



SUPPLIER SUMMIT

**USAID Global Health
Supply Chain Program
Supplier Summit
February 21-23, 2017**

YOU SAY DATA, I SAY DATA

STREAMLINED DATA EXCHANGE WITH GHSC-PSM



USAID
FROM THE AMERICAN PEOPLE



PEPFAR
U.S. President's Emergency Plan for AIDS Relief



USAID
FROM THE AMERICAN PEOPLE



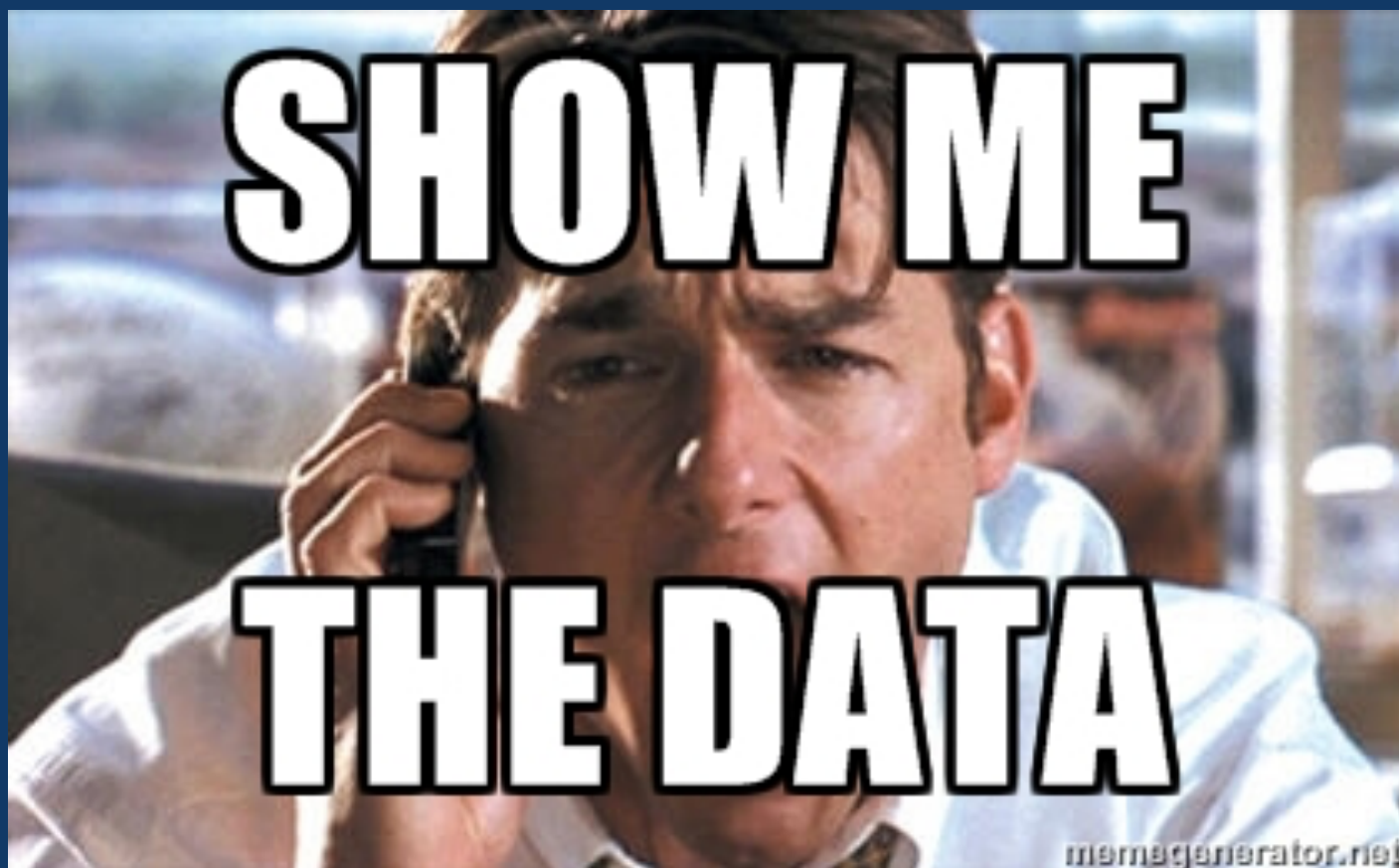
U.S. President's Malaria Initiative

AGENDA

- Overview and Data Exchange with ARTMIS
- Master Data vs. Transactional Data
- Master Data/Transactional Data Submission to ARTMIS
- Overview of GSI and GDSN
- Master Data Submission to GDSN Data Pool



INTRODUCTION AND OVERVIEW



GOALS OF GHSC-PSM AUTOMATION

- Extensively automate supply chain processes
- Electronically integrate with key stakeholder and partner systems
- Improve overall supply chain efficiency
- Reduce errors and re-work
- Reduce data quality issues and eliminate data redundancy
- Communicate more effectively with suppliers and other stakeholders
- Implement GSI standards
- Ensure supply chain security
- Increase patient safety

...LEADING TO MORE MEDICINE FOR MONEY

OVERVIEW OF ARTMIS

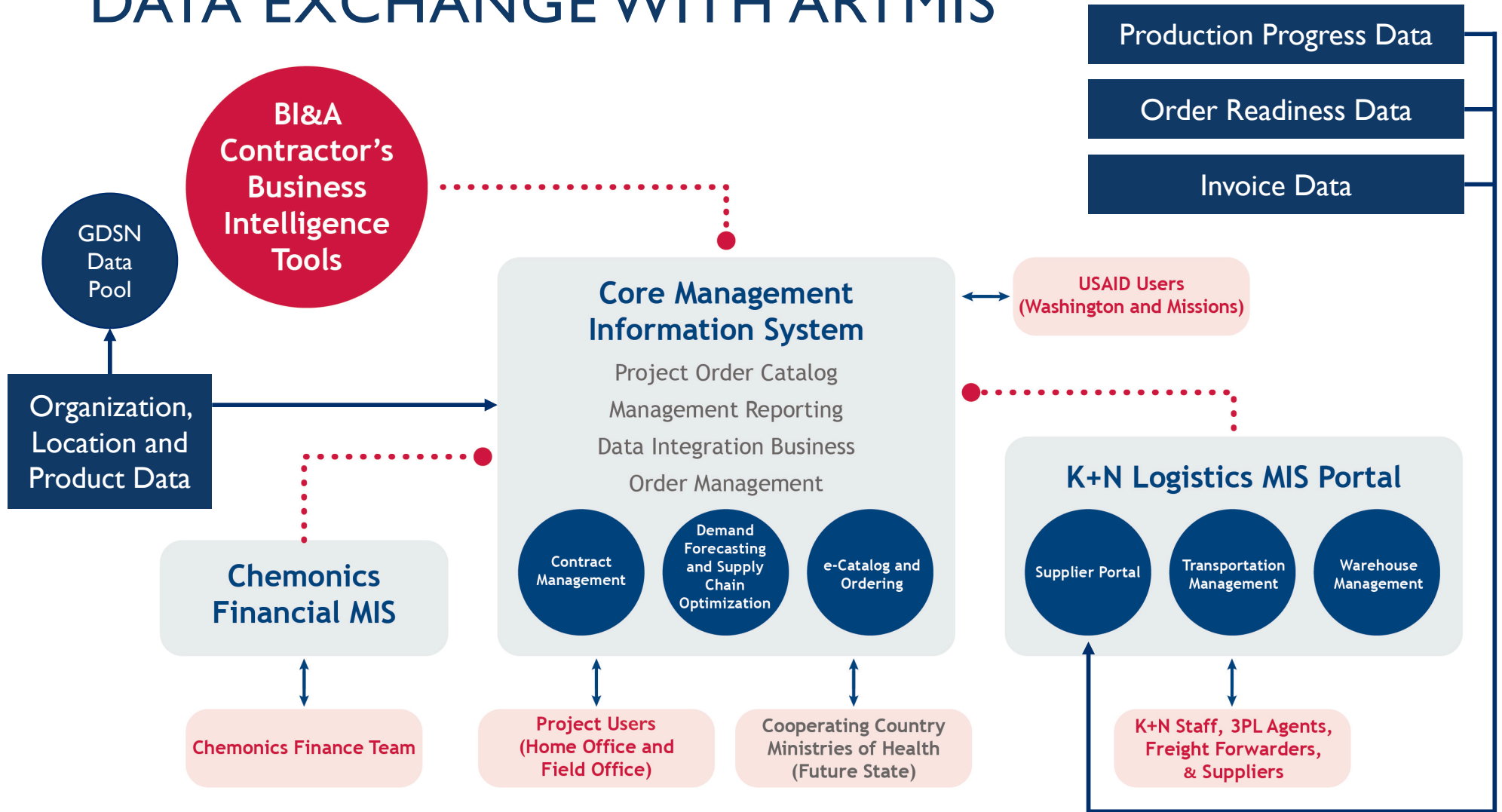
Automated
Requisition
Tracking
Management
Information
System

ARTMIS OVERVIEW

End-to-end data visibility of the health commodities supply chain is an overarching objective of the GHSC-PSM program. To achieve the highest level of data visibility, GHSC-PSM has selected an MIS that automates key steps along the supply chain. ARTMIS integrates three best-in-class solutions:

1. IBM's e-Commerce Suite, ranked No. 1 by Gartner and Forrester Research, is used by some of the world's top supply chain operators, such as Cardinal Health.
2. K+N's Logistics Management Information System (LMIS) is used to manage the largest non-asset-based freight forwarding operation in the world.
3. Chemonics' Financial Management Information System (FMIS) manages hundreds of millions of dollars in turnover annually and ensures adherence to USAID's reporting requirements.

DATA EXCHANGE WITH ARTMIS



MASTER DATA VS. TRANSACTIONAL DATA

KEY DATA SETS

- **Master Data** describes the people, places, and things that are involved in an organization's business.
 - Organizations
 - Locations
 - Product/catalog
- **Transactional Data** describes an internal or external event or transaction that takes place as an organization conducts its business.
 - Sourcing events
 - Production progress
 - QC testing
 - Order readiness
 - Invoice

MASTER DATA - ORGANIZATIONS

Company Name
Company Address
Company Telephone and Website
Manufacturer Information
Organization Name
Contact name
Phone no.
Email
Registered Address (HQ)
Website
Country of registration
Date of registration

Attributes listed below are illustrative only. Product attributes to be submitted at first via ARTMIS and later via GDSN.

MASTER DATA - PRODUCT/CATALOG

Item Name	Name of the Manufacturer	Registration Number
GTIN/Manufacturer ID	Manufacturing Site Address	Registration Expiry Date
Lot	Pick-up Address (if Applicable)	Estimated Lead time (no. of weeks)
Description	Currency Code	Lot Size in Number of Units
Desired Quantity	Remarks	Item Type
Unit of Measure	Price Per Unit	Quantity On Stock
What is your Regulatory Approval Status?	Shelf Life (in months)	Maximum Production Capacity Per Month (Number of Units)
Expiry Date of Regulatory Approval	Minimum Quantity	Product Registration Status for the Country
Maximum Desired Quantity	Maximum Quantity	Country
Goods Availability Date	GHSC-PSM Product ID	Action
Category	Unit Form	Manufacturer Item ID

TRANSACTIONAL DATA – SUPPLY CHAIN

- Production Progress
 - Production start date (within 24 hours after production started)
 - Production complete date (within 24 hours after production completed)
 - Batch Number/Quantity/Expiry Date (within 24 hours after production completed)
 - QC testing request date upon readiness of production goods when QC is required (within 24 hours after sending samples)
- Expected Readiness
 - Expected readiness date for confirmation (within 3 days of receiving email notification)
 - Expected readiness date for change (with a reason code of why date is out of tolerance)
- Booking
 - Booking Request/Packing List/Invoice

MASTER DATA/TRANSACTIONAL DATA SUBMISSION TO ARTMIS

SUPPLIER REGISTRATION AND SOURCING EVENTS

GHSC - PSM Supplier Lifecycle Management

Welcome to the SRM Registration
In this short questionnaire we gather the key values of your company. This information will be given to our Clearing department, who will get in touch with you soon after the registration was sent. If you encounter difficulties filling out the registration or if you have questions about the content of the questionnaire, please feel free to contact us: psmmishelpdesk@ghsc-psm.org

Display language: English

Self registration

Step 1: Answer Questionnaire

[open all | collapse all]

Introduction

Welcome to the Supplier Registration Questionnaire. Your organization's completion of this questionnaire will be an important step towards potentially becoming a supplier to the GHSC PSM project. Below, you will be requested to provide some high-level information about your organization, which may help us to identify and work with your organization in the future. This questionnaire should only take 5-10 minutes to complete. Please scroll down to begin the questionnaire.

General Company Information

Legal Company Name
good company

Do you have a Doing Business As (DBA) name?
 Yes
 No

Supplier Registration in ARTMIS (Emptoris)

Responding to RFx in ARTMIS (Emptoris)

RFx(s) > RFx Event - Supplier Tra...

Description: Project requires 300,000 Long Leasing Invertebrate...
Contract Information
Routinized Amie. Sciences

Type: RFP
Run RFx Sheet

Remaining Time: N/A
Open Time: 07/20/2018 13:17:02Z
Close Time:
Status: Open

All Questionnaires (7)

Questionnaire / Question	Response	View History
Section 1 & 2: Background & Instructions to Offerors	<input type="checkbox"/> Place Response	
Section 3: Specifications and Tax	<input type="checkbox"/> Place Response	
Section 4: Offer cover Letter	<input type="checkbox"/> Place Response	
Section 5: Required Certifications	<input type="checkbox"/> Place Response	
Section 6: General Terms and Conditions	<input type="checkbox"/> Place Response	
Section 7: Manufacturer Information	<input type="checkbox"/> Place Response	
Section 8: Capability Survey	<input type="checkbox"/> Place Response	

Accept Invitation RFx(s)

Please confirm you are an authorized representative of your organization with the ability to acknowledge and agree to all terms, conditions, special provisions, and instructions on behalf of your firm and verify that you have the authority to provide information regarding all commodities and services offered in response to this RFQ necessary to perform all work described under the activities and requirements this solicitation

By checking this box, I confirm that my company complies with this Terms and Conditions

OK Cancel

(Note: "OK" will appear after checking the box. If you can not comply please select "cancel" and contact us.)

ARTMIS Sourcing - Supplier Job Aid

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TRANSACTIONAL DATA SUBMISSION TO ARTMIS

Supplier Portal in K&N LMIS

Monitoring alert: 2.21-PO's pending Production Started

Description: Vendor will provide production start date.

Alert Info	Unknown Order	Alert Asst	Order Number	Lot #	Item #	Batch/Lot Number	Production Started (mandatory)	Time/Remarks	Delivery Window Start	Delivery Window End	Required Date of Delivery	QC Required	Vendor Bt Date/Entry
①	<input type="checkbox"/>		QP_PC10000211		1	100073AA08U032K	TBD		08/17/17	08/31/17	10/31/16		
①	<input type="checkbox"/>		IQ10000083		1	100074AA08U032	TBD		08/17/16	08/31/16			
①	<input type="checkbox"/>		IQ10000334		2	100128X0A01003A	TBD		10/17/16	10/31/16	11/28/16		
①	<input type="checkbox"/>		IQ10000149		2	1003000U2019	TBD		10/12/16	10/26/16	11/23/16		
①	<input type="checkbox"/>		IQ10000150		1	100073AA08U	TBD		09/28/16	10/12/16	11/09/16		
①	<input type="checkbox"/>		IQ10000155		1	100307XU2019	TBD		10/20/16	11/03/16	12/21/16		
①	<input type="checkbox"/>		IQ10000152		2	100015ACAD10	TBD		10/17/16	10/31/16	12/21/16		

Production Progress

Monitoring alert: 2.11-PO's pending Expected Readiness Confirmation

Description: 2.11-PO's pending Expected Readiness Confirmation

Alert Info	Unknown Order	Expected Readiness Date	Reason Code for missing Readiness Date	Reason code for readiness date out of tolerance	Alert Asst	Order Number	Lot #	Item #	Batch/Lot Number	Task Order	Order Type	KN Control Tower	Ordered Quantity	Exp	
①	<input type="checkbox"/>					32	IQ10000082	1	100073AA08U032	TBD	TO3	PurchaseOrder	Europe	1000	100
①	<input type="checkbox"/>					32	IQ10000334	1	100073AA08U032	TBD		PurchaseOrder	Europe	1000	100
①	<input type="checkbox"/>					21	IQ10003218	1	100025AC0809W03V	TBD		PurchaseOrder	Europe	10	10
①	<input type="checkbox"/>					10	RO21000020-1	1	100073AA08U032	B334354	TO2	DistributionOrder	Middle East/ Africa	2000	200

Expected Readiness

Booking Review

Booking and Bill Reference Information

Booking ID: 658171224
 Shipper Reference: 658171224
 Shipper Reference: 081024840

Booking Status

Shipping Information

Forwarding Office: DMCO (PL) Segment Type: FCL
 Ocean Vessel: 8651109 Usage: 1
 Place of Receipt: Port of Delivery: Singapore
 Port of Loading: LHM Chongqing Port of Discharge: Singapore
 Estimated Departure Date: 17 Nov 2016 Estimated Arrival Date: 11 Nov 2016
 Ready for Shipment Date: 07 Oct 2016

Charges/Insurance/Discounts

Terms of Delivery Location: N/O/TREY

Container Information

Container Type	Container No.	Seal No.	WVGP (M)	Volume (CBM)	Commodity	HS Code	Requested Delivery Date	Requested Delivery Location
0	40C	57191000	110830	54.93	see order line details see order line details			
0	40C	57191000	110830	54.93	see order line details see order line details			
Total	2 Containers		22,174.00	109.86				

Booking Request

Commercial Invoice

Invoice #: 8888

Vendor: Company Name, Address 1, Address 2, City, State, Zip/Postal Code, Country, Contact Name, First Last, TEL: phone #, FAX: fax #, Email: email address

Bill To: Company Name, Address 1, Address 2, City, State, Zip/Postal Code, Country, Contact Name, First Last, TEL: phone #, FAX: fax #, Email: email address

Consignee: Company Name, Address 1, Address 2, City, State, Zip/Postal Code, Country, Contact Name, First Last, TEL: phone #, FAX: fax #, Email: email address

Invoice Date: YYYY-MM-DD

Delivery Address: Company Name, Address 1, Address 2, City, State, Zip/Postal Code, Country, Contact Name, First Last, TEL: phone #, FAX: fax #, Email: email address

Incoterms: FOB Shanghai Origin Port: Shenzhen, China Destination Port: Mombasa, Mozambique

Country: USD Country of Final Destination: Mozambique

Order #	Order Line #	Item #	Item Description	Batch #	Expiration Date	Quantity of Order	UNIT QUANTITY	UoM	UNIT PRICE	TOTAL AMOUNT	
PO134897	001	A12345	Details	11111111111111	yyy-mm-dd	6.000	CTN		\$1,700.00	\$1,020.00	
PO134897	002	B12345	Details	22222222222222	yyy-mm-dd	7.500	CTN		\$1,700.00	\$1,275.00	
PO134897	003	C12345	Details	33333333333333	yyy-mm-dd	1.000	CTN		\$1,141.61	\$1,141.61	
PO134897	004	D12345	Details	44444444444444	yyy-mm-dd	4.831	CTN		\$2,426.97	\$2,426.97	
PO134897	005	E12345	Details	55555555555555	yyy-mm-dd	3.000	CTN		\$2,967.50	\$8,902.50	
PO134897	006	F12345	Details	66666666666666	yyy-mm-dd	4.290	CTN		\$1,081.75	\$4,640.75	
PO134897	007	G12345	Details	77777777777777	yyy-mm-dd	3.000	CTN		\$2,967.50	\$8,902.50	
Freight Charges										\$1,000.00	
Grand Total										38.607 UNITS	\$35,296.32

Printed By: VENDOR LAST NAME, VENDOR FIRST NAME
 Prepared On: yyyy-mm-dd

Invoice

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OVERVIEW OF GSI AND GDSN



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THE MASTER DATA PROBLEM



Every company has a **database** filled with master data about the products they **make, sell, or buy.**

But when one company changes any bit of information in their database or adds a new item, **another database becomes outdated!**



WHAT HAPPENED TO “MASTER DATA”



- Systems have evolved in “silos” over the last 40 years
- The link between “process” and data was broken (*remains so in many cases*)
- Numerous efforts to “unify” data and process, or views of data – one use at a time
- **So what?** Business success still happened anyway... (*and hospitals operated*)
- Only when costs increase, profits fall, (*or a patient is negatively affected*) does the real impact of bad data become known!



1970s



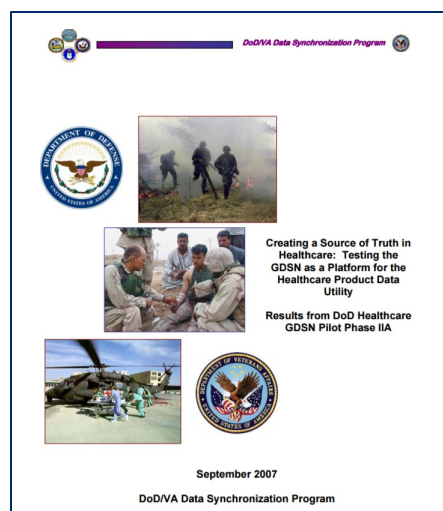
1990s



2000s

Original source: Gartner

DATA ERRORS IN HEALTHCARE



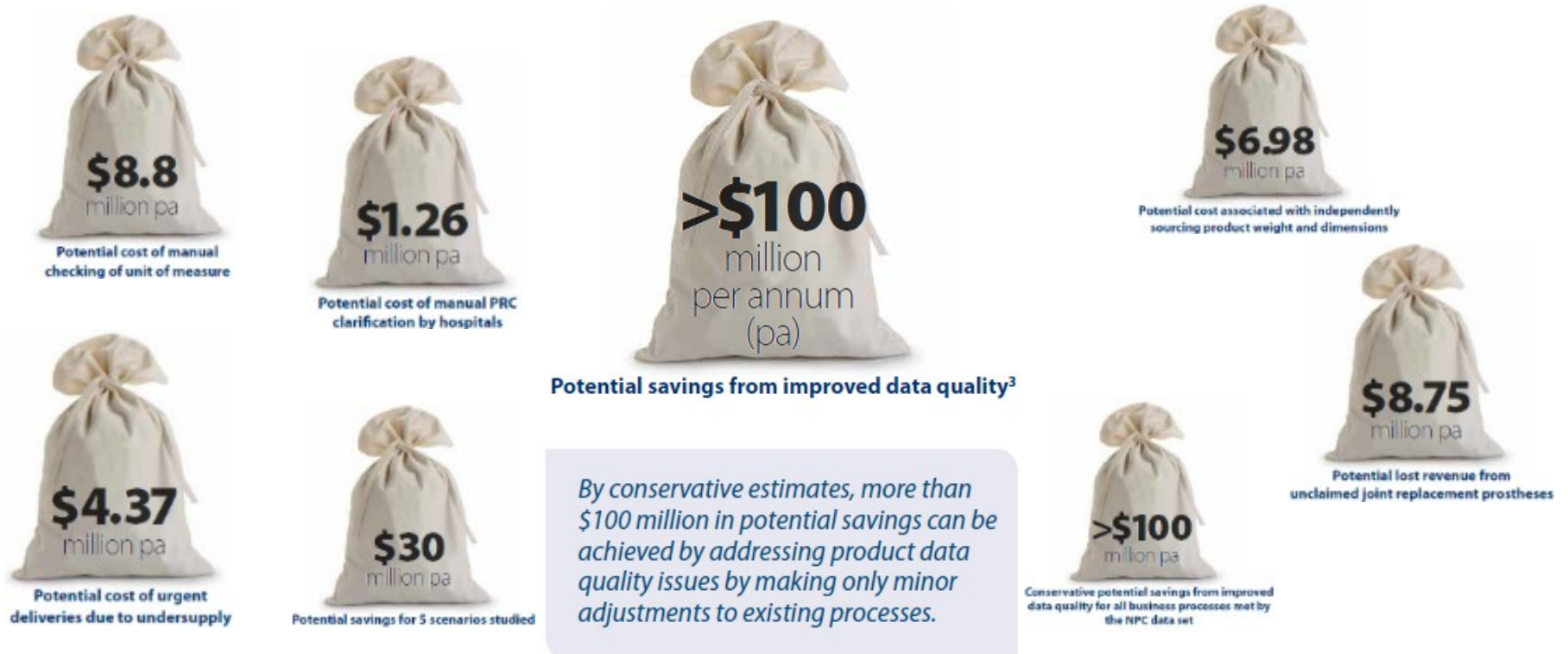
% of Total Data Error	Manufacturer	Distributor	GPO	Healthcare provider
Missing Middle Levels of Packaging	15-20%	1-4%	20-25%	15-25%
Hard "Packaging Quantity" Errors	1%	1%	2%	2-5%
Unit of Measure Confusion/Misuse	2-6%	1-3%	2-5%	Unknown
Missing Packaging—not Middle Level	3-8%	3-8%	3-7%	5%
Manufacturer Name Problems	NA	2-5%	1-4%	30%
Obsolete Products	1-4%	2-5%	1-8%	5-15%
Missing Product Brand Names	2-5%	5-10%	5-10%	20-25%
Incomplete Item Descriptions	5-15%	3-12%	5-15%	10-20%
Wrong Customer Unit Prices	Unknown	1-2%	NA	1-2%
Customer Paid More Than Lowest Contract Price	NA	Unknown	NA	3-6%

DoD Conclusion:
GDSN is capable of meeting the data needs of US healthcare

DoD report: https://www.gs1us.org/DesktopModules/Bring2mind/DMX/Download.aspx?command=core_download&entryid=620&language=en-US&PortalId=0&TabId=134

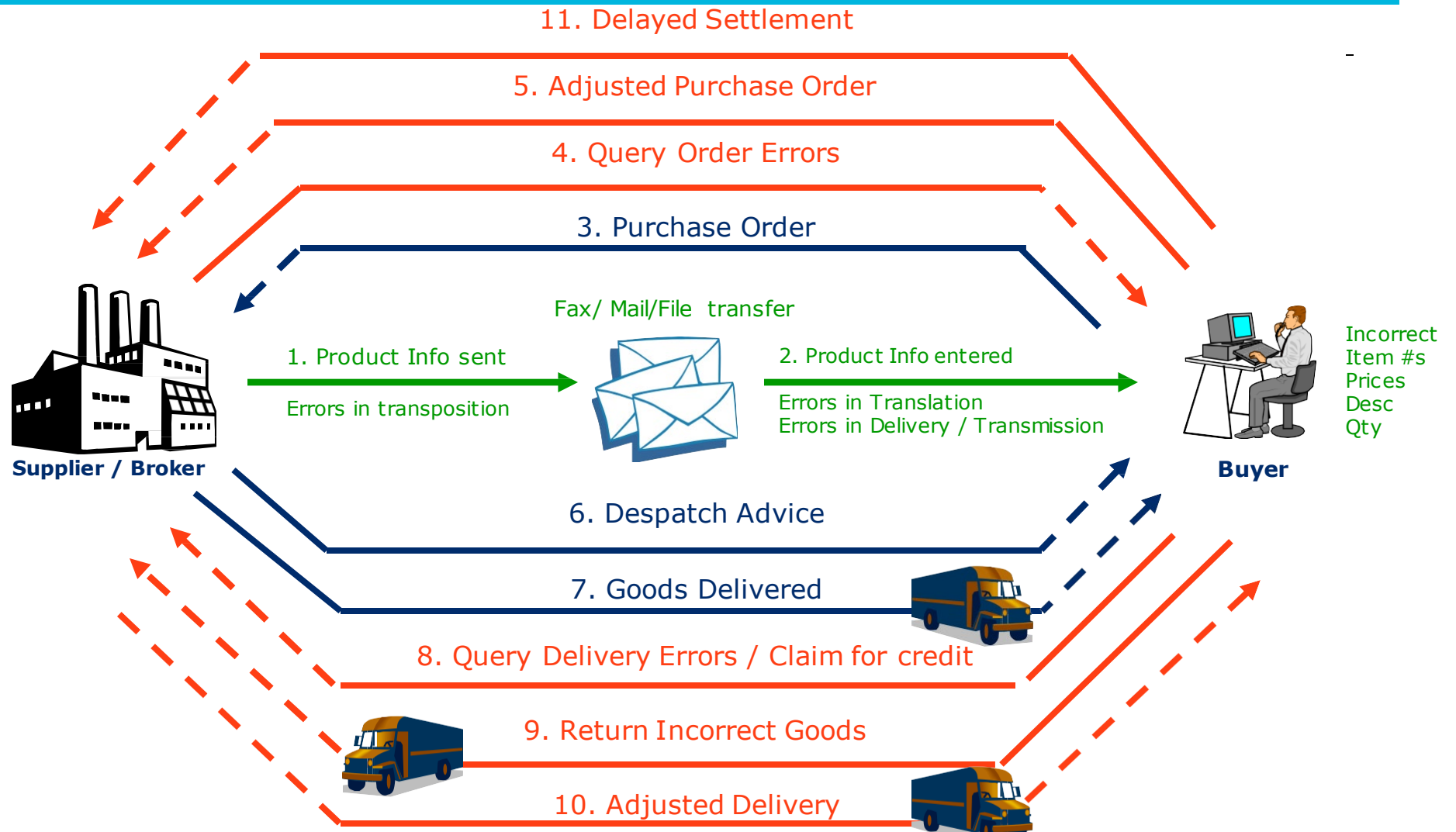


THE AUSTRALIAN DATA CRUNCH REPORT PUTS A COST ON THE DATA QUALITY PROBLEM IN HEALTHCARE



Source: <https://www.gs1au.org/resources/publications/>

ORDER-TO-CASH BEFORE DATA SYNCHRONISATION



DATA QUALITY STARTS AT THE SOURCE



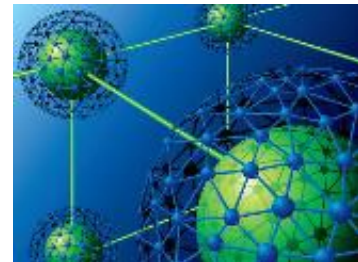
DATA QUALITY STARTS AT THE SOURCE



Data Governance



Roles and Responsibility



Enterprise-wide
Data Management



Data Quality

The quality of the data is a direct reflection on the quality of the product



ROLES AND RESPONSIBILITIES



Enterprise-wide definition of roles and responsibilities of everyone involved in the information flow, internal and external

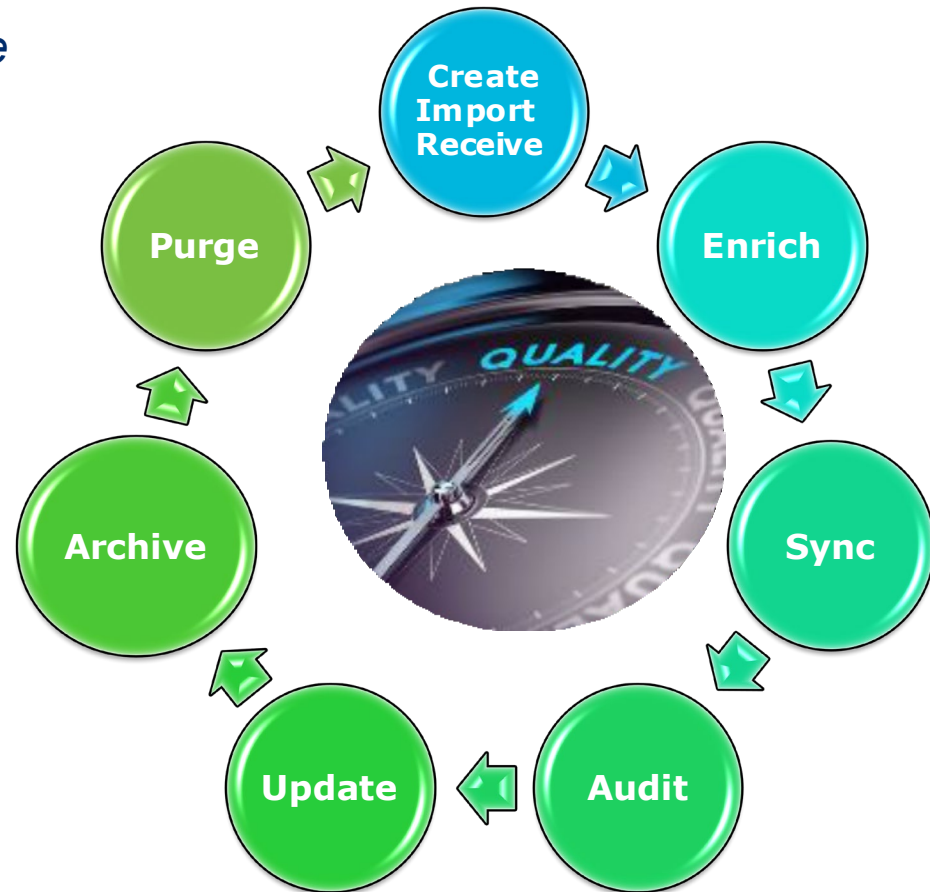


ENTERPRISE-WIDE DATA MANAGEMENT

Key Concepts – Information Lifecycle Processes



1. Create, Import or Receive
 - *Collect, Create, Receive & Capture*
2. Enrich/Validate
 - *Data Quality*
3. Sync/Activate
 - *Push to users*
4. Audit/Evaluate
 - *Routine Monitoring*
5. Update/Maintain
 - *Maintain, Protect & Preserve*
6. Inactivate/Archive
 - *Remove from active use*
7. Purge
 - *Delete from system*



WHAT IS THE GDSN AND HOW DOES IT WORK?



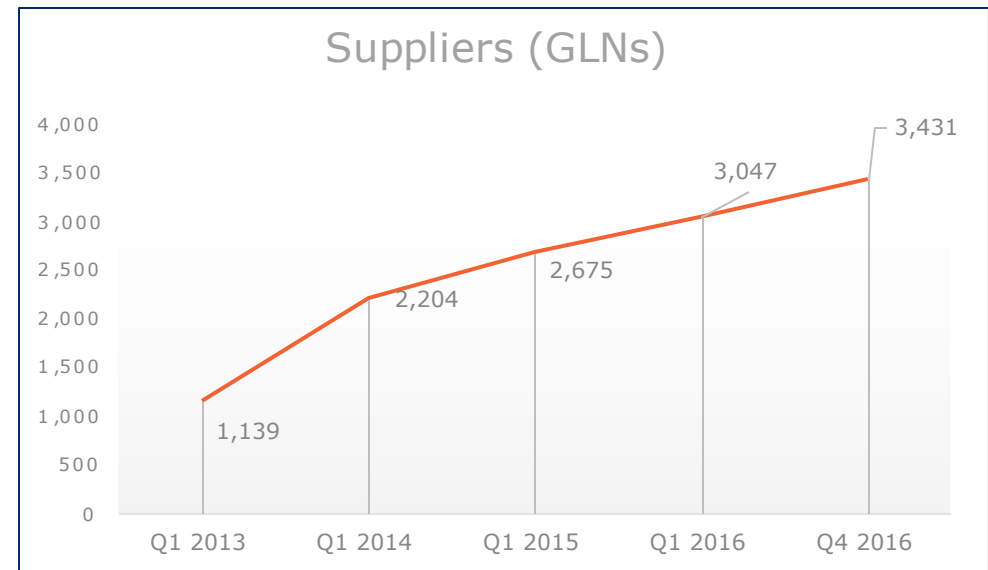
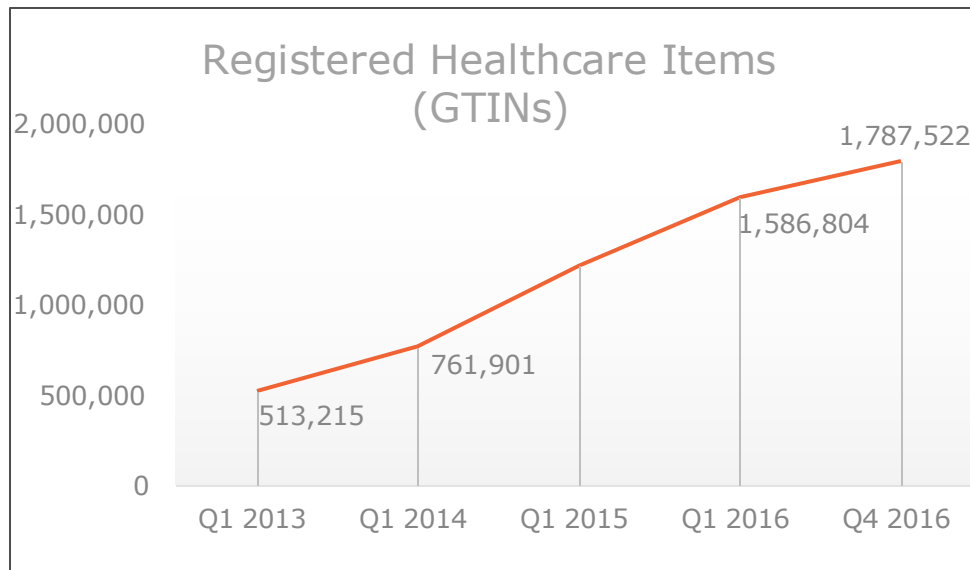


GDSN GROWTH AS OF END OF JULY 2016

Overall GDSN

	Feb 2015	Feb 2016	Feb 2017
GTINs	17,707,316	20,448,154	22,266,243

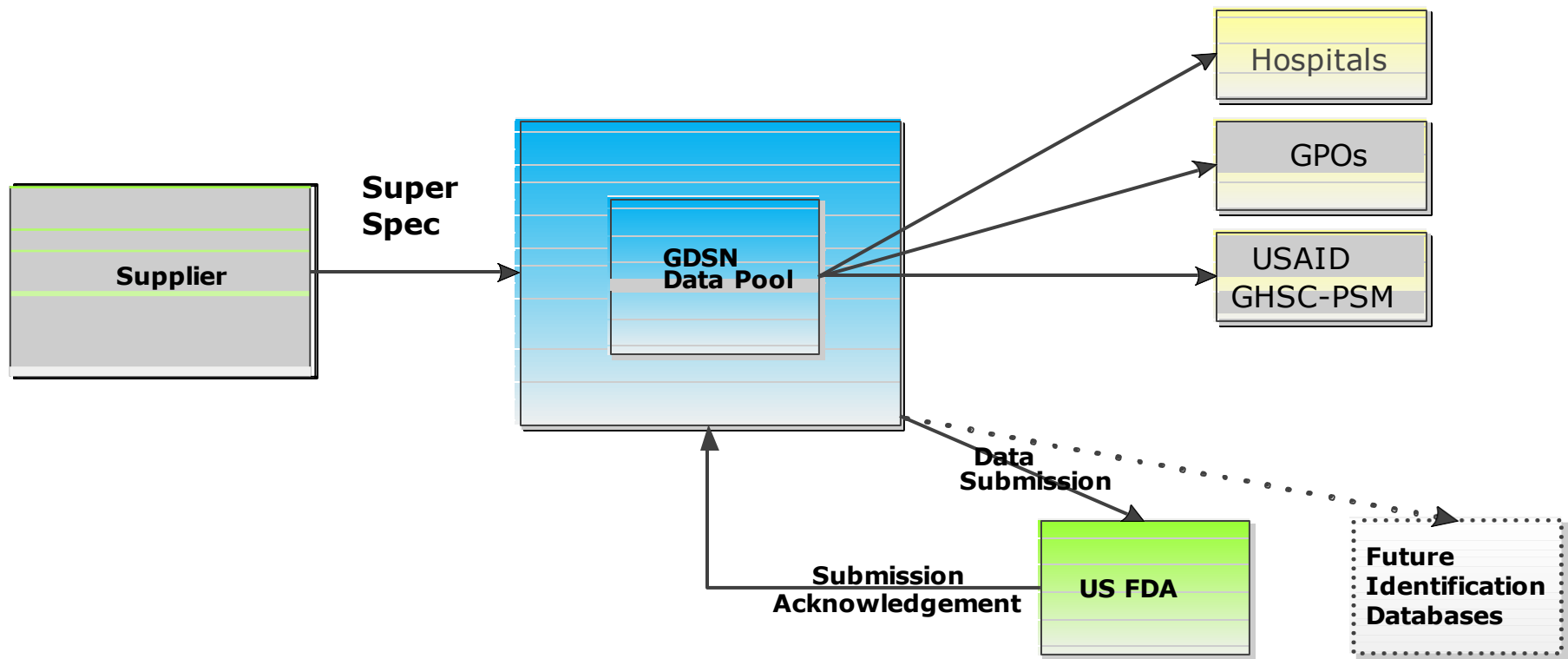
Healthcare





MANAGING DATA AT GLOBAL LEVEL

1. Find a **standards based** solution which can scale as more countries release identification regulation
2. Find a technology partner that can connect you globally
3. Define ALL regulatory and commercial attributes (Super Spec)





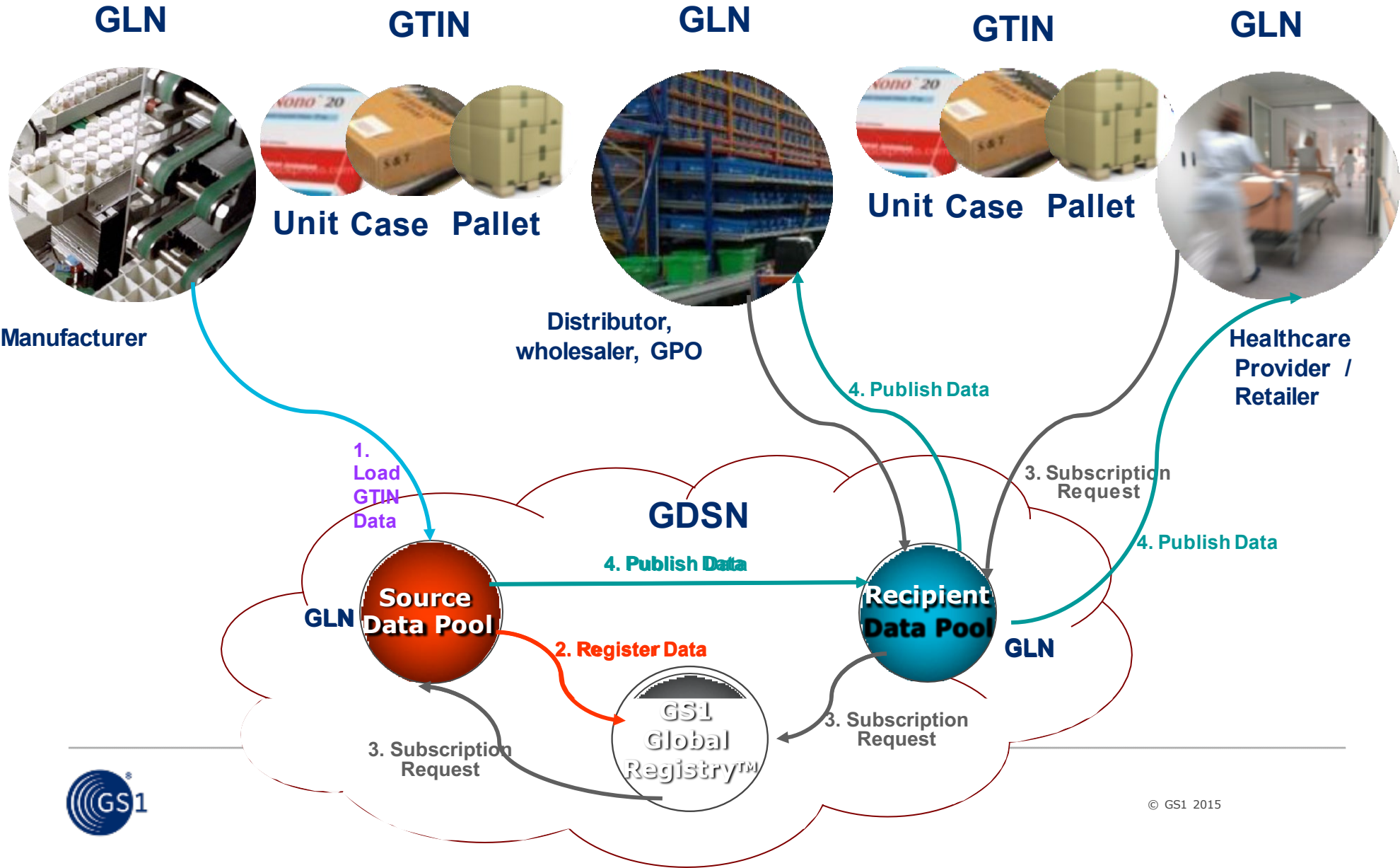
A WORD ABOUT ACRONYMS

- **GTIN:** Global Trade Item Number
 - Product identification

- **GLN:** Global Location Number
 - Identification of legal entities, physical, functions and digital locations

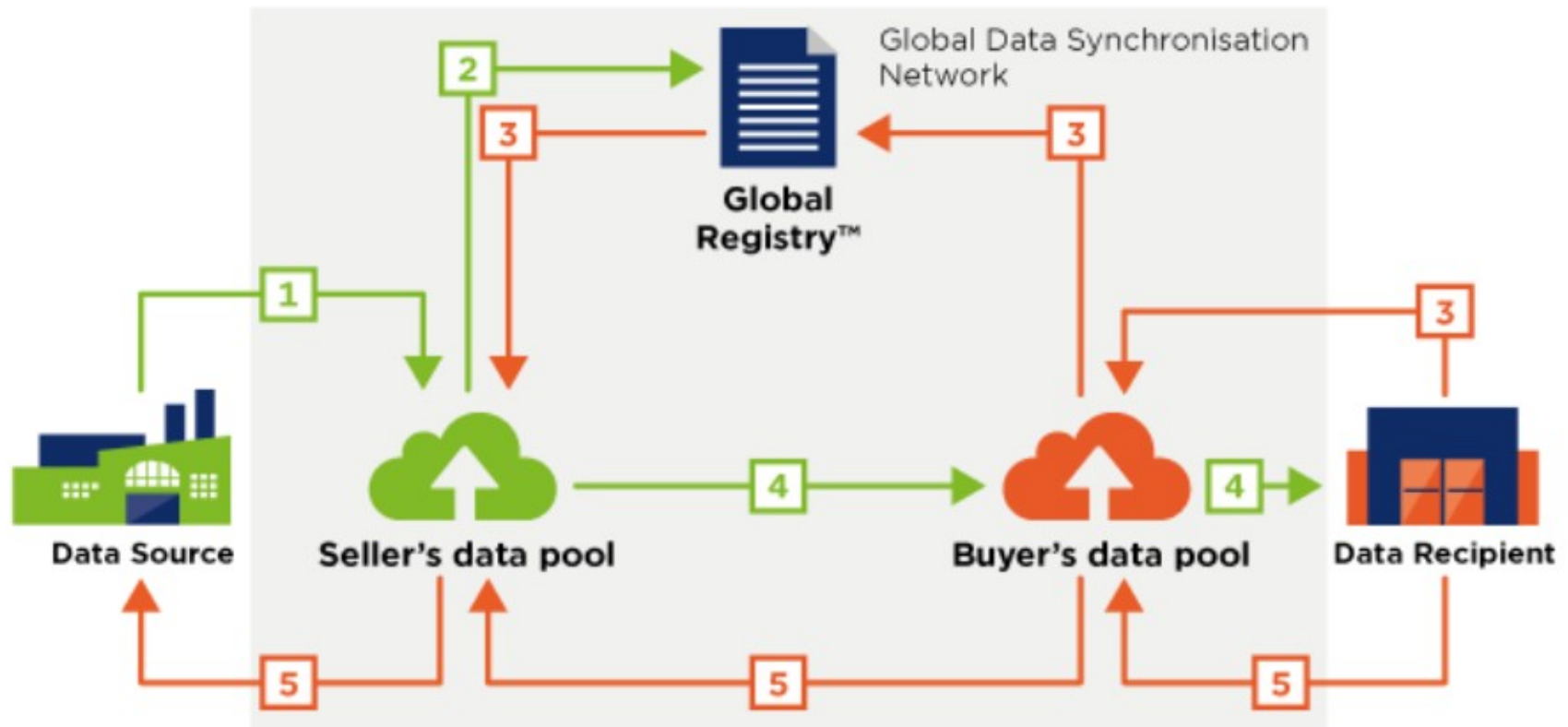
- **GDSN:** Global Data Synchronisation Network
 - Synchronisation of data between the Source (i.e. manufacturer) and the Recipient (e.g. hospital, retailers, etc.)

GDSN IN ACTION





HOW GDSN WORKS



1. Loading of company data
2. Registering of company data
3. Subscription to seller's data pool
4. Publishing of company data
5. Confirmation of receipt of company

ORDER-TO-CASH AFTER DATA SYNCHRONISATION



FOR MORE INFORMATION



www.gs1.org/gdsn

www.gs1.org/healthcare



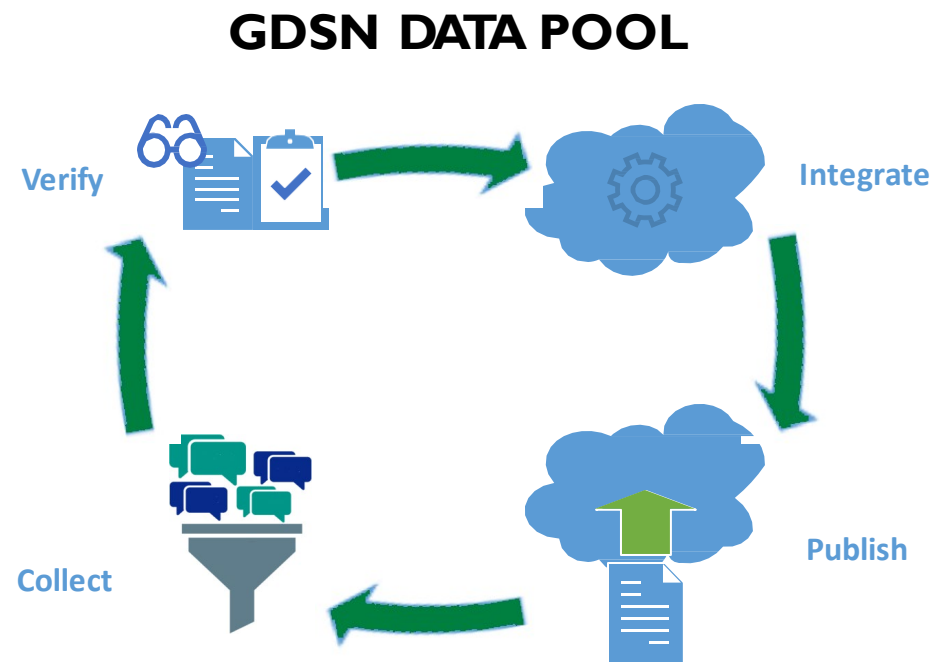
MASTER DATA SUBMISSION TO GDSN DATA POOL

GHSC-PSM'S PLANS FOR GSI SUPPORT AND GDSN DATA POOL INTEGRATION

- Engaged GSI consultants to aid in implementation of GSI standards
- ARTMIS supports tracking of commodities by global trade item numbers for identification and capture, including all corresponding documents
- GSI attributes are supported in ARTMIS with a subset selected for GHSC-PSM
- GHSC-PSM is procuring a global data synchronization network (GDSN) data pool subscription and planning to integrate with it to automatically feed GSI attributes into ARTMIS
- ARTMIS supports track and trace capabilities at the batch level and is preparing to support serialization
- A supplier strategy has been developed to encourage suppliers to register trade items with GSI, ensure proper item barcoding and labeling, and share product data via a GDSN data pool

GHSC-PSM EXPECTATIONS OF SUPPLIERS

- 1) Supplier registers with GSI and obtains a prefix
- 2) Supplier assigns GTINs to its products
- 3) Supplier registers with a GDSN data pool provider
- 4) Supplier agrees to provide product attributes based on GHSC-PSM's requirements
- 5) Supplier shares its product attribute data with GHSC-PSM via a GDSN data pool provider
- 6) GHSC-PSM expects all suppliers to submit their product data to a GDSN data pool within 18 months



SAMPLE LIST OF GDSN DATA POOL PROVIDERS

- IWorldSync
- Alkemics
- Attribytes
- Brandbank
- Comarch S.A.
- Comport Communications International, Inc.
- Contentis AG
- Edgenet
- EDICOM
- Equadis SA
- Eway FSE Inc
- GHX
- iTradeNetwork, Inc.
- LOGYCA / SERVICIOS Viagenie

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