

PROJECT DESIGN PHASE 1

PROPOSED SOLUTION:

A blockchain system for drug traceability and regulation is presented. As time goes on, it rebuilds the entire service architecture, ensuring the authenticity and privacy of traceability data, while at the same time, achieving a finally stable blockchain storage. There have also been presented algorithms that mirror the practical workflow of the medication supply chain. Healthcare supply chain is a complex network of several independent entities that include raw material suppliers, manufacturer, distributor, pharmacies, hospitals and patients. Tracking supplies through this network is non-trivial due to several factors including lack of information, centralized control and competing behaviour among stakeholders. Such complexity not only results in inefficiencies such as those highlighted through medical frauds but can also aggravate the challenge of mitigating against counterfeit drugs as these can easily permeate the healthcare supply chain.

SOLUTION ARCHITECTURE:

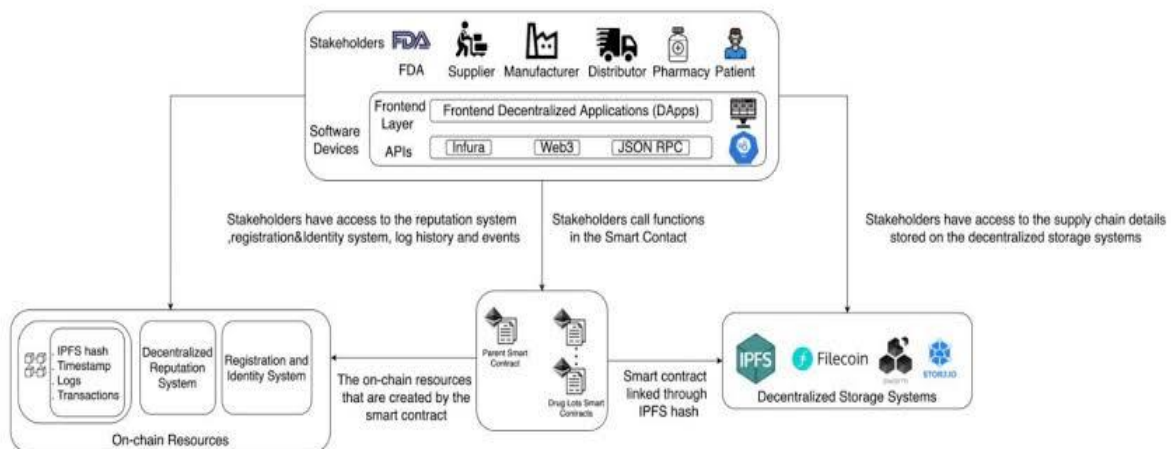


FIGURE 2. A high-level architecture for the proposed blockchain-based system for pharmaceutical supply chain