



ON QUANTIFICATION OF TRACEABILITY

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WE SEE IT!

THE IMPORTANCE OF TRACEABILITY



PREVENTS COUNTERFEITS

Drug Counterfeiting Industry: > \$5 billion

~18.7% of drugs in Africa are substandard or falsified

~13.7% of drugs in Asia are substandard or falsified

KEEPS STAKEHOLDERS ACCOUNTABLE

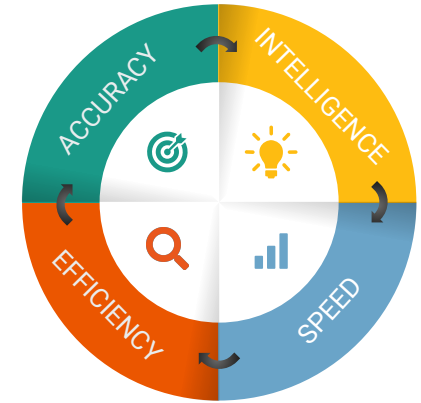
Encourages good practices throughout the manufacturing and distribution process, holding every stakeholder accountable for any lapses in quality control.

ENSURES TRANSPARENCY

Visibility, Assurance to the consumer and regulators about the entire supply chain and quality control measures taken for the production and distribution of life saving products.

INCREASES SUSTAINABILITY

Reduces the need for sampling and testing for counterfeits throughout the supply chain. Reduction in counterfeits also results in lower destruction/waste of materials used for their production.



SAFETY



THE EVOLUTION OF SERIALISATION



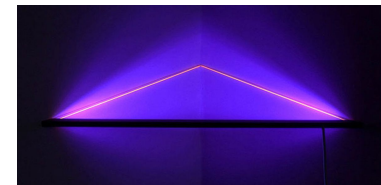
CODING



(01)09099999543217
(17)100521
(10)ABC123
(21)ABCDEFG123456789



PRINTING



INSPECTION



QUALITATIVE vs QUANTITATIVE INSPECTION



QUALITATIVE vs QUANTITATIVE INSPECTION



CLOSE THE LOOP!



DATA



KNOWLEDGE



ACTION



QUANTITATIVE INSPECTION & TRACEABILITY



BOTTLE INSPECTED

Shape Variability 0.8%, allowed tolerance limit 2.0%
Colour Variability 0.2%, allowed tolerance limit 2.0%

TABLETS INSPECTED

Average Size Variability 0.5%, allowed variability 1.0%
Average Colour Variability 1.0%, allowed variability 2.0%
Average Surface Consistency 2.0%, allowed variability 2.5%

INDUCTION SEAL INSPECTED

Sealing Temperature 84°C, allowed temperature range 80°C - 87°C
Sealing Variability 3.0%, allowed variability 5.0%

LABEL INSPECTED

Position variability 2.0%, allowed variability 5.0%
Printing variability 3.0%, allowed variability 5.0%
Barcode scanned and verified
Serialisation scanned and verified

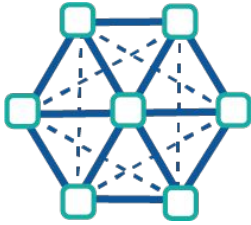
TODAY'S CHALLENGES IN TRACEABILITY



STAKEHOLDER AGREEMENT



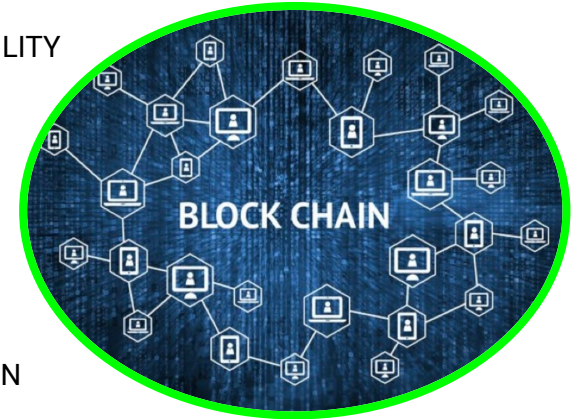
VULNERABILITY



INTEROPERABILITY



REGULATION



IMPLEMENTATION COST



KEY TAKEAWAY:

QUANTIFICATION REDUCES WASTE AND PROVIDES ASSURANCE THROUGH DATA

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