



Hewlett Packard Enterprise

Driving Value from your Serialisation & Traceability Programs

By: Focusing on Supply Chain Efficiency & Brand Protection

Current State of the PharmaCo Value Chain

Recent PharmaCo initiatives have been primarily focused on how best to achieve adherence to serialisation & traceability US, EU & global pharmaceutical regulatory directives. Pharma companies have implemented serialisation and traceability solutions to satisfy compliance and regulatory requirements without considering business and strategic value factors.

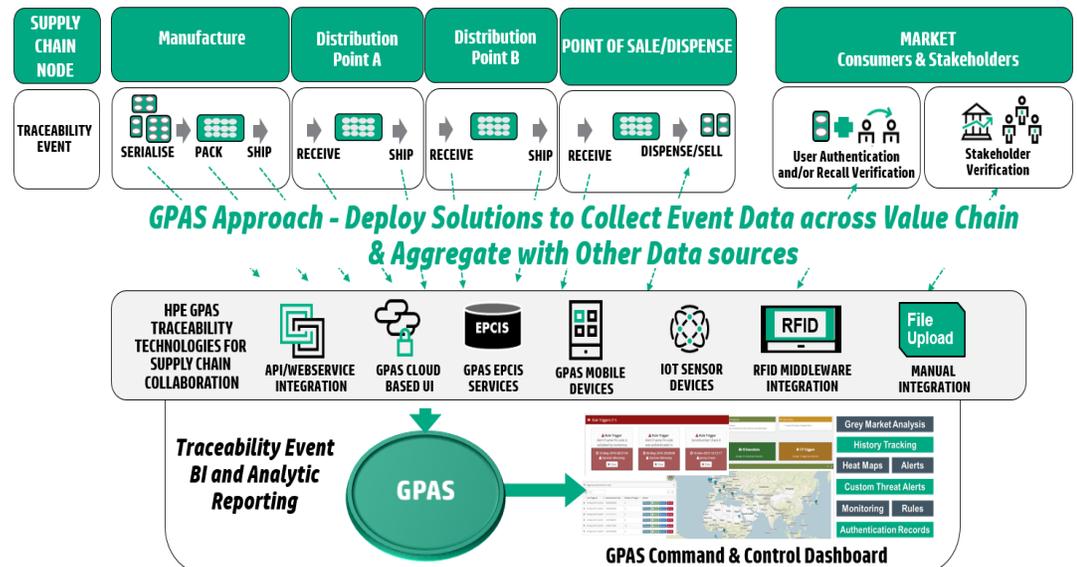
In most cases these product serialisation and traceability programs have not included any business value ROI considerations beyond compliance. The resulting technology based solutions were implemented under a 'cost of sale' philosophy which have not taken into consideration the strategic value of the data created and the very rich business intelligence value it represents, in simple terms the data is not being put to work through analytic based solutions to:

- Measure and manage operational and supply chain efficiencies to increase profitability.
- Benefit from the value that actionable analytics can provide to enable agile enterprises respond real-time to active and potential risks and threats relating to the PharmaCo brand and supply chain.
- Operate Anti-Counterfeit & Brand Protection programs that complement and extend existing pharmacovigilance efforts beyond the scientific analysis of suspected counterfeit drugs and monitoring for adverse drug reactions approach.

A full "Brand 360" approach instead looks to incorporate the following data sources:

- Physical product and supply chain traceability data
- IOT device data
- Online data relating to online illicit sale of pharmaceutical products
- Social Media and Consumer Sentiment related data

As a result the inevitable shift is occurring whereby PharmaCo are looking beyond the business driver of compliance and now seeking to gain real business value from the significant capital investment these programs have required.



Global Product Authentication Service

HPE GPAS are at forefront of implementing technologies in the PharmaCo Value Chain including IoT devices to improve drug efficacy in the pharma industry. Utilising GPAS to generate considerable business value add, enabling proven drug recalls, data driven analytics visualization across the supply-chain.

GPAS Capabilities:

Track/Trace – Supply Chain Visibility –
Deployment View – Business Intelligence View – Copy Protection

GPAS Approach:

Deploy Solutions to collect Event Data across Value Chain & Aggregate with Other Data sources



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Gary is an Innovation Centre Business Consulting Manager with 20+ years' strong domain expertise and experience of managing HPE teams in successfully delivering technology based services & solutions related to brand protection, counterfeit detection and prevention, product & supply chain traceability, big data and analytics services. His role and focus is based on providing practical business and domain subject matter expertise through the application of innovative technologies to address business problems & needs.

PharmaCo Value Chain Business Transformation – Required Approach and Benefits

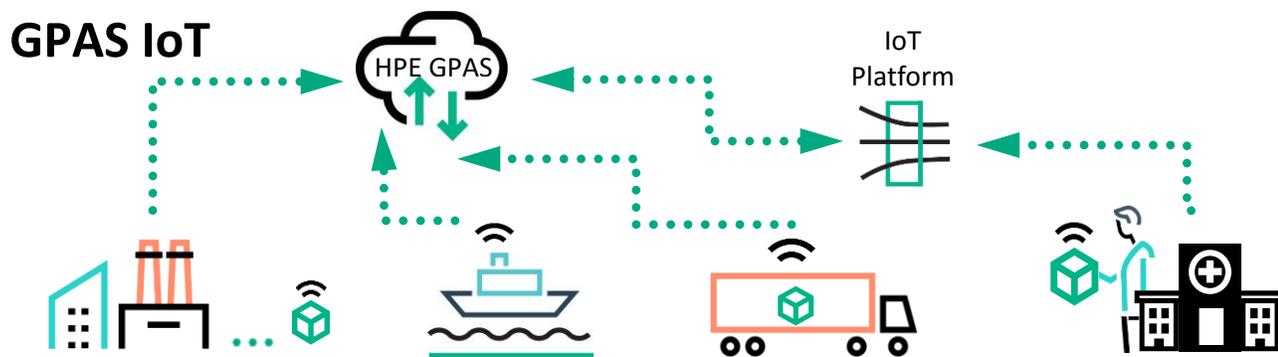
The business transformation to unlock increased value requires a program level strategy that at its core recognises the importance of a data driven approach across the entire value chain. By collecting and measuring both physical and digital value chain data, across all stakeholders, and then applying big data and analytic solutions, key business challenges that have c-level attention in the Pharma domain can be addressed effectively for the first time, namely:

- **Product Counterfeit:** Identifying hot spot of counterfeit product and supply chain activity and predicting future illicit trends to proactively direct field service agent deployments and direct counterfeit market awareness programs for the benefit of consumers.
- **Grey Market/Product Diversion:** Identify grey market activity, the root cause of the leakage and predict the likelihood of a shipments going grey.
- **Supply Chain Efficiency:** Measure and Monitor the performance of your supply chain partners to drive operational and financial performance improvements.

PharmaCo Value Chain Business Transformation and the Internet of Things (IOT)

The advent of Internet of things (IoT) to enable product and shipment monitoring through the supply chain is further accelerating the business value realisation in this data driven approach. Specific to supply chain traceability the use of IOT devices that can autonomously report real-time location and environmental conditions when attached to a product and shipment opens new PharmaCo's business value opportunities whilst addressing the greatest challenge to data collection and sharing across value chains – stakeholder participation.

- Enabling business value beyond traceability to be achieved by addressing questions relating to product authenticity and efficacy, i.e. Has the product been tampered with, has it been transported within the required environmental ranges or subject to grey market conditions by being transported somewhere it should not have been? This is particularly relevant to biopharma products which have been subject to increasing counterfeit and theft recently.
- Addressing of the key challenges to Supply Chain Traceability - Stakeholder participation whereby the IoT devices can report data back to the PharmaCo without the need for any user validation or participation. IoT provides the ability to extend end to end supply chain visibility beyond the closed supply chain.



PharmaCo Value Chain Business Transformation – The End Result

How are these business value challenges realised in a practical manner? Customisable Dashboards that provide both operations level and executive level actionable analytics both real-time and predictive in nature is how business value is unlocked in this data driven approach.

It will allow enterprises to focus on current state whilst also allowing you to predict and create value in the future and to be agile enough to adjust the course as required. As Warren Buffett once stated - "Price is what you pay, value is what you get". This is very applicable to the current state 'cost of compliance' approach where considerable investment has been made vs. the proposed 'data driven approach' where value is yet to be unlocked.