Challenges in Donor Agencies Supply Chain Information Systems and data exchange with Country Systems

GS1 Global Health Conference
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Agenda

• Background
• Challenges with donor agencies supply chain information system
• Data exchange between donor agencies systems and country systems
• GS1 Adoption
• Benefit & Assumptions
Current challenges with donors agencies supply chain information systems & Data exchange with Country systems

End-to-end SCM visibility

- Supply Chain system optimization
- Financial/resource constraints
- Supply Chain business optimization
- Donors need for justification to taxpayers
- Business need for accuracy
Current challenges with donors agencies supply chain information systems & Data exchange with Country systems

Donor Agencies Supply Chain Information Systems

Planning
Sourcing & Order
Manufacturer
Logistics
Receive/Handover
WMS/eLMIS*
HMIS*

Physical processes

Demand & Supply Plan
Sourcing Order
Containers
GSIN/GINC
Pallet
SSCC
Case
GTIN
Item
GTIN

End Recipient

Integrated
Disconnect or Manual

Current challenges with donors agencies supply chain information systems & Data exchange with Country systems

Challenges interfacing Manufacturer
1. Global setting (standards)
2. Lack of product and data exchange standard

Internal Challenges
1. ICT landscape
2. Business need and alignment
3. Lack of product and data exchange standard

Challenges interfacing Country
1. Global setting (scale, political, standards)
2. Lack of product and data exchange standard
Current challenges with donors agencies supply chain information systems & Data exchange with Country systems

<table>
<thead>
<tr>
<th>Challenges</th>
<th>GS1 response</th>
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<tbody>
<tr>
<td><strong>1. Product Identity and Master Data</strong></td>
<td>1. GS1 GDSN</td>
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<tr>
<td>• Inconsistent product information (identity, registration, origin, etc.)</td>
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<tr>
<td>• Inconsistent product master data (classification, dimension, unit of measure, ingredient, Logistics, and more)</td>
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<td><strong>2. Label and Barcode</strong></td>
<td>2. Capture Barcode</td>
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<td>• Inconsistent product label/barcode (not used, no barcode, reassignment, recreate)</td>
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<td><strong>3. Data exchange of master and transaction</strong></td>
<td>3. Data Interoperability &amp; Data Sharing</td>
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<td>• Inconsistent data sharing obscuring interoperability; not used, manual (emails), heavily customized, etc.</td>
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<td>• Lack master data standard; (manual data entry, duplication, validation)</td>
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<td>• Challenges with transaction data; (shipment dates, Batch/Lot dates, expiry dates)</td>
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<td><strong>4. End-to-end Visibility (last mile)</strong></td>
<td>4. EPCIS – Event data</td>
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<td>• Inconsistent business vocabulary; event, object, location, etc.)</td>
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<td>• Challenges of dissimilar systems</td>
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Current challenges with donors agencies supply chain information systems & Data exchange with Country systems

- Master Data
  - Product Identity
  - Description
  - Dimension
  - Brand owner & manufacturer
  - Unit information
  - Classification
  - Ingredients
  - Logistic unit
  - Storage

- Transaction Data
  - Shipment Notice (ASN/DesAdv)
  - Order number
  - Product Identity
  - Quantity
  - Ship destination & Consignee
  - Shipment date
  - Batch and Lot number
  - Expiry dates

- GTINs
  - Product GTIN
  - Secondary GTIN
  - Case/Multi GTIN
  - Pallet SSCC
End Objective – GS1 based solution

1. Product/package Identification
2. Master Data Pool (GDSN)
3. Transactional Data
4. End-to-end Visibility & Analytics

Flow of Goods
Flow of Stock & Consumption level Data
Flow of Barcode data Event
Event Data
Vision - GS1 standard based solution

Benefit for Vendors and UN Agencies
Enhance Inter-Agency collaboration
Foster data exchange capabilities

Benefit for Governments
Respond to Patient Safety and Stock-out
Reduce Cost, Complexity, Data source

* Electronic Data Interchange
Points to remember for adoption

• Non-core commodities
• Global supplier base
• Wholesalers
• Business resource and Technology dependency
Benefit and assumptions for Doner & Donor agencies

Benefits

• Enhance product/package identification and streamline data exchange leading to automation and accuracy
• Benefit forecast as it will be based on actual consumption
• Contribute to higher willingness from donors to support

Assumption

• Successful implementation product identity, capture and data sharing (GS1)
• in-country VAN, Global VAN, eLMIS, HMIS data capture and share in place
GS1 benefit and assumptions

Benefit for Governments

• Enhance product/package identification and streamline data exchange leading to automation and accuracy
• Support Recalls, Detection inefficiencies like leakages, Support forecast, Support in detection of stock-outs and overstock at an early stage and assist in redistribution
• Contribute to higher willingness from donor support

Assumption

• Successful implementation product identity, capture and data sharing (GS1)
• eLMIS and HMIS data capture and share in place
Thank you