TRANSPORTATION

DEFINING THE UNIVERSE OF ROBOTICS AND AI

AUTOMATION FOR ORGANISATIONS

1. OBJECTIVE

The aim of this study case is to present findings about Magnus in Updated Navigation Maps (Transportation), which helps in notifying the car agents to update the software.

From a transportation perspective, there are several applications that could benefit from the marriage of IoT and Blockchain. In terms of telematics, it would enable manufacturers to add more sensors to help service centers securely capture and store engine diagnostics data and other vehicle performance information. This information can be used with machine-learning algorithms to determine when a vehicle will require maintenance. The role of Blockchain in this example is to provide decentralized data storage, eliminate a single point of failure, provide a tamper-proof record and enable smart devices to autonomously communicate with one another.

What's the future of blockchain technology in transportation?

Blockchain is often referred to as a trustless network, meaning trust is not required to prove the validity of transactions that. Blockchain envisions a system, that, because of the multiple parties involved in verifying some of the transactions, because of the technology that allows for more seamless interaction on non-proprietary systems. It offers shorter processing times, higher degrees of verifiability, more interoperability among different systems and different players, oftentimes players that previously had been unaware of each other.

For example, a carrier may not have a relationship with a shipper or manufacturer until they're part of a blockchain. This visibility could open up new partnerships that they hadn't known about.

Drivers will have an important role in the blockchain, too, as they add their own data, often automatically, such as times on and off duty, the condition of roads, condition of the load and vehicle. It also can help them in disputes with shippers or their own carriers about when and where an event, such as a crash or goods damage occurred. It might bolster their opinion about unsafe vehicles or those that require repairs.

Role of Magnus in Updated Navigation Maps (Transportation)

A car manufacturer updates their top model's car navigation software on a monthly basis, due to ever ongoing changes in roads.

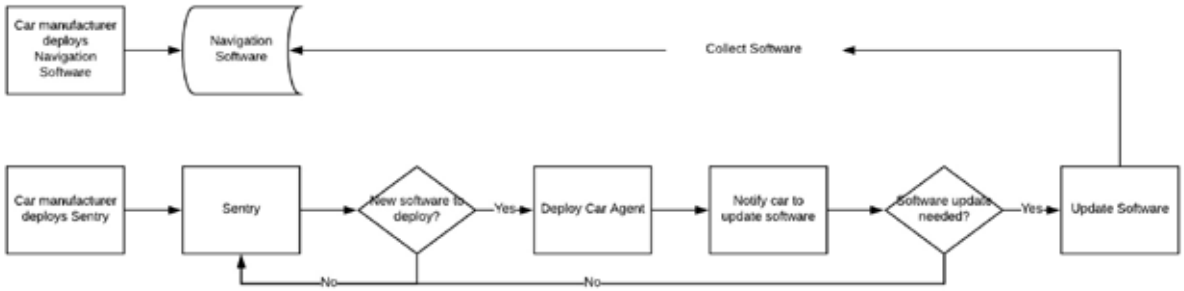
The process they follow is as follows:

The car manufacturer deploys the software in the cloud, as such that it can be accessed by anyone who is entitled to the software.

They deploy a sentry to manage the updating process. The sentry notifies all car agents to update the software; and Each car, which receives the notification, updates its software, and provide an update to the sentry that its navigation system is up to date. The sentry provides an overview of total number of cars to be updated and number of cars outstanding to the car manufacturer.

After 2 weeks 95% of all cars has been updated.

The car manufacturer issues emails/notifications to the remaining owners to bring their car for updates during the next scheduled maintenance or alternatively update them online.


Car manufacturer deploys Navigation Software
Navigation Software
Collect Software
Car manufacturer deploys Sentry
Sentry
New software to deploy?
Yes
Deploy Car Agent
Notify car to update software
Software update needed?
Yes
Update Software
No
No