

The Client is a South Korean multinational electronics company headquartered in Suwon, South Korea.

It is the world's largest manufacturer of mobile phones and smartphones.

Solution:

Inventory Dispatch Management.

Problem / Pain Point:

With multiple phone models being manufactured and dispatched, the Client faces a problem of wrong cartons being dispatched against a given order. This problem arises both at the plant warehouse & Dispatch centre levels.

Objective of Project:

1. To automate the dispatch management process.
2. To ensure that right material is dispatched as per order received.

Solutions Proposed:

To ensure accuracy of dispatch, QodeNext proposed a solution based on barcode printing & sensing technology. The solution will be implemented at the plant warehouse & distribution centre levels. In the first stage of the proposed solution, a barcode printer will be used to print carton barcodes that contain Unique ID of the phones & cartons. Also, the cartons already come with IMEI no. barcodes along with a 2D code which can be used as a part of the solution.

For barcode scanning, QodeNext proposed two possible solutions:

a. Use of Fixed mount Scanners

The proposed solution will require a conveyor belt to be installed at the dispatch bays for validation. A fixed mount scanner will be installed at the conveyor belt for scanning & validation. Next, 2D barcode details & dispatch schedules will be loaded on the QodeValidate application. At the time of dispatch the cartons would be required to go through the conveyor belt. The fixed mount scanner will scan the barcodes one by one. In case of any mismatch an alert will be generated in the form of an alarm or stoppage of the conveyor. The loading process will then be resumed after the wrong carton is removed from the line.

b. Use of RFID Scanners

For the RFID based solution, each Carton will be labelled with an RFID Tag using an applicator system which will encode data on the tags and apply tags on the carton automatically. RFID Label will contain the information that will be linked to the carton ID. This Label will be pasted on the side of each carton. This encoded data can also carry all the information of the individual Phones packed inside the carton.

Dispatch area will have a gate portal placed with RFID antennas, cartons will pass through this portal where each carton will be validated with the dispatch schedule created in the QodeValidate Application.

Another way of achieving this would be through a conveyor belt containing a tunnel placed with RFID antennas. Each time a wrong carton is detected, the application will trigger an alarm or alert the user.

Benefits:

1. Barcode printing & sensing technology ensures validation of cartons, thereby ensuring accuracy of dispatch.
2. Automation not only reduces manual errors but provide for efficient utilization of resources (time, money & labour).
3. The solution is capable of report generation which can be use for future audit purposes.