

SAP LIQUID STUDIO FOR LEONARDO APPLICATION: PHARMACHAIN

Keeping a healthy pharmaceutical supply chain

Function: Quality Management | Process: Supply Chain | Industry: Life Sciences

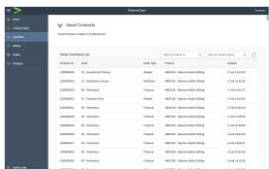
Application Overview

Pharmaceutical supply chains are complex operations involve many actors, and are highly regulated to safeguard the health of consumers. These supply chains, however, have also become vulnerable with the continuing rise of counterfeit pharmaceuticals. The World Health Organization estimates that up to 30% of all medical products on sale in developing countries are counterfeit. Besides the large health risk, fraudulent products harm the reputation and business of pharmaceutical manufacturers.

The Pharmachain application offers a new way to make sure that every patient receives the genuine product and that the pharmaceutical supply chain is fully secure, from producer to patient. Through use of a distributed ledger, the Pharmachain app brings visibility and real-time track-and-trace to the medicine supply chain, from its fabrication through distribution to hospital and pharmacies.

Solution

This application uses blockchain technology combined with the SAP Cloud Platform, SAP Leonardo IoT and analytics.



Business Value

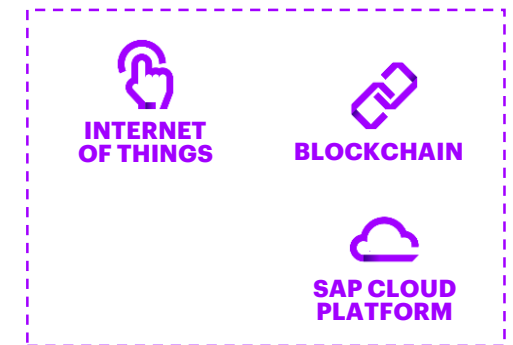
- Ability to trace and verify every transaction along the supply chain.
- Reduced risk of fraud.
- Simplified, “frictionless” transactions along the supply chain.

Features

- Uses an RFID tag to identify a medicine.
- Each actor in the supply chain (industries, distributors and customers) has an RFID reader in order to read these tags and communicate with its respective node in the blockchain.
- When an RFID tag is read, IoT services are used to communicate with the blockchain node and create a smart contract for its respective step in the supply chain.
- Visual indicators to illustrate whether the blockchain process is successful.
- Each sensor sends the smart contract number to the SAP system. In addition, SAP has its own blockchain node to validate a smart contract received by other nodes.

Technologies in Use

- SAP Cloud Platform
- SAP Leonardo IoT Services
- Blockchain technology
- SAP Fiori



[Click here](#) to watch the video.