

Blockchain for Tracking Goods

Organization Name: HERE TECHNOLOGIES

Overview:

When you order a parcel from Amazon, you receive an alert letting you know when your parcel has shipped, and when it will be delivered to your house. You are then able to track the status of your order via check-point based information. You can see when your parcel has left the factory, when it is on the road, when it has arrived in your local delivery depot, etc. Which, if you are running a large-scale shipping or logistics operation that involves the movement and monitoring/tracking of thousands of packages or assets at any given time, is a game changer.

Current Challenges

Now, imagine if you are a large manufacturer with thousands of parts and supplies being ordered and delivered from multiple suppliers on a daily basis. How do you gain a similar level of complete trust in the latest status of every single update in such a complex supply chain? When it comes to logistics, knowing where everything is – at all times – can no longer be left up to chance. Accurately tracking the real-time location of your assets. When it comes to delivering products locally and around the world, delayed, lost and stolen goods can cost businesses big, especially considering transport figures already account for up to 10 percent of total product cost. The bigger and more valuable the assets, the more important it is for businesses to have trusted, accurate, and real-time tracking at their disposal.

However, despite the range of technologies currently available, the way heavy equipment deliveries move from the factory to the warehouse and onto the customer is often shrouded in mystery. As the demand for smarter products grows, so does the need to supply them and track in a smarter, digitalized way. Manufacturers know their supply chains are ripe for optimization, but a lack of visibility into the process has limited opportunities to drive out costs and improve efficiency.

Business Requirements

With HERE open location platform data for tracking, we are looking for solutions based on the Blockchain or Holochain base framework, into the supply chain for transport and logistics use cases.

- In combining IoT tracking technologies, real-time location data and blockchain/ holochain, we should be able to verify that a transaction that you are notified about really happened at that specific time and in that exact geo location area.
- Blockchain/Holochain needs to allow to make this entire process fully automated, because it gives you an exact location and guaranteed information that the updates you are receiving from the shipping company are accurate.
- By using Smart Contracts directly within the blockchain, the system can automatically generate an invoice based on independently verified data. This is a perfect example of a use case of blockchain methodology done within the context of supply chain. The system gives the recipient a guaranteed and trusted notification that they have received their goods and that they can automatically generate the necessary invoice on receipt.
- The proposal is not limited to the specific location of an asset, it was directly relative to when it entered and departed a facility. Infact, we propose it should be real-time, indoor-outdoor-indoor tracking throughout the journey – as an end-to-end asset tracking.

Supporting a connecting ecosystem of things is a mammoth challenge for any business, and that's even before factoring in rising fuel costs, higher freight fares, added services, and increasing competition. Not only does the sort of global inventory visibility save time and money, it also makes for a more streamlined, sustainable operation – a definite 'must-have' for any business of today with delivery or transport as a service. We are looking for startups who has the domain knowledge of location tracking embedded with Blockchain or Holochain framework with a quantifiable demo or ideation or prototype.