded to each selected finalist at the start of the prototype development process, with the remainder 70% to be awarded during the

prototype development process, based on milestones agreed between Banta and the solver.

Note that a finalist who is selected to undertake the prototype development process will be required to enter into an agreement with Banta that will include more detailed conditions pertaining to the prototype development.

## **DEADLINE**

All submissions must be made by **21 June 2019, 1600 hours (SGT/GMT +8)**. Banta and IMDA may extend the deadline of the submission at their discretion. Late submissions will not be considered.