

The Client is a South Korean multinational electronics company headquartered in Yeouido-dong, Seoul, South Korea.

Solution:

TITO.

Problem / Pain Point:

1. Client faces a challenge in truck management at the logistics hub of trucks being dispatched to the wrong parking & bay area.
2. Also, the client faces a challenge of occurrence of bottle necks at the entry & exit points.

Objective of Project:

1. To automate the truck management process in the warehouse.
2. To reduce mismatch between trucks & bays.

Solutions Proposed:

The proposed solution begins when the truck reaches the logistics hub. Invoice details are entered by the customer and the ASN no generated by the Clients system is printed as a barcode. The driver then has to report to the traffic controller following which a que will be made based on the time line / Space availability / Material requirement. ASN no is scanned at the gate and the details of the same are updated.

A display board on the boundary line will display the tentative time for entry of the truck into the warehouse. As per the assigned timeline driver will take the truck to the entry gate for clearance of paper formality. On clearance, a parking location will be designated to the truck in the QodeTITO application and a tag will be assigned to the truck. The tag will contain details of material and is linked with ASN no.

RIFD readers would be mounted on the parking lots. On entry of the truck, as soon as the truck approaches the right designated spot for parking the reader mounted at the parking lot would look for the RFID tag with ASN no. When truck approaches the designated parking location, the RFID reader reads the tag and the light will turn green from red for the appropriate parking bay.

The driver will then park the truck in the bay, and verify the no. of his vehicle, which will be displayed on the small display board mounted on the wall. In case if he doesn't reach to the right location, an alarm will be raised in the traffic control room, for corrective action to be taken.

Next, the traffic controller will assign the unloading/ loading bay to the truck. As soon as the assigned unloading/ loading bay is free, driver will get the intimation for the movement over Public announcement system as well as an SMS will be sent to his mobile no with bay details. This information also can be displayed on the display board in the waiting room.

The driver will then take his vehicle to unloading/ loading/ loading area. The movement of the truck out of the parking bay to unloading/ loading bay will be intimated to the traffic control room, for further assignment of the parking bay to the waiting trucks.

The same process as parking bay will be followed for loading & unloading bays, as soon as the truck approaches the bay, the RFID antenna mounted on the bay will read the RFID tag and turn the light green for the respective bay. As soon as his truck is unloaded, it'll move towards the exit gate & in similar fashion to the parking bay, an outward move from the unloading bay will be recorded to the traffic control room. The traffic control room can then allocate further trucks to the loading & unloading bay.

Benefits:

1. Printing & sensing technology reduces the occurrence of mismatch between trucks & allocated bays, thereby improving operational efficiency.
2. Automation reduces the occurrence of bottlenecks at entry & exit gates.
3. Automation allows for effective utilization of resources (manpower, space & fuel).