

Headquartered in Michigan, United States, the Client has established itself in over 90 countries. The company boasts of over 600 products in various categories with around 22,000 SKUs. In December 2016 the Client opened its manufacturing facility in the nation and is located at Nilakottai in the Dindigul district of Tamil Nadu.

Solution:

Track & Trace.

Problem / Pain Point:

The client being one of the world's largest direct selling companies producing more than 75 SKUs in their Madhuri manufacturing plant alone, suffered from tracking and tracing problems. The Client follows a supply chain system in which the product flow starts from the production centre or contract manufactures, going to the National Distribution Centre (NDC), to the regional warehouse from where it goes to city warehouse from which it is taken to either the XPP centre, PUC centre or for home delivery. Moreover 13 of their contract manufacturers have no barcoding system in place. Also lack of track and trace led to problems such as product mismatch, difficulty to maintain FIFO at warehouse level. human intervention.

Objective of Project:

- 1. To track Primary, Secondary & Tertiary Sales.
- 2. To minimize counterfeit.
- 3. To enable traceability.
- 4. To minimize occurrence of product-batch mismatch.

Solutions Proposed:

Production Centres

All SKUs would be printed with 2D barcodes following which it would be scanned manually on a presentation scanner & the data would be automatically be updated in SAP. The SKUs would then be placed onto the master carton, the master carton will then be placed onto the shipper.

On reaching the shipper limit, automatically on software trigger, an aggregated barcode will be generated for the shipper which will have all the details of the SKU's filled in the respective shipper.

Once the SKUs are aggregated, the shipper is sealed through a sealing machine and then again based on scanning shippers will be aggregated onto the pallet. All the pallets will have a unique fixed metal barcode which will be permanently fitted on to it.

Post the event of pallet getting loaded, the fixed barcode of the pallet will be scanned thus ensuring the pallet aggregation. This gives the exact data of aggregation of SKU's in Shippers and Shippers on pallet based on a single pallet barcode scan. This will ensure smooth operations further in the plant warehouse.

On completion of the above process QC is conducted using a Hand Held Terminal (HHT), following which the pallet is transferred to the implant FG warehouse.

Contract Manufacturer

A barcode printer would be provided which will pull in data from the central server. The sticker once printed will be placed manually on to the SKUs.

Once the SKUs have been loaded on to the cartons, an aggregate label will be generated for the same.



Nation Distribution Centre

On arrival of the material at the NDC it will be subject to a QC following which the location of the material would be assigned by the HHT scanning the available bin location & thereafter the Pallet Label. In this fashion, the entire inventory held inside the warehouse along with the location details will be available for reference in the software. On generation of a PO the material barcode will be scanned with the HHT while picking up along with the location barcode at the pick-up point. This data will update in the software accordingly.

Regional Warehouse

A set up similar to the NDC is proposed for the regional warehouses.

City Warehouses

City warehouses will have the WMSLite software, which will track the inventory and IN/OUT through the city warehouse. The process of GRN and quality remains the same, post quality the material will be placed in the warehouse. The dispatch will be based on Sales order received from AS4000.

XPP Centre

The solution at the XPP is focused to enhance user experience. A TC70 device will be used for scanning the ID card, the data will get interpreted and then stored in the data base. The costumer must then proceed to the billing counter.

At the billing counter, their ID (PAN Card/Aadhar Card) will be scanned, the data thus populated would be reflected and balance details can be entered for generating a unique Registration Number in case of new customers. If case of an existing customer they can enter their liked Email ID or mobile number.

Following this each SKU would be scanned for automatically updating the same in AS400 software for billing. This helps with the billing process and stores customer details.

PUC Centre

At the PUC centre the process remains as the XPP centre.

Home Delivery

The delivery crew would be picking the material from the city warehouses for the delivery, for this an app would be generated and can be downloaded onto the crews cell phone, which would enable them to scan the products if required and take acknowledgement from the customer on the receipt of goods at the customer end.

Benefits:

- 1. The solution help to track products starting from the manufacturing stage till it reaches the hands of the customer. Thus, accurately tracking primary, secondary & tertiary sales.
- 2. Printing & Sensing technology reduce the amount of manual work involved in the process thereby reducing manual errors.
- 3. QodeAggrigate software reduces product-batch mismatch considerably.
- 4. Scanning & Validation of product at every stage acts as a countermeasure to counterfeit.