



Microsoft Cloud

Medicine Traceability and Verification

Solutions built on Microsoft Azure to support
medicine verification and traceability

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Medicine Traceability and Verification

Solidsoft Reply is the global leader in medicines verification technology. Falsified medicines may cause harm to patients and fail to treat diseases effectively. They contribute to antimicrobial resistance and drug-resistant infections. They lead to a loss of confidence in medicines, healthcare providers and health systems.



Primary challenges

Falsification accounts for losses of around US\$ 200 billion globally and US\$ 30 billion in low and middle income countries (LMICs) where the risk of diversion is higher due to limited governance structures, tools, and technical capacity.



Ideal solution

Building on our investment in medicines verification technology, we can offer solutions built on Microsoft Azure to support medicine verification to GS1 standards (EPCIS, CBV, Digital Links) and support traceability throughout the supply chain.



Desired outcomes

A system which allows users, such as health care workers, regulatory authorities and customs agents, to use a phone application to scan medical product barcodes and verify their authenticity in real time.




The Traceability and Verification System (TRVST)

TRVST allows countries to verify the authenticity of health products. The solution relies on a global repository that stores health product information.




Supply Chain Traceability



Data is fed into TRVST by medical product manufacturers. The system allows end users to use a phone application to verify their authenticity in real time.



Combating Counterfeit Medicines



Ensuring higher levels of verification controls, giving patient access to safe, effective and quality-assured vaccines and other medicines.

Built on Microsoft



Microsoft Azure Cosmos DB and Azure SQL Database

Reply, The Traceability and Verification System (TRVST), and Microsoft Azure

TRVST, pronounced 'Trust', is the world's first global medicines verification system designed to support low and middle-income countries (LMICs) in their ongoing fight to eliminate falsification and diversion of medicinal products.



Azure Cosmos DB and Azure SQL Database

A global repository that stores product information, such as Global Trade Item, serial and batch numbers, production and expiry dates.

Mobile Verification

Allows users, such as health care workers, regulatory authorities and customs agents, to use a phone application to scan medical product barcodes.

Real Time Authenticity

Any verification failure or suspect activities will trigger an alert which will be sent to respective manufacturers and regulatory authorities.



Customer success: TRVST and UNICEF

In July 2022 UNICEF announced a milestone moment in efforts to tackle the global counterfeit medicines industry as Rwanda and Nigeria became the first countries in Africa to authenticate vaccines using GS1 barcoding technology with The Traceability and Verification System (TRVST). The initiative is the result of a two-year long, multi-stakeholder project.

▶ Global Initiative with the VTI

A multi-stakeholder partnership composed of UNICEF, Gavi, The Bill & Melinda Gates Foundation, the Global Fund, USAID, Vital Wave, and the World Bank.

▶ Efficiency and Cost Benefits

The TRVST is an important addition to improve efficiency in sharing data across the chain, strengthen data quality, extend data visibility, and reduce costs of data capture and transformation.

▶ What's Next?

TRVST is now expected to scale up and expand to routine vaccines and other health products to treat HIV, tuberculosis, reproductive health supplies, anti-malarial items and other essential medicines.

Contact us to learn more about Medicine Traceability and Verification

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