



7 Things You Need in a Cargo Security Monitoring System

May 10, 2018 - **Premsai Sainathan**
Read Time | **5 Mins.**

Your supply chain security system must go beyond protecting your warehouses or trucks in-transit. Learn what you need to secure your cargo movement end to end

There are many cargo and trailer tracking systems out there! Most, if not all, can be divided into two categories: technologies to monitor the warehouse itself and technologies that track the fleet carrying your goods.

The most popular warehouse cargo security tracking systems in the market are CCTV cameras, access control solutions, and RFID.

For fleet security, GPS vehicle tracking is most popular.

But, do these solutions really make your supply chain security initiatives watertight?

They don't!

Let us identify seven key things you need in a cargo security monitoring system that gives you good control over your warehouse inventory.

1. Track your inventory, not just your warehouse



Securing your warehouse using CCTV cameras, access control technologies, or even increasing your security headcount neither translates into better security in the warehouse, nor is a sure shot formula to recover stolen goods.

This is because none of these technologies can determine that something has been stolen with certainty, within a few minutes of the incident taking place.

Knowing immediately when your warehouse inventory goes missing is key to improving recoverability.

Therefore, the solution you choose for securing the goods in your warehouse must provide you with visibility at an inventory level.

Technologies like RFID work for item-level monitoring, but have some disadvantages when it comes to setup and cost.

[Learn how you can address warehouse security at an inventory or item-level using alternative technologies.](#)

2. Track your consignment, not your logistics fleet



Tracking the truck carrying your goods using a GPS vehicle tracker is helpful if your vehicle gets hijacked. GPS vehicle trackers can also indicate a security risk if there is an unscheduled stop or a route deviation during the journey.

But, you cannot tell with certainty about a security breach, with this data alone.

An unscheduled stop at a customs check post, or a route deviation due to unexpected traffic are not necessarily a security breach.

What happens if there is pilferage? A few parcels lifted off your truck from a scheduled rest stop.

What happens if your truck door has been clawed opened at a scheduled rest stop?

What happens if your truck has offloaded the trailer at a transit warehouse, whose security-level you are unsure about?

What about multi-modal shipments that move across air, rail, road, or sea? You cannot track your goods by just tracking the truck which carried your shipment during its first or last mile.

[See all of the reasons why vehicle tracking systems failed in logistics.](#)

Therefore, you need goods-level monitoring for your logistics operations as well.

RFID doesn't work too well for in-transit item-level logistics tracking because most RFID readers need Wi-Fi connectivity or an internet cable to communicate data.

[Learn how you can use hybrid IoT technologies to get package-level visibility to secure your cargo in-transit.](#)

3. Know what was dropped off, and where, in your last mile delivery



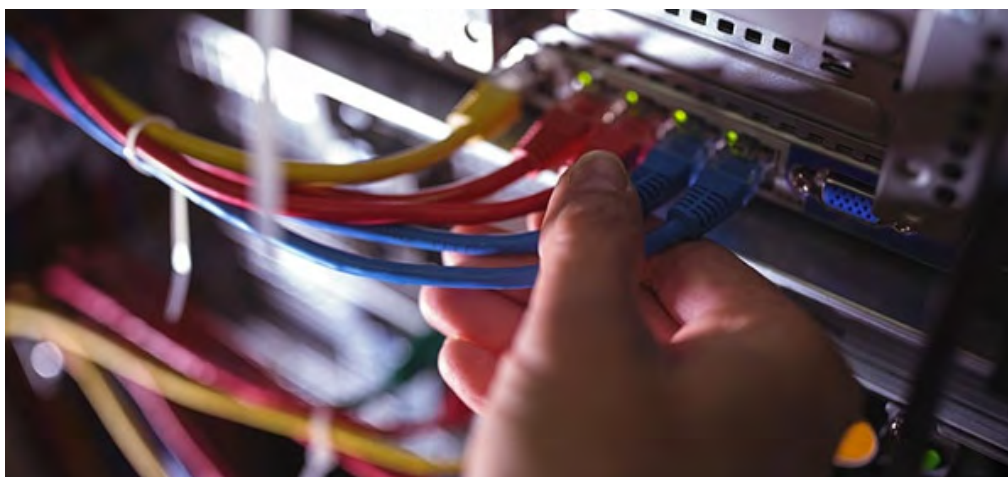
For your last mile deliveries, you are almost always dealing with part-load consignments. A wrong delivery in sequence not only disrupts your route planning but can also be a security risk and liability for your company.

ePOD apps, GPS vehicle tracking, or mobile based tracking solutions provide you with information about where your delivery truck is, and whether someone has signed off for a delivery, but you will have no idea if a wrong item was delivered until the customer opens the package and finds out – which could be days later in a B2B scenario.

Delivering iPhones in place of apples may delight a customer but delivering the wrong items at a hospital, which is awaiting additional stock of life-saving medicines, could affect human lives.

Therefore, for your last mile, you need to track at a package-level.

4. Need for additional infrastructure is a strict no!



GPS vehicle tracking systems need a power source – like the battery of the vehicle. RFID solutions on the other hand require Ethernet cables, Wi-Fi, and antenna installation.

Such infrastructure is easy to provide if you are transporting goods on your own vehicles or trying to secure a warehouse that you own or manage. Most of the time, however, you will not have this luxury in your supply chain. Trucks are usually rented from the market by your transport providers or 3PLs, and your warehouses could be operated by your 3PLs, your dealers, or your customers.

Therefore, you need a warehouse or logistics security tracking solution that is “plug and play” with no need for any infrastructure upgrades.

[Know the 5 things you need in a real-time tracking system to secure your supply chain end to end.](#)

5. Ensure your solution is scalable on-demand



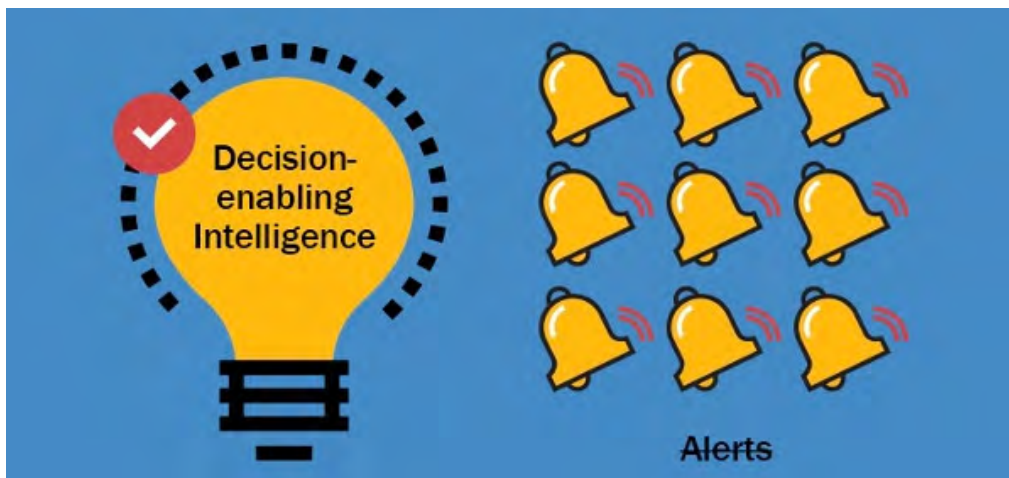
You don't want to go all out unless you are convinced that a few shipping lanes are well secured.

GPS tracking systems, for instance come with capital expenditure. To pilot the solution on a single lane, you need to ensure that every vehicle that your 3PL provides comes fitted with a GPS, as you don't know which vehicle is being deployed on which lane.

You need a solution where you can decide to place trackers only on consignments designated for a particular lane or sector. This is the definition of a cargo security tracking system scalable on-demand.

You should also have the ability to scale it down during lean seasons so you are keeping your cargo security system expenditure optimal.

6. Go for decision-enabling intelligence, not 1,000 alerts everyday



Knowing if your truck door is opened in-transit is one thing, while knowing if the truck door was opened at an unauthorized location is another.

The problem with security solutions is that they can cough up too many alerts, many of which are not worthy enough to prompt immediate action, with some even being false alarms. For example, would you take your fire alarm seriously if it goes off every time your neighbor fires up their barbecue grill?

Intelligent security systems using IoT smart devices and big data analytics platforms like the Honeycomb platform, often analyze more than your current consignment status. Honeycomb, for instance, analyzes past patterns, external data streams like weather conditions, and your organizational data to determine if there is really a security risk at hand or not.

Knowing for sure means you act for sure, saving you precious person-hours and resources that are lost from false warnings.

7. Knowledge is insufficient, you need to act, and act on time



Being aware of inventory leaving your warehouse unauthorized, or a few vaccine packets stolen from your trailer at a wayside rest stop is not enough.

Ask yourself whether you have a team in place on the field that can act promptly when there is a warning so you improve your chance of goods recovery.

In reality, most companies seldom have an instant response and recovery team in place, even many large multinationals.

You and your team are always working towards the big picture, and rightly so which provides you with little bandwidth to follow through effectively on warnings that your security systems provide.

Security crisis management needs a dedicated team of experts (like BeeCentral) that can coordinate with the local law enforcement and your field staff to initiate recovery within minutes of an incident occurring.

Consider setting this up as part of the cargo security system you are deploying.

In Summary

To achieve end to end supply chain security, you need a tracking solution which can monitor at a goods-level (for your warehouse and logistics), one which “brownfield” (requires no additional infrastructure to setup), is scalable on-demand, and enables decision-making through smart data analytics rather than generating alerts for every anomaly.

Cost and ease of deployment are also important factors from a scalability standpoint.

Keeping this in mind, Roambee leveraged multiple IoT technologies like GPS, GSM, Wi-Fi, and Bluetooth Low Energy (BLE) to create the industry’s first unified security system across the supply chain – from the warehouse to transportation to the last-mile. It is called the BeeBeacon solution.



Know More. Now.

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