

## Cloud Based Supply Chain Traceability

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**Abstract :** Concept introduction: This paper talks about how an innovative cloud based analytics enabled solution that could address a major industry challenge that is approaching all of us globally faster than what one would think. The world of supply chain for drugs and devices is changing today at a rapid speed. In the US, the Drug Supply Chain Security Act (DSCSA) is a new law for Tracing, Verification and Serialization phasing in starting Jan 1, 2015 for manufacturers, repackagers, wholesalers and pharmacies / clinics. Similarly we are seeing pressures building up in Europe, China and many countries that would require an absolute traceability of every drug and device end to end. Companies (both manufacturers and distributors) can use this opportunity not only to be compliant but to differentiate themselves over competition. And moreover a country such as UAE can be the leader in coming up with a global solution that brings innovation in this industry. Problem definition and timing: The problem of counterfeit drug market, recognized by FDA, causes billions of dollars loss every year. Even in UAE, the concerns over prevalence of counterfeit drugs, which enter through ports such as Dubai remains a big concern, as per UAE pharma and healthcare report, Q1 2015. Distribution of drugs and devices involves multiple processes and systems that do not talk to each other. Consumer confidence is at risk due to this lack of traceability and any leading provider is at risk of losing its reputation. Globally there is an increasing pressure by government and regulatory bodies to trace serial numbers and lot numbers of every drug and medical devices throughout a supply chain. Though many of large corporations use some form of ERP (enterprise resource planning) software, it is far from having a capability to trace a lot and serial number beyond the enterprise and making this information easily available real time. Solution: The solution here talks about a service provider that allows all subscribers to take advantage of this service. The solution allows a service provider regardless of its physical location, to host this cloud based traceability and analytics solution of millions of distribution transactions that capture lots of each drug and device. The solution platform will capture a movement of every medical device and drug end to end from its manufacturer to a hospital or a doctor through a series of distributor or retail network. The platform also provides advanced analytics solution to do some intelligent reporting online. Why Dubai? Opportunity exists with huge investment done in Dubai healthcare city also with using technology and infrastructure to attract more FDI to provide such a service. UAE and countries similar will be facing this pressure from regulators globally in near future. But more interestingly, Dubai can attract such innovators/companies to run and host such a cloud based solution and become a hub of such traceability globally.

**Keywords :** cloud, pharmaceutical, supply chain, tracking

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