In-premise Goods Tracking

Organization Name: NEC

Overview:

Multiple type of cargo (such as containers, break bulk cargo, liquid cargo etc.) pass through a given port premise. Management often relies on the expertise of their manpower to store and locate such goods within premise. Stacking of these container cargo (done using heavy machinery) is directly proportional to the OPEx costs incurred. Devise a suitable method to visualize and manage such cargo in an efficient manner to improve operational efficiency and reduce TAT.

Current Challenges:

In premise, precise tracking of container cargo is problematic, in the current scenario. Containers are often stacked on top of each other, by the use of a crane. Each crane movement incurs a cost and inefficient stacking (i.e. more number of movements for each container transport) causes a higher OPEx cost to the premise.

- ➢ Moreover, the precise location of any cargo becomes problematic, and requires manpower deployment (to figure out exact location, across all 3 axis).
- ➢ Tracking of break-bulk cargo, due to the lack of a standardized container, is a problem area as well. Theft, pilferage and losses are often overlooked due to the lack of a suitable tracking/ monitoring mechanism, which also generates an alert in case of any discrepancy.
- ➢ Truck drivers, which arrive at the premise to collect cargo/ goods, are not aware of the status of their goods. As a result, they end up a lot of time waiting for their turn (to collect their cargo)

Business Requirements:

Below is requirement to clear this challenge

- Port area is very restricted secure area. It is prefer to check and decide container's location automatically by using IT technologies
- 3rd party truck companies are so fragmented. It's not feasible to ask them to set up on-premise system that can communicate to port side system
- Most of drivers don't use even smartphone. Digitalize them with low cost and technology is important
- Tracking of goods, within port premise, needs to be obtained with minimal intervention of human (labour)
- Stacking of containers needs to be in accordance with their expected arrival/ departure times, so that minimal container movements are incurred while transporting any cargo container. They also need to adhere to certain thumb rules (such as container having food items are not stored in the bottom layer, to prevent damage/infestation)